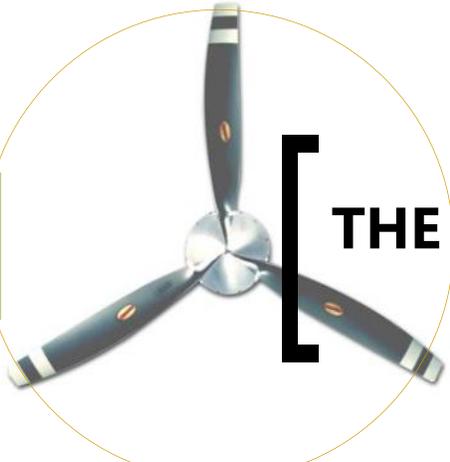


# THE SLIPSTREAM

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA  
**FEBRUARY 2019**



## PRESIDENTS COLUMN

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### Presidents Column:

Digging out of the doldrums

Every year, around the 21st of December, I get really excited. Not because we're in the run-up to Christmas. Not because we're just beginning our holiday break at work, and will have some time at home.

I get excited because 21 December, 2018 was the Winter Solstice. This is the shortest day of the year. After that date, the days become longer. I don't know about you, but the winter darkness really affects me. I'm not sure why. We're in the middle of what Jake calls the "Workshop Season", and my workshop is well lit. But going to work in the dark and coming home in the dark just seems to make me feel more tired.

A couple of weeks ago, on a rare clear day, the guys in the vanpool noted that it was still twilight at just after 5PM, when we got to the park and ride. That really boosts my spirit. Pretty soon we'll be gaining several minutes per day of day light.

As the days get longer, I discover that I have more energy. I don't mind being in the workshop after dinner, even if it is dark outside. I'm feeling better. And if this rain/snow ever ends and the temperatures get back to "normal", which the weather guessers on TV tell us should be around 50F this time of year, it'll be MUCH better.

Every year, I try to get myself to the point where at this time I am ready-

ing myself for the "flying" season. The airplanes have all had their annual condition inspections, are in license and airworthy. Now it's just a matter of waiting for the sky's to clear (at least a little bit) so we can put some air under the tires.

The Northwest Aviation trade show is this weekend. I have my list ready. My order was placed with Aircraft Spruce a couple of weeks ago, so I can pick up my bits and pieces without paying for shipping. I'm looking forward to seeing fellow aviators who I don't usually see except at the trade show. If it doesn't snow again...

Fly safe.

Brian

### February Program:

In December, Brian went to Florida and got his glider ratings. While we've heard from the Puget Sound Soaring Association a couple of years ago, Brian will give his first-hand account of his experience in going through the training.

### EAA Chapter Leaders Boot Camp:

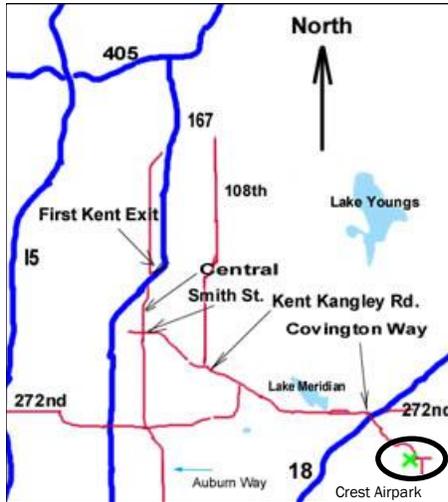
Mark and Brian spent a day in Puyallup attending EAA's training for chapter leaders. They had some 45 people signed up for this class, which was hosted by our friends in Chapter 326. There were people from as far away as Florida, Utah, Oregon (and I didn't get to meet everyone). It was a firehose of information, and Mark and Brian got seriously doused with it. We'll get a preliminary report on Mon-

### SPECIAL POINTS OF INTEREST:

Northwest Aviation Trade Show:  
 The 2019 NW Aviation trade Show is scheduled for February 23-24, 2019

EAA 292 From Independence  
 Oregon Fly-In and STOL Expo  
 August 16-18 2019  
 See Poster on Page XX

## WHERE DO WE MEET THIS MONTH?



Meets 4th Mondays 7:00 pm  
17605 SE 288th PL, Kent  
The Mellema Hanger



## FEBRUARY PROGRAM

Getting a Glider Rating Add-on

### Program

#### February Program

In December, Brian went to Florida and got his glider ratings. While we've heard from the Puget Sound Soaring Association a couple of years ago, Brian will give his first-hand account of his experience in going through the training.

### 2019

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**PIETENPOL UPDATE, KITFOX UPDATE, DARINS RV ADVENTURES:**

day night, but you should look forward to hearing more about it in the future.

Thanks,  
Brian



**Pietenpol Update:**

Hello 441,  
Progress continues on my 1931 Pietenpol.  
A second buyer for the Rotec radial didn't pan out so the selling process continues.... Switching engines from a radial to a flat-four requires a new cowling shape and I am going for the look of a Curtiss Jenny. After numerous scale drawings and sketches I mocked it up in cardboard on the plane. Working on fabricating a "false radiator"



for the nose - more on that as it comes together.  
I also received the cushion for the pilot seat and have included a view of the cockpit which is starting to come together pretty well.

That's all for now,  
Jake

**Kitfox Update:**

Working on final engine plumbing. Made two stainless braided hoses connecting gascolator to fuel pump and pump to throttle body.

Also made the crankcase vent using 5/8" O.D. aluminum tubing and connecting to engine with heater hose. Runs across top of engine, through baffling, fastened to engine mount, then down firewall. (photos on page 5)

Steve

**Darin's RV Adventures:**

Section 29....still

I think I'm beginning to understand why people don't like section 29. I've been almost done for two weeks now! Well actually I've been on vacation for the past two weeks with not much time to work on the airplane but still...shouldn't it work on itself while I'm gone?

Travis came over and helped me with the last of the skin riveting before we left for vacation. That was a huge help to me. I almost hope he decides to build an airplane some day because he has an amazing ability to visualize parts as well as read the plans. Anyway in addition to the skins I was able to finish up the rear vents (which I don't really like but...) and I've finished riveting the front floor skins in. Actually I'm not 100% done with the front floor skins because I still have a few side rivets to put in that will have to wait until I am done with the fuel pump mount that goes in

## 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.



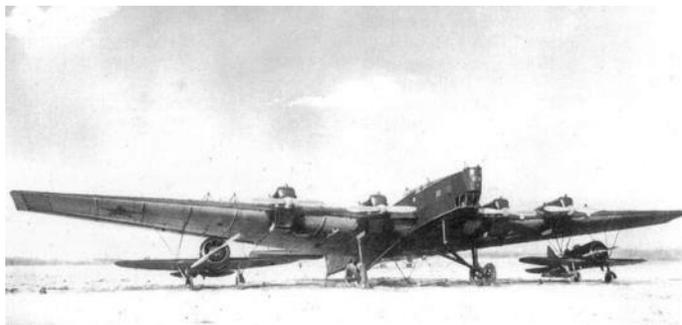
## GUESS THAT AIRPLANE; GUESS THAT ENGINE

This months entry:

Go to Page 11 for the January airplane

This months entry:

Go to Page 12 for the January Engine



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## KITFOX UPDATE, CONTINUED, DARINS ADVENTURES, CONTINUED:



The only steps left for this section is to rivet in two side ribs (which should go pretty quickly) and to install the main landing gear weldments. That last step will probably be a bummer since it involves many bolts and holes that all have to line up properly...and never do...depending on the temperature in the garage, the phase of the moon and how I position my head while banging it on the wall. :-)

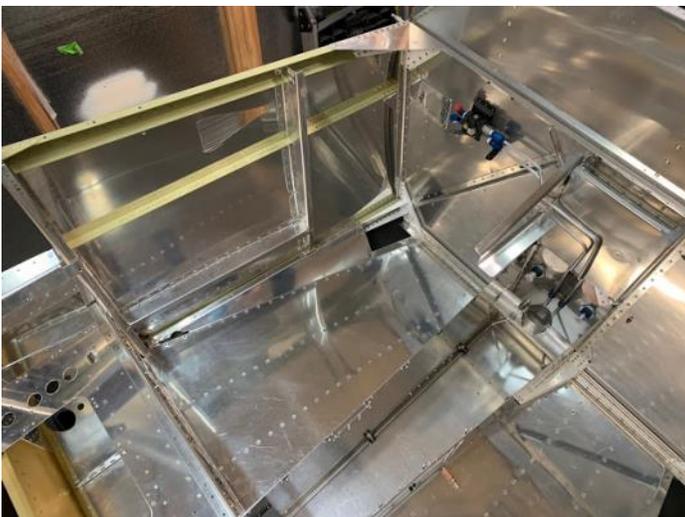
I'm probably going to step forward to the next section before I try to install the gear weldments. I have a couple of shims that I need to prime before I install the weldments and the steps (next section) are made of steel and need priming also. If I'm going to mix up a batch of primer I might as well try to use all of it.

Riveting....lots of riveting

Most of the past week has been devoted to assembly and riveting. As the title suggests its a lot of riveting and I'm trying to do it mostly by myself. There are many rivets I just can't do by myself so at some point I will have to call for help but so far so good. :-)

On a related note I finally made the decision to use the Grove brakes that come with the kit. Originally I was concerned about the brakes based on comments I read on VAF but it seems Van's has made a change from the older Cleveland brakes to the newer Grove brakes like the ones I have on my 9A. With that decision made I was able to order my finishing kit. They say its a 10 week wait so I figure it should come just about the right time, or a little early is fine too.

the tunnel.



## DARINS RV ADVENTURES, CONTINUED, JABIRU ENGINE MAINTENANCE COURSE, EAA NEWS:

Oh, one more thing, Jeff and I did a little IFR practice this past week and were treated to a beautiful sunset. Obviously the pictures below don't do it justice but I thought I would share.

### Jabiru Engine Maintenance Course:

The Jabiru engine maintenance course is on for May 17-18 at Independence Oregon (7S5), sponsored by EAA 292. We can offer free housing and Pete Krotje will be teaching it. It does not get any better than this.

We still have 3 openings. Yours for \$350.

Please distribute this message to all who might be interested

David G. Ullman

EAA 292, Trustee

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541-760-2338

### EAA News:

EAA Chapter 1218 Completes Deceased Member's EAA Biplane

By Tom White, President of EAA Chapter 1218

February 2019 - Eugene "Gene" Pascoe, EAA 59899, joined EAA and attended EAA Oshkosh in 1971. He purchased plans, attended many workshops, and began his EAA Biplane in 1972 while living in California. He continued work on the project after a later move to Kansas City. Still later, he built a retirement home in the Ozarks near Dora, Missouri, and a vintage hangar complete with a vintage brick floor took priority. In 1999, Gene was instrumental in establishing EAA Chapter 1218, in Gainesville, Missouri, where he held the office of chapter treasurer for several years. He was a Young Eagles ground crew member and assisted with the construction of the chapter hangar after it was relocated to Willow Springs, Missouri, in 2001.

Following his death in 2009, the family donated the EAA Biplane project to Chapter 1218 with one stipulation: They wanted to see it completed and flown. The airplane was completed in 2018 with the first flight on December 17 — the 105th anniversary of the Wright brothers' first flight.

To Read More: [Click Here](#)

Young Eagle® Credits Program

What are Young Eagles credits?

In 1995, we explored ways we could help offset some of the cost to our volunteers who support and give so generously for the Young Eagles program. Each pilot must provide 10 Young Eagles flights in a calendar year before the credits start to count. The following spring the Young Eagles Coordinator will receive a letter indicating how many Young Eagles credits their Chapter pilots earned in the previous year. Pilots who do not belong to a Chapter will receive individual letters.

Approved uses of Young Eagles credits

Program funding allows us to continue the approved uses of Young Eagles credits, to include the following:

EAA Air Academy Scholarships

As in past years, we strongly encourage Chapters to pool their credits to help send young people for the "aviation experience of a lifetime" at the EAA Air Academy summer camp in Oshkosh. There are two changes that will assist these efforts:

Young Eagles credits can now cover up to 100% of Air Academy tuition.

Young Eagles credits can also be used to support the transportation cost of sending children to the Air Academy.

Support of local Young Eagles activities

EAA Chapters may also apply for cash reimbursement of costs directly associated with the promotion, enhancement and execution of their local Young Eagles activities.

To Read More: [Click Here](#)

Upcoming Programs

Pre-registration is required for all workshops and webinars.

We thank Aircraft Spruce & Specialty Co. for sponsoring our SportAir Workshop & Webinars programs.

Upcoming SportAir Workshops

February 23-24:

Multiple Courses - Phoenix, AZ

**EAA NEWS CONTINUED, NICOLE BLOUNT:**

March 23-24:

Multiple Courses - Fremont, CA

Upcoming Webinars

February 27: Paramotors: Learning, Flying, and Buying the Smallest, Most Portable Aircraft

February 28: Become a Better Chapter Leader – Secretary/Treasurer

To Read More: [Click Here](#)

**Congrats, Nicole!**

Congratulations to Nicole Blount for being selected as the first Ray Scholar nationally. Through EAA's Ray Scholarship program, qualifying EAA Chapters are responsible for nominating and mentoring a young person on their journey to successfully obtaining a private pilot's license. Nicole received the notification of the \$10,000 award in late January.

In accepting the award she said, "the concept of being able to pilot an aircraft has always seemed so inconceivable to me. I never quite believed that I would have the ability to do this."

**Ray Aviation Scholarship Program:**

The Ray Aviation Scholarship Fund is a scholarship program that is supported by the Ray Foundation, managed by EAA, and administered through the EAA Chapter network. Through the generous support of the Ray Foundation, EAA will provide up to \$10,000 to deserving youths for their flight training expenses, totaling \$1,000,000 in scholarships annually.

The EAA Chapter network will play a critical role in the success of this program, as chapters are tasked with identifying and recommending local youth to apply for this scholarship. The chapter will also be tasked with mentoring and supporting the scholarship recipient throughout their flight-training journey.

Due to the critical nature of the local chapter to the success of this program, chapters interested in participating in the program must be prequalified by EAA through an application process. Once selected as a Ray Aviation Scholarship Fund approved chapter, the chapter can recommend a deserving candidate (s).

To Read More: [Click Here](#)

**Aerial Firefighting to Be Featured at AirVenture 2019**

Aerial firefighting will be a major theme at EAA AirVenture Oshkosh 2019 with support from the U.S. Forest Service and other aircraft operators and manufacturers.

"EAA is pleased to have the opportunity to showcase aerial firefighting and most importantly to give our attendees the opportunity to better understand this important aspect of aviation and salute those that make it happen," said Rick Larsen, EAA vice president of communities and member programs, who also coordinates AirVenture features and attractions.

EAA will be working with the U.S. Forest Service and other entities to bring various firefighting aircraft to AirVenture to allow visitors to see them up close.

To Read More: [Click Here](#)

**FAA Publishes Drone Rulemaking Documents:**

February 14, 2019 - On Wednesday, the FAA published three separate rulemaking documents relating to small unmanned aerial systems, or sUAS. The notices concern rules that currently or may in the future apply to sUAS, which is a catch-all term for commer-

## EAA NEWS, CONTINUED, EDITORS CORNER, JANUARY MEETING MINUTES:

cial and hobby aircraft (including traditional RC aircraft) weighing less than 55 pounds.

### Registration Marks

Without prior notice, the FAA published an interim final rule (IFR) that requires registration markings on sUAS to be affixed to the exterior of the aircraft. Previously, such markings could be located inside a compartment that does not require tools to open, such as a battery or radio receiver compartment. The FAA made this change after concern from law enforcement that a drone or model aircraft fitted with an explosive device or other dangerous payload could cause harm to first responders if they were required to handle the aircraft in search of a registration marking.

The FAA considered the security concern significant enough to publish an IFR without first inviting comment. The rule therefore takes effect on February 25, however the FAA is accepting comments until March 15.

To Read More: [Click Here](#)

Mark Owens Glasair:

Mark has made progress on painting his Glasair.

### Editors Corner:

I am hoping that you have been finding time to either fly or do some building. Building has probably been easier to accomplish than flying with the this years weather so far. I am hoping the old adage for March applies "I like a lion and out like a lamb."

I have been using the time to work on cleaning out



my workspace in my garage. I have found the old adage that Nature abhors a vacuum, so as soon as I had a clean space, something from somewhere else in the house managed to take its place. And I have to begin again. Though truthfully, most of it was related to the snowy weather. A generator and a snow blower managed to find their way into the space.

Tom Osmundson has been doing some research while taking care of his newborn and came across an article in Flying Magazine from 1948. See below.

How are you doing on your resolutions? I have decided to just refer to mine as goals for the next year.

Your input to the News letter is important. If you can write a couple of paragraphs about what you are doing, or about the mods you want or are making to your airplane, or even something you learned about flying it would improve our Newsletter. If you feel you cannot write, send me a video or voice recording and I can run it through a converter.

Here are some of my goals related to flying:

Get current again

Improve the Chapter 441 Newsletter, make it more interesting, more informative, a testimony to our ingenuity, etc..

Get working on the Luscombe on a weekly basis.

Build Straight

Roger

### Luscombe Update:

So I was tinkering on the internet, as keeping an eye on the kiddo I'm on the computer more than in the shop.

I recall when we got the registration records there was an outfit with a goofy name. Saunders fly-it-yourself. Kansas City, KS. The registration records also have it lumped into a Chattel Mortgage with 4 Ercoupes...

Decided to google it and gee whiz turns out there's a Flying magazine article on the outfit, January 1948. Reading the article the dad was into rental cars (drive-it-yourself) and the son after discharge from the Army Air Forces decided to give aircraft rental aircraft a try. The rentals were for long periods, several days to several weeks. Must have done good business because the mortgage was paid off in December 47.

WINGS OVER WILLAMETTE FLYIN AND STOL EXPO:

**Wings Over the Willamette**

**Fly-in & STOL Expo**

**Aug 16-18** *Van's Homecoming*

**2019**



**CUBCRAFTERS**       **LIGHTSPEED**       **VAN'S AIRCRAFT**  
TOTAL PERFORMANCE

**Independence, OR 7S5**

**EAA 292** for info go to: [eaa292.org/fly-in](http://eaa292.org/fly-in)

©Rockert

**JANUARYS MEETING MINUTES, CONTINUED:**

To see the article: [Click Here](#)

2 page view stitches together a photo of 4 Ercoupes and one Luscombe. (Connecting the dots with the mortgage listing the 4 Ercoupes and Duane's Luscombe N71346)

So, magic internet discovers early photo of N71346 with the first real owners of the airplane. Previous owners being the dealership in Lincoln, NE, and the factory in Dallas.

Tom Osmundson

**January Meeting Minutes:**

Brian Lee:

Presentation on a week at Seminole lake gliderport, Motion to add Joe to the Memorial at Oshkosh.

Motion passed Jake to get in touch with Rose about details.

Mark Owens has written a couple of articles for EAA which they might use someday. Will continue to write and submit to the EAA. His Glasair has been taken about for a couple of weeks. Underside painted. Painted blue. Upper Masked and ready to paint

Mel is back

Sam occasional flight with Doug getting ready to do conditional inspection

Doug flying to Massachusetts in March. Recipient of a surprise Retirement Party

Jerry 17 years of retirement

Ron. Had cataract surgery recently. EAA membership can use Solid Works CAD program. He is using Solid Works for his 3d printer. Making fake Lewis gun

Jeff Miller Made some progress on his ringed propeller air plane

Tim Yokers: life long dream to fly. He has an Europa for sale, bought it to learn to fly in it. No issue bringing it in from Canada. Planning to fly out of Crest and needs to build a trailer.

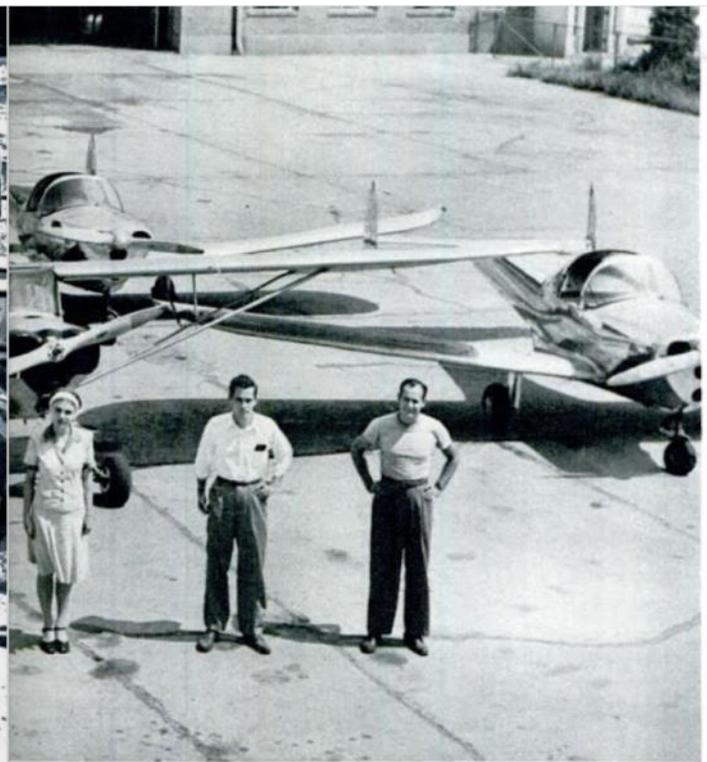
Norm Paulk is prepping to go to China.

Bruce Finney schedule issues about transponder and avionics. Playing with solid works.

Dave flew Tims Glasair and found no issues with his Glasair.



Luscombe N71346



**GUESS THAT AIRPLANE:****Dewoitine D.21:**

The Dewoitine D.21 was 1920s French open-cockpit, fixed-undercarriage monoplane fighter aircraft.

**Design and development**

The prototype D.21 was a development of the D.12. The aircraft was license-built in Switzerland (by EKW), Czechoslovakia (by Skoda and known as the Skoda-Dewoitine D.1) and Argentina (by FMA). One Turkish D.21 was fitted with a modified wing and named Orhanelli.

**To Read More:**

Wikipedia: [Click Here](#)

Military Wiki: [Click Here](#)

OnWar.com: [Click Here](#)

AllAero.com: [Click Here](#)

**General characteristics**

Crew: 1

Length: 7.925 m (26 ft 0 in)

Wingspan: 12.8 m (42 ft 0 in)

Height: 3.32 m (10 ft 11 in)

Wing area: 25 m<sup>2</sup> (270 sq ft)

Empty weight: 1,090 kg (2,403 lb)

Gross weight: 1,590 kg (3,505 lb)

Fuel capacity: 250 kg (550 lb) (ca. 175 l (46 US gal; 38 imp gal))

Powerplant: 1 × Hispano-Suiza 12Gb W-12 water-cooled piston engine, 370 kW (500 hp)

Propellers: 2-bladed fixed pitch propeller

**Performance**

Maximum speed: 267 km/h (166 mph; 144 kn) at sea level

262 km/h (163 mph; 141 kn) at 2,000 m (6,600 ft)

258 km/h (160 mph; 139 kn) at 3,000 m (9,800 ft)

254 km/h (158 mph; 137 kn) at 4,000 m (13,000 ft)

250 km/h (160 mph; 130 kn) at 5,000 m (16,000 ft)

Range: 400 km (249 mi; 216 nmi)

Service ceiling: 8,991 m (29,498 ft)

Rate of climb: 10 m/s (2,000 ft/min)

Time to altitude: 4,000 m (13,000 ft) in 8 minutes 4 seconds

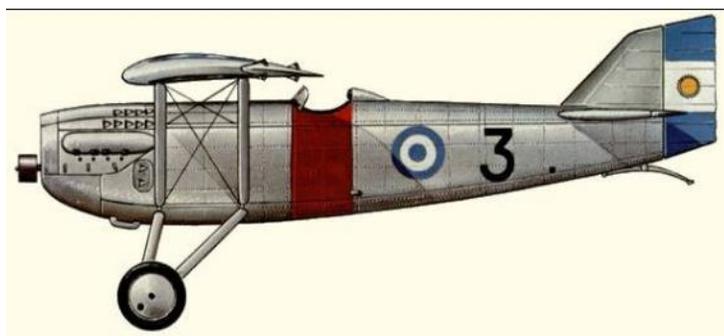
5,000 m (16,000 ft) in 11 minutes 17 seconds

Wing loading: 63.6 kg/m<sup>2</sup> (13.0 lb/sq ft)

Power/mass: 0.2694 kW/kg (0.1639 hp/lb)

**Armament**

Guns: 2 × fuselage-mounted synchronized 7.7 mm (0.303 in) Vickers machine-guns and 2 × wing-mounted 7.5 mm (0.295 in) Darne machine-guns in the centre section (optional)



**GUESS THAT ENGINE:**

## Salmons 9Z

The Salmson water-cooled aero-engines, produced in France by Société des Moteurs Salmson from 1908 until 1920,[1] were a series of pioneering aero-engines: unusually combining water-cooling with the radial arrangement of their cylinders.

Henri Salmson, a manufacturer of water pumps, was engaged by Georges Marius Henri-Georges Canton and Pierre Unné, a pair of Swiss engineers, to produce engines to their design. Their initial efforts were on barrel engines, but these failed to meet expectations due to low reliability and high fuel consumption caused by internal friction.

A new 7-cylinder water-cooled radial design was then developed by Canton and Unné. The range was expanded to produce 9-cylinder models, and also two-row 14-cylinder and 18-cylinder engines. By 1912 the Salmson A9 was producing around 120 brake horsepower; while competitive with rival designs from French companies, Salmson, Canton and Unné decided to develop more powerful engines as their rivals were concentrating on engines of lower power.

To Read More:

Wikipedia: [Click Here](#)

Museum of Applied Sciences: [Click Here](#)

Revolvy.com: [Click Here](#)

General characteristics

Type: 9-cyl radial engine

Bore: 125 mm (4.921 in)

Stroke: 170 mm (6.693 in)

Displacement: 18.7 l (1,141.14 cu in)

Designer: Georges Marius Henri-Georges Canton and Pierre Unné

Components

Cooling system: Water with radiators

Performance

Power output: 186.4 kW (250 hp) at 1400rpm

