

# THE <mark>SLIPSTREAM</mark>

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA

## INSIDE THIS ISSUE:

PICNIC NEWS	1
HIGHLANDER UP-	
DATE	1
DARIN'S RV AD-	
	_
VENTURES	3
	_
NEW MEMBER IN-	3
TRODUCTION	
	_
EAA NEWS	3
GUESS THAT AIR-	
PLANE	4
PLANE	
GUESS THAT IN-	4
doess marma	
JUNES GATHERING	6
MINUTES	×
GUESS THAT MOV-	7
IE/AIRPLANE	
LAST MONTHS	8
GUESS THAT AIR-	
PLANES ANSWER	
	9
LAST MONTHS	9
GUESS THAT IN-	
STRUMENT PANEL	

#### SPECIAL POINTS OF Interest:

WE ARE HAVING A PIC-NIC IN JULY AND IN AUGUST THIS YEAR!

### **PICNIC NEWS, HIGHLANDER UPDATE:**

#### **Picnic News!:**

We will celebrate our return to in person get togethers on Monday JULY 26.

We will have a potluck picnic!!!!!!

Where: Back to Mellema Hanger 17605 SE 288th PI. Kent

When: Monday July 26th

Time: 6:00 (note time, earlier than normal meeting) We will be setting up at 6:00 so don't feel rushed to be there right at 6:00

Bring potluck dishes to share. Can be anything from hor d'oerves to desserts. We always seem to get a variety of foods and no one goes hungry.

You are welcome to wear masks and bring your own food or just visit if you are not comfortable eating together.

Chapter will provide dishes and utensils etc. Will also have beverages and water. If you want pop please bring for yourself. No alcohol please.

Look forward to visiting and enjoying everyone's company!!!!!

Lynda and Steve Crider

#### **Scottish Highlander Status:**

My build assist partner moved from Homedale to Twin Falls, Idaho. So now I fly over on Sunday and back on Thursday instead of driving more than 10 hours each way. Had a major setback when the inflatable paint

booth collapsed on the freshly painted fuselage like vacuum wrapping. We tried sanding out the resulting mess, and repainting, but it looked terrible. So... off with the fuselage fabric and tail feathers. I'm using Superflite's System 7 Superthane over top of Poly Fiber silver and fabric. The paint will look awesome. I'm considering making place mats out of the material. So, if you get them as a white elephant gift, don't be surprised. The biggest thing I will miss is the closeness of Jim Huber to do Tech Advisor visits. That, and the fact the nearest parts store for anything aero related seems to be on another planet.

After the painting disaster, I started focusing on the wings. It has surprised me that the ailerons and flaps have been the most complicated parts so far. Got the cables installed and roughly rigged this week. Just got one gas tank installed today and the other planned for next week. Here are a couple photos. One is the Highlander in its native condition (landing) and the other is a shot of my shop buddies coping with the Idaho heat.

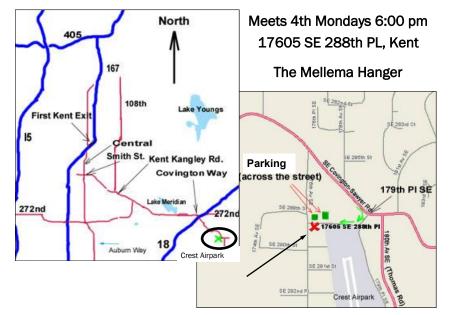
With the re-fabric effort, I suspect I won't be in the hangar at Auburn that just opened up for me until October. Does anyone know anything about the virtues of a south-facing open hangar versus a north-facing one at our latitude (fabric plane)?

Regards,

Steve Cameron

Page 2

#### WHERE DO WE MEET THIS MONTH?



JULY PROGRAM

Picnic!

# Program

We will celebrate our return to in person get togethers on Monday JULY 26 .

We will have a potluck picnic!!!!!!

Where: Back to Mellema Hanger 17605 SE 288th Pl. Kent

When: Monday July 26th

Time: 6:00 (note time, earlier than normal meeting) We will be setting up at 6:00 so don't feel rushed to be there right at 6:00

Bring potluck dishes to share. Can be anything from hor d'oerves to desserts. We always seem to get a variety of foods and no one goes hungry.

You are welcome to wear masks and bring your own food or just visit if you are not comfortable eating together.

Chapter will provide dishes and utensils etc. Will also have beverages and water. If you want pop please bring for yourself. No alcohol please.

Look forward to visiting and enjoying everyone's company!!!!!

Remember that over the last 18 months we may have developed a few sharp edges that need some burnishing. Be gentle with each other.

2021 **OFFICERS** President: **Brian Lee** (253)-639-0489 Vice-President: Mark Owens Secretary: To be determined Treasurer: Steve Crider **Tech Counselors/ Flight** Advisors: **Brian Lee** (253)-639-0489 **Dave Nason** Jonathan Lee (253) 508-1376 **Newsletter Editor: Roger Schert** (206)713-9910windridershaman@gmail.com

## NEW MEMBERS CONTINUED, DARINS RV ADVENTURES, EAA NEWS:

#### **New Members:**

#### Dean Betz:

I'm a longtime EAA member only now returning to participating in chapters. Fingers crossed, the Zenith Cruzer parts in my garage will be flying in a year or so. The EAA Fly-In Convention was my summer camp as a kid, beginning when it was in Rockford. I'm very much looking forward to getting to know other builders, and hopefully might learn a thing or two.

#### Jeff Goehard

Gary Cemmons

#### Darins RV Adventures:

Well in the past couple of weeks I have managed to get about 16 hours of flight time in on N88DA. Since the engine is new I have had to do most of those at high power to ensure seating of the piston rings. High power means lots of heat during the hottest months of the year including a few days of record breaking VERY high temps.

A few squawks (issues) have come up as expected but so far nothing major.

A 'buz' during high power operations at certain yaw orientations. Turned out to be one of the skin panels near the copilot knee panel was "oil canning". I fixed that with



a little j-channel and some pro-seal.

Lots of mixture issues as I learn to use my new SDS EFI system. This is just a learning curve and I'm slowly getting comfortable with what is required to fly this airplane and keep the engine CHT's down.

Trim indication was backward. Easily fixed with a setting in the G3X touch settings.

Autopilot pitch trim as backward. This was an interesting one...I enabled the Autopilot in "heading" mode and "Altitude" modes and the airplane immediately started to descend when it was supposed to climb. Ooops. The roll AP servo was also controlling the roll trim backward...again an easy fix.

CWS button does not seem to work. Still haven't dug into that one.

A couple of oil leaks (seeps is probably more appropriate of a description). Still working on those.

Oil pressure was still too high. Had to adjust it a couple of times to get it where I wanted it.

Throttle position sensor failed at one point. Not particularly important to safe engine operation but it does help with throttle response. This one turned out to be a crimp issue where the heat shrink connectors I used didn't fare well between the two hot exhaust pipes. I re-did the connection and then surrounded it with a heat protective cloth sleeve.

G3X EFIS would not update to the latest databases. My fault...I had entered it on the Garmin site as a non touch G3X. An email to Garmin support resolved that issue.

Com 2 does not transmit. Another one that I am holding off on for

now. When I tried to do a transmit test with my Com 2 I was not getting a satisfactory return. In addition if the engine was running it caused some electrical interference with my SDS-EFI system. I'm pretty sure this is just a routing of the coax problem. SDS is very clear in the instructions that it's wiring harness should be insulated by about 1" of air from other power source wires. A coax during transmission is definitely a violation of that rule...if it turns out to be the case. For now I have been operating with just one comm radio.

Fuel flow indication was WAY off. A couple of re-fueling's and I think I have that number dialed in now.

I also did a couple of stalls to set my baseline stall speeds. With the flaps up she stalls at 62 knots indicated and with the flaps down that number is 51 knots indicated. Pretty close to the published numbers from Vans.

To Read More: Click Here

#### EAA News:

#### AirVenture 2021 Daily Air Show Schedule Set

The daily air show schedule for EAA AirVenture Oshkosh 2021 has been set. AirVenture's daily air shows feature a wide variety of performances from the world of flight — precision aerobatics, military big iron, rare and unique flying examples, and history coming alive.

To Read More Click Here

# AirVenture 2021 Webcams Are Live!

Get a glimpse of the action on the grounds on your computer,

#### Page 4

#### TECH COUNSELORS AND FLIGHT ADVISORS



Chapter 441 is fortu nate to have two 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 June's 2021 airplane

This months entry:

Go to Page 9 for June's 2021 Instrument Panel





DISCLAIMER: The "SLIPSTREAM" Newsletter is published as a clearing house for ideas, opinions, experiences and member information. No responsibility or liability is expressed or implied. Anyone using or purchasing parts or product is doing so at his or her own risk, and is

Page 5

#### EAA NEWS, CONTINUED, EDITORS CORNER:

tablet, or smartphone through the EAA AirVenture Oshkosh webcams, which went live this week!

To view the cameras, Click Here

#### Experimental, limited, and primary category Aircraft Flight Training FAQs

EAA continues to push the FAA for a legitimate solution to the harm and confusion the agency has created with its recent interpretation involving compensated flight training in Experimental, Limited, and Primary Category aircraft. As previously mentioned, the FAA did an unexpected and stunning about-face from decades of standard policy with the change, disregarding longstanding aviation safety practices.

The Letter of Deviation Authority (LODA) process created to allow flight training to continue in Experimental aircraft is no more than an interim quick-fix until a permanent rule change that returns the common-sense flight training policy for this aircraft category, and the safety standards that are present with it. In parallel with the LODA effort is an upcoming exemption process for Limited and Primary categories as well. EAA is urging the FAA to keep these interim steps as simple as possible to minimize the burden to the community. To Read More, <u>Click Here</u>

#### **Rare Warbirds to attend EAA Airventure:**

A number of rare warbirds will be in attendance for EAA AirVenture Oshkosh 2021 on July 26-August 1.

Fagen Fighters WWII Museum will be bringing its newly restored Grumman F6F-5 Hellcat, as well as its Lockheed P-38L Lightning and Curtiss P-40K Warhawk. Other rare warbirds expected to attend are a Grumman F4F-3 Wildcat (Lewis Air Legends), Supermarine Spitfire (Dakota Territory Air Museum), and Hawker Hurricane (Dakota Territory Air Museum). A Douglas SBD Dauntless recovered from Lake Michigan will also be on a trailer for viewing in the warbirds area.

In addition, you can expect a wide variety of other warbirds typically in attendance, including trainers such as T-6s and T-28s, a variety of L-birds, World War II fighters such as P-51s and Corsairs, bombers such as B-25s, cargo aircraft such as C-47s, postwar piston-pounders like A-1 Skyraiders, and postwar jet trainers and fighters such as T-33s and F-86s. To Read More, Click Here

#### **Editors Corner:**

I am so glad that we can, at least for now meet in person. I don't know about you, but I am really looking forward to the picnic people other than my beloved family. So I am looking forward to looking you in the eyes and maybe if everyone is comfortable a fist bump or clap on the shoulder at our picnic this Monday. I know I have many rough edges that have developed over the last 18 months and I know that they need to be de-burred a bunch, or maybe it is the Mr. Wilson theme of "Get off my lawn" that seems to set into people as they age, though I know it is in reality both. After spending a few days in the mountains and forests, I found my return to Seattle quite bumpy and full of snarls (on my part, I sounded like a grumpy bear or irritated lion), so please let us all be gentle with each other as we meet, we all view things that are going on differently, though as pilots we tend to be more conservative and agree on a lot of things.

I have been thinking about the Newsletter and I have a few questions to ask the membership:

Do you still want a printable pdf? I know I do like something I can hold besides an electronic device.

Would you like a more blog or video oriented newsletter?

Brian: How does the EAA view such things?

Would you like more building techniques, technical themes?

Would you be interested in more history?

Review of things like how do you use Oratex instead of fabric? How to drill and figure out how to get rivet holes aligned properly, especially when it is a blind situation? I do understand that the majority of the membership is building an aluminum aircraft, but I do not want to lose the skills of the tube and fabric building.

What articles or wisdom or just this is how I did it information can the membership provide? We have seen a bunch of things from Steve Crider, Ron Wanttaja, and Mark Owens.

What about the Zenith group that we are starting to have more interest in. Can you provide tips and "oh crap", I shouldn't have done that? What about printing 3d parts? Coding and actually making a part?

I know many people are afraid to write some technical things, but I can help. Please send me your ide-

#### EDITORS CORNER, CONTINUED, JUNE MEETING MINUTES:

as and we will publish them as I can.

Your ideas will help this chapter grow successfully into the future.

It is looking like I can finally pick up the Wag Aero Sportsman 2+2 project this Sunday, so there may be more I can share on Monday.

I seem to be an obsessive plans collector, I now have plans for the Cygnet, Easy Eagle (First attempt at a project that I had concerns about after 2 accidents by the same builder, I spoke with Ron extensively about it), The Headwind (the second attempt to build, but now a plane I cannot fit into, but it is a proven design), The Affordaplane, the Falconar F-10A, Floats for a light aircraft (about 1400 lbs.), the Veri-viggen (gifted to the Chapter).

I began to realize that I had focused needlessly on a single seat when a two seater is more functional (thanks to several members suggesting my looking at more than one seat). I am also more interested in out-back or back country flying and STOL. This is a partial reason for the Sportsman 2+2 project. How successful will I be? Time will tell.

#### Build Straight; Roger

#### June Meeting Notes:

Brian: Calls from two new members Dean and Bill. Make sure you know which way you are going to avoid the restricted airspace near Western Airpark. Clean, clean, clean after each session of building. Coming to a conclusion to his glue issue for the Mooney mite. Complete set of factory plans. Having an issue where the FAA Advisory does not override the factory. Thinking about using resorcinol, need high clamping pressures, good jigging. Going to repeat his process of testing the spars with resorcinol. Ailerons stripped and rebuild gliders ailerons. NY chapter found a Europa in the box for similar to Tim's Europa. The O-ring in the Curtiss drain valves are special shape. Cant replace the O-ring

Jason Fish: Got his wing crate Spent at least an hour a day in June working on his Zenith. Used a dab of super seal to hang the wooden tongues. Put the senders into the top of the tanks. No standard for the torque on the fuel fittings. Rear Spar has a 3/16 inch hole for the return The lines are hard, so he used a pipe bender 10 degree out then 10 degree back to align to the hole he cut. Brian Do not use the Teflon tape. Did not realize that the fuel sealer stays wet. June has been best month for his building. Zenith had the dual lights in one wing Jason wants to have one in each wing. Wear different shoes that are only used in the shop. Watching a video relating to where his is at the moment. Ordered fuel drains that locks open.

Bill Gregory: Airline pilot, wood worker Investigation time of researching what he wants to build. Going to Vans to get an RV10 ride. Darin invited him to join him to see his RV10. Spoke about strategic planning for scheduling builds.

Doug Happe: Just did third annual. so he has been flying it for 4 years. Lots of support from Vans. His Hot Rod has been his project. Drove his HR to Moses Lake and back and now has 400 miles. Flying a bunch, Aerobatics this time he had a program for aerobatics and had a great time. Hung up Hammerheads just really enjoying them Also enjoys inverted, so did about 5 minutes inverted. Has the inverted system, except for the brake fluid which drains out No problem to Capping it for the short time. Takes screws and screw into the top of a box and paint the heads of the screw to match the color. Now has 28 color matched screws (Red) to his leather seats. Reminded Bill that it is more time consuming than the RV9. The Vans plans and Vans air force are really good. Suggested the Vans book on tips and hints. suggested labelling, and organizing the parts to save a lot of time searching for parts A T-hanger recently sold 235,000 with a sixty year reverting to the port authority. Suggested that the drains be bought in multiples because the stuff from the build breaks free and clogs the drains. Or just take off the drains to get a good flow to get out the crud.

Tim: Tim asked Bill if he had looked at the Sling. Just got back from Oakland, had a great time with his grandkids. Finishing up a fence project. Too many non av related projects

Bruce: The T-18 design has been flying for 50 years Definitely a classic. There have been a couple built lately. Working on the house The airplane is flying good. Got his ADSB issues resolved. Moving to Western airpark in Yelm Deal closes on Wednesday. Has to build a hanger, but there are two widows that do have empty hangers. Used screen material for painting his screws. Suggested a Rumbha for clean up.

Page 7

#### GUESS THAT MOVIE AND THE STAR AIRPLANE:

# Junes Movie and Star Airplane: 1995 Comedy, drama, romance

A Month by the Lake:

Starring:

Vanessa Redgrave (Miss Bentley) Edward Fox (Major Wilshaw) Uma Thurman (Miss Beaumont) Alida Valli (Signora Fascioli)

At a Lake Como resort, Miss Bentley, an attractive older guest, meets a handsome, well-to-do bachelor. But when he's more interested in a beautiful young flirt, the mischievous Miss Bentley goes to outrageous lengths to reel in her catch.

To read more: IMDB: <u>Click Here</u> IMPDB: <u>Click Here</u>



The airplane:

Caproni Ca.100 Idro

The Ca.100 (nicknamed Caproncino, little Caproni), was based on the de Havilland DH.60 Moth, for which Caproni had a production license. They revised the wings so that the upper wing was slightly smaller than the lower, and also redesigned the tailplane. Otherwise, its wings followed those of the Moth in having no sweep or stagger. It was a wooden-framed, fabric-covered single-engine aircraft with a square section fuselage built around four longerons, with tandem open cockpits. It had a fixed, conventional undercarriage. Fuel was carried, Moth style, in a streamlined tank on the centre section of the upper wing. It first flew in late 1928, piloted by Domenico Antonini, at Milan-Taliedo

To Read More: Click Here

This Months Movie and an airplane:





2008 Movie This month we get three airplanes.



#### **GUESS THAT AIRPLANE:**

#### Reid and Sigrist R.S.3 Desford

The Reid and Sigrist R.S.3 Desford was a British twin-engined, three-seat advanced trainer developed in the Second World War for postwar use. Although the R.S.3 was evaluated as a trainer, the type never entered production and was eventually rebuilt as the R.S.4 Bobsleigh as an experimental aircraft with the pilot in a prone position, seen as advantageous in minimizing g-force effects in fighters.

Reid and Sigrist in Desford, Leicestershire, England, were an important instrument manufacturer in the interwar era, specializing in aircraft applications leading to the forming of an aviation division in 1937 at the New Malden, Surrey factory site. The first product was a twin-engined advanced trainer, the R.S.1 Snargasher (1939) which was eventually relegated to company hack used primarily at the factory and Desford aerodrome.

#### **Design and Development**

The follow-up design, the R.S.3 Desford (taking its name from the company site) was similar in size and concept to its predecessor although it was only configured for a pilot and trainee and featured a low-set wing. The R.S.3 was powered by two 130 hp de Havilland Gipsy Major Series I engines, rather than the higher powered de Havilland Gipsy Six engines of the earlier R.S.1. The overall shape was more pleasing than the dumpy R.S.1 and the pleasant flying characteristics of the earlier machine were retained.

#### To Read More:

Wikipedia: <u>Click Here:</u> All-Aero.com: <u>Click Here:</u> Aerial Visuals Airframe Dossier: <u>Click Here:</u>

Specifications (R.S.3 - Gipsy Major 30)

Data from Jane's all the World's Aircraft 1947

#### **General characteristics**

Crew: 2 Length: 25 ft 6 in (7.77 m) (26 ft 9 in (8.15 m) as R>S.4 Bobsleigh) Wingspan: 34 ft (10 m) Height: 8 ft 2 in (2.49 m) Wing area: 186 sq ft (17.3 m2) Max takeoff weight: 3,550 lb (1,610 kg)



Fuel capacity: 44 imp gal (53 US gal; 200 I) fuel in two centre-section tanks; 4.6 imp gal (5.5 US gal; 21 I) oil

Powerplant: 2 × de Havilland Gipsy Major 30 4-cyl. inverted in-line air-cooled piston engines, 160 hp (120 kW) each at 2,500 rpm for take-off Propellers: 2-bladed constant-speed airscrews **Performance** 

Maximum speed: 181 mph (291 km/h, 157 kn) at sea level

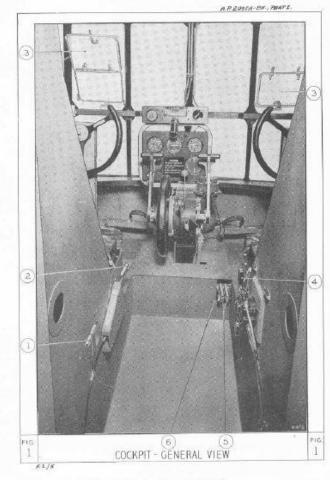
Cruise speed: 170 mph (270 km/h, 150 kn) Range: 523 mi (842 km, 454 nmi) Endurance: 4½ hours Service ceiling: 24,000 ft (7,300 m) Rate of climb: 1,416 ft/min (7.19 m/s) Wing loading: 19 lb/sq ft (93 kg/m2) Power/mass: 11 lb/hp (6.68 kg/kW)



#### **GUESS THAT INSTRUMENT PANEL:**

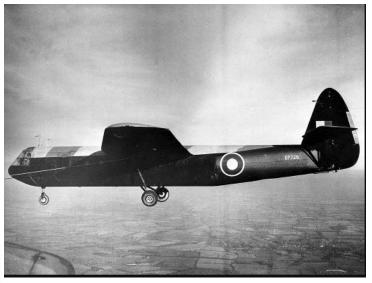
The Airspeed AS.51 Horsa was a British troopcarrying glider used during the Second World War. It was developed and manufactured by Airspeed Limited, alongside various subcontractors; the type was named after Horsa, the legendary 5th-century conqueror of southern Britain.

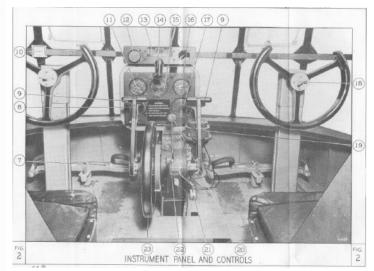
Having been greatly impressed by the effective use of airborne operations by Nazi Germany during the early stages of the Second World War, such as during the Battle of France, the Allied powers sought to establish capable counterpart forces of their own. To Read More: Click Here



Key to Fig. 1

- Flare release control 1.
- Wheel brake lever 2.
- Clear vision panels 3.
- T.R. 9D controls
- Lugs connecting port & starboard control column.
- 4.5.6. Locking pin for (5)





#### Key to Fig. 2

7.	Port rudder bar
8.	Altimeter
9.	Air brake control levers
10.	Compass deviation card
11.	A. S. I.
12.	Air pressure gauge
13.	Flying limitations plate
14.	Instrument panel light
15.	Artificial horizon
16.	Rate of climb and descent indicator
17.	Turn and bank indicator
18.	Wing nut securing starboard control wheel
19.	Compass
20.	Tow release control lever
21.	Undercarriage jettison control lever
22.	Flaps control lever
1.	

25. Elevator tab control