



The Flying Wire

**Chapter 124
Experimental Aircraft Association**

**Volume 57 Number 9
Sep 5, 2018**

Board Meeting - 5:30 pm

Dinner – 6:15 pm (\$7 donation)

General Meeting – 7:00 pm

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www.EAA124.org

www.CafeFoundation.org

www.EAA.org

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Windsor, CA 95492

--- Mail ---
PO Box 6192
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September 5, 2018 Program

How Drones Integrate into the National Airspace System:

Kespry supplies industrial drones for aerial inspections and will bring a team for a demonstration flight. Kespry worked with the Oakland FAA on the LAANC program for airspace integration. Sonoma County airport is now a LAANC site, and members of the STS tower staff will address the FAA perspective.

Dinner Menu

September Dinner - Hamburgers and hotdogs, super salad, beans, fiddle faddle \$7

Events Calendar

Please send info about upcoming events!

Please send us information if it comes your way!

Nut Tree Fly-In: [Fourth Saturday Each Month](#)

Clearlake Splash-In: [September 7-9](#)

PCAM Air Show: [Sept 22/23](#)

Bob Gutteridge: bob_gutteridge@pacbell.net

Stuart Deal: aaa124newsletter@sonic.net

There and Back Again

(by Stuart Deal)

Yes it is true. I am not the only one to wonder why airplanes in the early twentieth century could be monoplanes but took a long (slow) circuitous route through biplanes and triplanes until a "no biplanes" mark was reached for fighter aircraft. There is a PhD thesis by Paul Kelly at the University of Edinburgh online titled "BIPLANE TO MONOPLANE : TWENTY YEARS OF TECHNOLOGICAL DEVELOPMENT

IN BRITISH FIGHTER AIRCRAFT , 1919-1939" [found here.](#)

Paul Kelly goes into great depth with the points of view of the many contributors to the development of aircraft in that time between the wars (the interwar period).

It seems safe to argue that all the early planes were slow. The Fokker E.III "Eindecker" monoplane maximum speed was 87 MPH (140 km/hour) while a few years later the Sopwith Camel biplane maximum speed was faster, 113 MPH (182 km/hour).

While aluminum had started to be available for aircraft by 1916 when the [Junkers J1](#) aluminum monoplane was built it still was not that fast at 106 MPH (170 km/hour).

Between the First and Second World Wars the thing that started moving aircraft development along was air racing. In particular, the Schneider Trophy seaplane races captured the imagination of Europeans (since Uncle Sam quit competing after winning) and eventually was owned by the British with the fastest seaplane going 407 MPH.



The Supermarine S.5 Winner of the Schneider Trophy at Venice in 1927 with 453,25 km/h (281 MPH)

While many entrants for the Schneider Trophy were biplanes, by

1929 the monoplane was dominant and big inline engines were pulling them. While air cooled radial engines were strong in the U.S. with the Bendix Races, Rolls Royce created the liquid cooled Merlin engine which became the primary mover of British planes as the Second World War was ramping up.

According to [Britannica](#) the Merlin engine was influenced by the Curtiss D-12 engine. The Curtiss engines attracted attention when James Doolittle won the Schneider Trophy flying the R3C-2 from Curtiss. It is quite fascinating that Rolls Royce refined the V-12 concept to power most of the planes that the British put in the air in WW2 in an "all your eggs in one basket" approach. Because Merlin production and development became "the key to life" while pulling the RAF through the Battle of Britain, it was well situated to be adopted to power North American P-51.

With limited resources the British strategy was to very carefully develop something that was the best they could do. This stands as an alternative to wide ranging U.S. development of many different planes in a "it will go somewhere" strategy allowed by the production might of U.S. industry of the time. A perfect example is the Corsair F4U that was a carrier plane that was hard to land on carriers so was adopted by the Marines to fly from land bases.



Hawker Fury

It turns out that the structural simplicity of the biplane may have put it in a favorable light, even in the interwar period, to the Royal Flying Corps because of the number of accidents that happened with monoplanes versus biplanes early on. They actually put in place what came to be called a "monoplane ban". Because of a bias against monoplanes the structure of fighter aircraft for the RFC went from wood to steel tubing and engines continued to advance but as late as 1939 the Hawker Fury biplane was the primary interceptor for the RFC.



Curtiss JN-4 "Jenny" to show a plethora of bracing wires

The Hawker Fury was an advanced biplane that could fly over 200 MPH and biplanes of today still have that side-by-side X of bracing wires without the four boxes of the earlier biplanes like the Jenny. On YouTube there is a video titled "[Hurricane – The Silent Hero](#)" they talk about the 1935 George V Jubilee with a large RAF review was a farewell to the biplane. While there was still some resistance from the Air Ministry Hawker took up Sir Sydney Camm on his proposal to create a monoplane version of the Fury which led to the Hawker Hurricane.

Of the WW2 fighter planes, the one with the most similar

construction to plane I have is the Hawker Hurricane. Steel tube fuselage and wing stubs with wood formers to shape the fuselage and a fabric covering. While the prototype had fabric covered wings, they went to a stressed skin aluminum wing. Reputed to be easy to fly and repair, there are stories that some shells would go right through with little or no structural damage.

The Hurricane was essentially a platform for modifications as they switched up wings and armament and tweaked the Merlin engine. Many Hurricanes were made in Canada and they were deployed all over the world, even on merchant ships and as [tank busters](#) in North Africa.

While not as pretty as, well, almost any other fighter from WW2, the Hurricane is very solid looking with the straight through wing root and bird face front end and accounted for a great proportion of RAF fighter success.



Hawker Hurricane

President's Post

Thanks to Andy Werback, EAA Ch 124 Pres.

Well, as I'm writing this in mid-August, I'm wondering how the Aug 25 event will go – I've invited a few of our friends from Petaluma and San Jose, so we'll see how it turns out. I'm sure the Young Eagle Rally will be a busy event as Josh says all slots are reserved.

Oshkosh went well this year – we had some exceptional presentations by Myron Meek, Wayne Cook, Brien Seeley, John Swanstrom, and yours truly. A lot of airplane pictures (I think the favorite is Mike Patey's red Wilga turbine conversion) and John's presentation was exceptionally well organized. Thank you all!

The major down note was the tragic crash of the de Havilland 112 Venom vintage jet, killing Martin Tibbitts, the pilot and co-founder the World Heritage Aviation Museum in Grosse Point, MI.



Another item of note was the weather – worse than usual. Arrivals over the weekend were pretty much scud running except

for brief periods when everybody was headed for Fiske. We had a chance to visit the Fiske FAA site up on a little hill – the main message was “we need at least a mile in trail – all you guys turn left 270 and try again”. That, plus intermittent runway closures. We finally got the airplane to Oshkosh at noon on Monday, having spent a night in a Super 8 at \$200 per night. Every year is different!

And that was after I diverted to Baraboo, WI, for 3 hours to wait out the morning rush. I would like to report that Baraboo is about 60 nm west of Oshkosh, and that it’s a really nice place to visit. I spent the time meeting 3 enthusiastic EAA members, getting the cook’s tour of their Wittman Tailwinds that they had built (one a tricycle conversion), and a quick peek at their plexiglass forming operation. EAA is alive and well at KDLL.



As we were flying back from Oshkosh over Utah, we heard several airline pilots contact Salt Lake Center about something floating up in the sky – Center said they were Google balloons. And so they were – Project Loon, helium balloons for internet

connections to remote areas (could use one over Sebastopol). Pretty interesting, how they can cruise autonomously around the world but provide local service. A couple of links –

<https://www.wired.com/2013/08/googlex-project-loon/>

<https://spectrum.ieee.org/tech-talk/telecom/internet/how-project-loon-built-the-navigation-system-that-kept-its-balloons-over-puerto-rico>

Oh, and Hey, Guess What. It’s September, time to think about nominations for Chapter Officers. We will need a new Pres, possibly a new VP, and reelecting or nominating members for the Treasurer and 3 Board positions (please see the last page of the newsletter for the expiration dates – yes, we start to smell if left in the newsletter for too long). We’ll announce the Nominating Committee at the September meeting.

Boonville Fly-In

(from David Heal)



Bob Gutteridge (Jabiru), Dave Heal (RV-12), and Mike Tovani (Champ 7FC) at Boonville Fly-in Lunch on 8/11/18

Young Eagles and Open House

(from Andy Werback)

In case you missed it, we had a really fine Young Eagles event and EAA 124 Open House on Saturday, 25 August. The weather was pretty much as you have seen it for the last many weeks, so things were a bit different, not much flying but we and the YE's and their parents had a great time.

Thank you all who attended – we had John Swanstrom doing YE Ground School, Sam, Ron, Geri, Howard, Jim and Arlene doing hot dogs and hamburgers and cleanup. Also Laura, Vicki and Alan doing signs and YE registration. And many of our YE pilots brought their planes over to display and give people a chance to sit in them and talk about whatever comes up. Thank you Mike Shook, Kevin Quirk, Bob Gutteridge, Steve Barnes, Mike Tovani, Marlon Young, Josh Hochberg, Frank Euphrat, Wayne Cook, Dan Vance for dusting off their airplanes and opening them up for display. Plus we had a lot of members just show up – David Franco, Steve Barnes, Stephen Mann, Pete, Larry Rengstorf, CJ Stephens, Charley Taylor, David Heal, ... so it was a good time.

Also many thanks to Josh and Julia Hochberg for organizing and supporting everything that went on.

And, contrary to the TAF, around noon things did start to clear up and we got about 5 flights in for 7 Young Eagles who could stay a little longer. It was still a bit hazy, but the flights went well and people were very appreciative. Thank you Marlon, Frank and Josh! And I got to fly with an 11-year old on his first "small" airplane flight.

Overall, Sam and crew served about 40 hamburgers and 24 hot dogs. We had 27 Young Eagles signed in and going through ground school. A new feature at this event was the paper pinwheel project, enjoyed by many of the younger ones.

Well, here it is the next morning, and it's back to foggy. With so much smoke in the air and the super persistent fogs, we're hoping for some actual weather to help with the fires and get back to "normal"! Maybe we can even go out and FLY sometime soon!

Continental Titan

(from Bob Ferguson)

Hello All-- Finally, after a wait of 6 months, Continental Motors-Titan delivered the engine for my RV-8A project. A big step forward. Now I'm lacking only a prop, a few instruments, and many hours more labor to complete the plane.



Some Titan Specs:

IOX-370 cubic inches
high compression pistons-- 9.6 to 1
pendulum counter weighted crankshaft
rated at 200HP at 2700 RPM
roller lifters
Superior Air Parts cold air induction
Precision Silver Hawk fuel injection
B&C spline drive alternator
dual Light Speed Engineering PIII ignition systems

Bob

Wings Over Wine Country

(from Andy Werback)

The Wings Over Wine Country Airshow is coming up – Sept 22 and 23. We hope to have great weather and lots of visitors. Besides the airshow and airplanes, this year we will have many of our First Responders so you can meet and thank them and find out more about what they do.

But – we need some help!! We are looking for volunteers, with and without AOA badges, who would like to donate some time for a great cause. If you don't see something specific in the Signup Genius, give us a call and we will figure it out.

[You can view our current newsletter here](#)

[Please visit our Wings Over Wine Country Volunteer page here](#)

Fly Mart

Please send changes to eaal24newsletter@sonic.net

CAFE Hangar Spot: (9-18)

CAFE hangar space available at STS. Space for one or two light singles depending on fit. \$200 monthly each. EAA Chapter 124 Members, flyable aircraft only, please.
Contact Mike Fenn (707) 481-5791

EAA Hangar Spot: (9-18)

Eaa Ch 124 has one Hangar spot available for a RV size airplane, \$110 per month, plus \$200 deposit.
Must be Local & National Member.
Call Larry 707-575-0331 or Andy 707-823-5616.

For Sale RV-12 Project: (5-18)

All parts necessary to finish, including Avionics with ADS-B.
Extras include: Factory fuel tank, Vernier Throttle, Landing gear upgrade, many small upgrades.
Avery tool kit, Large tool box. air compressor, drill press, 1" belt sander, scotch bright wheels on grinder. 2 each 3' x 3' work benches.
Joe Arluck, 925-455-9954, jaarluck@comcast.net

For Sale: (10-17)

Garmin GDL 39 Portable ADS-B and GPS Receiver
Paid \$800 for sale at \$200
James Carraway 415-300-6150

For Sale: (8-17)

Glasair 2 FT serial#1077 Wing closed, control surfaces all completed, future vision instrument panel, kit was inspected by Al Negrin about 12 months ago when I bought it and found to be in excellent condition with good build logs and excellent craftsmanship. Wing and fuselage separated for shipping.
Asking \$10,000 for the kit.

Also have a lycoming IO-360-B1E 0 hrs since rebuild by Dick

Demars Aero. chrome lined cylinders, slick mags, plate says 200hp because it has 9:1 or 10:1 compression (I have to check the build logs). Built a long time ago, but recently inspected with cylinder #2 removal and boroscope. Asking \$15,000 obo
Call Owen Fredericks 530-591-7554 owenfred@gmail.com



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News / Notes From the Editor or ...

Please don't think I missed the huge news of the huge Mendocino Complex fire and the passing of Aretha Franklin and John McCain. I am not however, well situated to report on these events so I have left it to other media and publications.

FAA Wings forwarded by David Heal

[Link to FAA Safety](#)

"Double Feature - The New SFO Class Bravo AND Stabilized Approaches"

Topic: Learn about the new SFO Bravo and Bay Tours AND how to avoid landing accidents with stabilized approaches

On Thursday, September 6, 2018 at 18:30 Pacific Daylight Time

Location:

Sonoma County Office of Education

5340 Skylane Blvd
Apt #131
Santa Rosa, CA 95403

Select Number: WP2785079

Description:

It's summertime, and that means taking friends and family on a Bay Tour. We live in a place that offers amazing scenery, great restaurants, and horrible traffic jams. As pilots, we get to offer both visitors and locals the opportunity for a unique perspective on the scenery and easy access to enjoyable on-airport (and nearby) restaurants, without having to endure all that traffic. Of course, a tour over the Golden Gate often includes a transition through SFO Bravo airspace, which was reconfigured in August. Learn about the changes that have taken place in the SFO Bravo airspace and how it may affect your Bay Tour options.

After a break for refreshments, we will reconvene for a short presentation on how to impress your passengers and minimize accident possibilities with stabilized approaches and landings.

Interesting Aviation Links

(thanks to Random Surfing, Larry and David)

Pumpkin Carriage - [Click Here](#) (Caution: some F Bombs)

Mosquito Construction - [Click Here](#)

Engine Out - [Click Here](#)

Seattle Tacoma Hijack Radio - [Click Here](#) (Caution: Too Stupid)

Martin Mars to Oshkosh 2016 - [Click Here](#)

EAA Chapter 124 Board Meeting Minutes

August 1, 2018

Called to order at 5:30 PM by President Andy Werback. Attending: Marlon Young, John Whitehouse, Ben Barker, Larry Rengstorf, Terry Freitas, Steve Barnes, Brien Seeley, Dan Steinhoff, Josh Hochberg, Bob Gutteridge and Dave Franco.

Andy noted for the record that the Board voted unanimously by email on July 13, 2018 to appropriate \$300 for food at the August 25 YE/Chapter Event.

Larry and Marlon distributed a draft of a revised Bump System point sheet. There was discussion of how to adjust point values so as to encourage ongoing participation while respecting the stake of veteran members in the current system.

Josh reported that the EAA Chapter Survey is in preparation.

Andy said that a signup page for the PCAM Airshow on Sept 22/23 has been opened. After discussion of using the airshow as an opportunity to publicize the chapter, Josh proposed that EAA sign on as a Bronze level sponsor. The Board voted unanimously (motion Josh/second Dan) to appropriate \$750 for Bronze sponsorship and to authorize Andy to negotiate a trade of other sponsor benefits for a larger and/or more prominent banner to advertise the chapter.

Larry related that he read a new report by an Air National Guard Aviation Medical Examiner that found no decrease in safety associated with the less-stringent medical standards of the Light Sport Aircraft license.

Meeting adjourned by Andy at 6:20 PM.

Respectfully Submitted,

Ben Barker, Secretary

EAA Chapter 124 General Meeting Minutes

August 1, 2018

Called to order at 7:15 PM by President Andy Werback.

The chapter thanked the cooks and helpers, Sam, Arlene, Jim, Dan and the Mikes (Finn and Shook).

Visitors included Bob Brunholt and Chris Hawkins, a former member now living in Washington State. New member Lewis Nasner was introduced. Lewis is the builder of a Lancair Super ES.

Andy thanked Stuart Deal for the newsletter and John Palmerlee for the website.

The minutes of the July 2018 Board and Members meetings were approved as published, by unanimous vote on a motion by Larry Rengstorf, seconded by Dave Heal.

John Whitehouse filed the Treasurer's report, noting that chapter remains in stable financial condition.

Josh Hochberg reminded all that the next Young Eagles Event is coming on August 25. He also noted a nice newspaper article on Young Eagles flights by EAA Chapter 1268 (Sonoma).

Marlon Young previewed a September presentation on drones in the National Airspace System and reported progress in updating the Chapter hangar allocation system.

John Palmerlee reported that the Electric Aircraft Symposium in Oshkosh was a cozy and successful affair with about sixty attendees. He also said the CAFÉ Foundation is working to achieve common charging system standards for both aircraft and automobiles.

In the Builder's Reports, John Swanstrom announced he has a building permit from the City of Santa Rosa and is moving forward to rebuild his home, destroyed by the Tubbs Fire. Steve Barnes updated his adventures with magnetos and said he is still working on a replacement.

After a break for refreshment, the chapter was treated to Oshkosh Reports.

Myron Meek told of his travels with Dwayne Green in the latter's C-182.

Brien Seeley reported on a NASA Lithium battery meeting before AirVenture and the PADA awards ceremony.

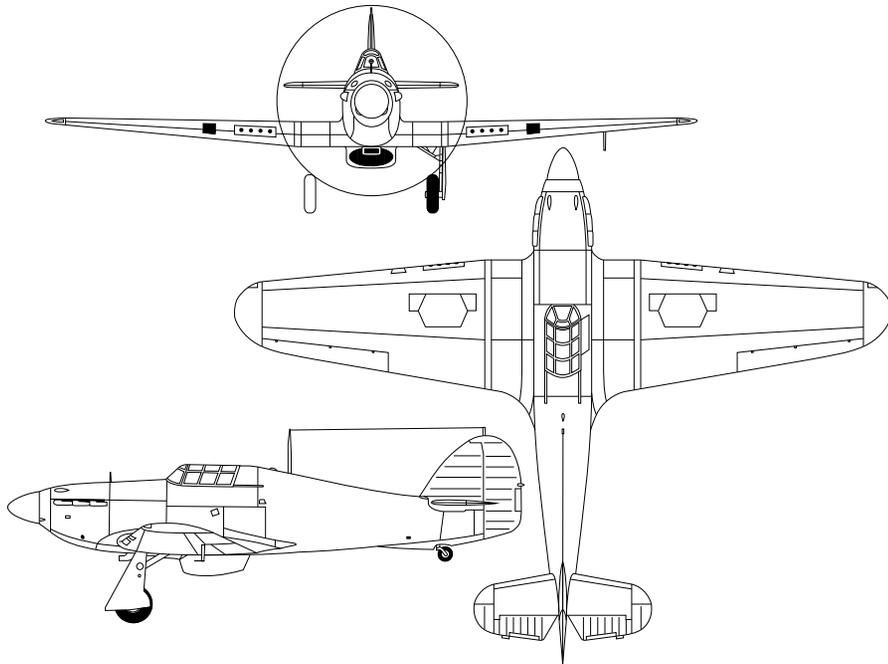
Wayne Cook, John Swanstrom and Andy Werback all shared entertaining tales and pictures.

Joe Wiegand reported that he and Heidi had not yet returned from Oshkosh. They drove straight from Ely, Nevada that day to attend the meeting and would not return home to San Francisco until afterward.

Meeting adjourned at 9:10 PM.

Respectfully Submitted,

Ben Barker, Secretary



Chapter 124 Contact Information

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	Dan Steinhoff (18)	(707) 235-0275
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Young Eagles: Josh Hochberg (415) 999-0949

Librarian: Walt Ferris (415) 482-8331

EAA Chapter 124
5550 Windsor Road
Windsor, CA 95492

Chapter meetings are held on the first Wednesday of each month at 7:00 pm. FOOD (\$7 sometimes \$10) AND SOCIALIZING (free) from 6:15 to 7:00 pm. EVERYONE IS WELCOME!

Directions: The site is located on the west side of Sonoma County Airport. Take the Shiloh Road exit from Highway 101 in northern Santa Rosa. Turn left at the stop light (west) and continue to a "T" intersection. Turn left again and follow the road to the EAA sign on the left.

Members are invited to submit articles of interest. You will be notified whether or not an article will appear in the current issue.

Please email articles to: eaa124newsletter@sonic.net

or mail to: Stuart Deal
430 Secretariat Ct
Santa Rosa, CA 95401

Deadline for newsletter submissions is the 20th of each month. Articles submitted after that date will be included in the newsletter at the discretion of the editor. All articles are copyrighted. To reproduce any article, please contact the editor.

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