

# The Flying Wire



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**Chapter 124  
Experimental Aircraft Association**

**Volume 57 Number 8  
Aug 1, 2018**

**Board Meeting - 5:30 pm**

**Dinner – 6:15 pm (\$10 donation)**

**General Meeting – 7:00 pm**

[www.EAA124.org](http://www.EAA124.org)

[www.CafeFoundation.org](http://www.CafeFoundation.org)

[www.EAA.org](http://www.EAA.org)

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5550 Windsor Road  
Windsor, CA 95492

--- Mail ---  
PO Box 6192  
Santa Rosa, CA 95406

## August 1, 2018 Program

### Annual Oshkosh Highlights:

Oshkosh Report – All the exciting places we visited and people we met at Oshkosh

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### Dinner Menu

August Dinner - Tri tip BBQ, Corn on the Cob, Heart Attack Garlic Bread, Super Salad and Sundaes for desert. \$10

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### 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](#)

**EAA 124 Young Eagles:** Saturday August 25th

**PCAM Air Show:** Sept 22/23

Bob Gutteridge: [bob\\_gutteridge@pacbell.net](mailto:bob_gutteridge@pacbell.net)

Stuart Deal: [aaa124newsletter@sonic.net](mailto:aaa124newsletter@sonic.net)

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### Pan Am 483

(by Andy Werback)

Did you ever wonder what happened to those Flight Insurance machines that used to line the walls at major airports? Well, there's still at least one still around – in the Smithsonian Museum. There was a time, however, when things didn't go as well as they do today.

It was a pretty simple procedure, insert a bunch of quarters in the machine and it spits out a printed form, which you then fill in your name, flight, and the name and address of the beneficiary. Then sign it and mail it to your spouse or other beneficiary. This was of

course, long before the Internet.

But why would this be important? Well, some years back, things could get to be pretty exciting.



Consider the case of Pan Am Flight 843. This Boeing 707-321B (Clipper Friendship, N761PA) left San Francisco on June 28, 1965, headed for Honolulu, Hawaii. It was just passing through 800' when it had an uncontained engine failure that destroyed the #4 engine (outboard, right wing) and started a fire in the right wing fuel tank, which then caused about 25' of the outboard right wing to structurally fail, with another 4' severely damaged.

Flight 843 declared an emergency, managed to extinguish the fire, and then headed for Travis Air Force Base with their big open runway. After a successful landing and no injuries, arrangements were made for another aircraft to pick up the passengers and continue the flight.

(The accident investigation turned up a lot of interesting facts regarding improper maintenance and inspections. But that's another story).

Well, that wasn't so bad. A second Pan Am 707 was dispatched to Travis – upon landing, its nose gear collapsed on the runway. A real confidence builder, for sure. A third aircraft was sent that successfully made the trip to Hawaii, but 8 passengers from Flight 483 elected to stay behind and travel some other way.



What became of N761PA? It was rebuilt and returned to flight, sold a couple of times, and then bought by Boeing to use as a source of spare parts for KC-135 aircraft. Some parts of it may still be residing at Davis-Monthan AFB.

By the way – what happened to the Number 4 engine? It went through the roof of a cabinet shop in San Bruno, through an 8' high concrete wall, and landed outside the building. A section of the wing wound up in Holy Cross Cemetery. Fortunately, and amazingly, no injuries.

But – what do you do with an airplane that is missing part of its wing? Well, simple solution, update the flight certificate to allow flight on 3 engines with part of the wing missing. It had obviously flown that way... So N761PA was flown out of Travis to the Boeing factory in Washington, where basically a new right wing was installed.

There are many other amazing stories from that era, unfortunately, and many did not turn out so well. But that's why you buy insurance!



## Rapid Development

(by Stuart Deal)

Not software with marketing schemes like "Rapid Development", "Extreme Programming", "Agile", "Continuous Integration" but just making the next better than the one before. That was what went on with aircraft during either of the World Wars. Yes, the topic of the young pilot (Lt. John J. Goodfellow, Jr.) from Texas who lost his battle while the Doughboys and the Allies were winning the war has latched onto me and perhaps letting it run its course will get me to the other side.



EAA 88 Display of Fokker Triplane Replica on Wichita working trip  
2011

The image of the homebuilt Fokker Triplane proves that there are people who are willing to devote time to the images and aviation technology of World War 1. While the plans and kits I know about are made with a more modern material (aluminum) the flying characteristics are bound to have something in common with the original.

While I do struggle with romanticizing the experience of the fliers of the time, all manner of distance and a "Peanuts" cartoon where

Snoopy's dog house becomes a Sopwith Camel with a [popular song](#) describing the "dog" (thus the humor) fight that ensued mean, to me, that liking the airplanes of the First World War is socially acceptable on these pages.

By my count of the Red Barons Victories, 19 out of the 80 were while flying the Fokker Triplane which was the last plane he flew. The fact that the Triplane design was originally built by Sopwith and copied, at least conceptually, by Rienhold Platz and Antony Fokker is not much discussed outside the [Wikipedia Page](#).

The more the merrier wing count actually reduces the potential for speed in a triplane, but it has captured the imagination of generations of fliers and enthusiasts, partly because of the marketing done by Baron Manfred von Richthofen himself with the red paint job and all.

While for us, the whole thing is retro, at the time every development had a serious impact on lives of soldiers on the ground and, later, in the air. Early in the war, air reconnaissance helped to prevent losses, such as at the Battle of Mons where airborne observations prevented huge losses by the BEF (British Expeditionary Force). Other times air observations increased losses with one strategy to simply following troops on the ground to guide artillery fire to them. Any victory created losses on the other side, so aircraft stimulated losses on the ground on one side or the other.

In the air, eleven years after the first powered flight at Kitty Hawk, it was getting in the air that counted. Things went from almost no combat with airplanes to the first air to air combat. Eventually, of course, dogfights on a massive scale became normal. All this was enabled by the current technology and aircraft production.

In those days, neither side had real ability to interfere with the production of airplanes in any significant way. Obviously, they could destroy planes, their own with design flaws and enemy planes with machine gun fire.

While it may be obvious, successful gunnery relies on successful aiming. The "Fokker Scourge" caused by Antony Fokker developing a way of synchronizing the front facing machine guns, to avoid hitting the propeller, was mostly a way of allowing the German fighter pilot to aim his machine guns better from August 1915 to

early 1917.

The British "Royal Aircraft Factory" and "Vickers" both had been working on pusher types, based on designs from the French "Farman Brothers", that could shoot forward without synchronization. One of the early types that were able to counter the German air dominance was the F.E.2b which was mostly produced outside the Royal Aircraft Factory, 1,939 were built.

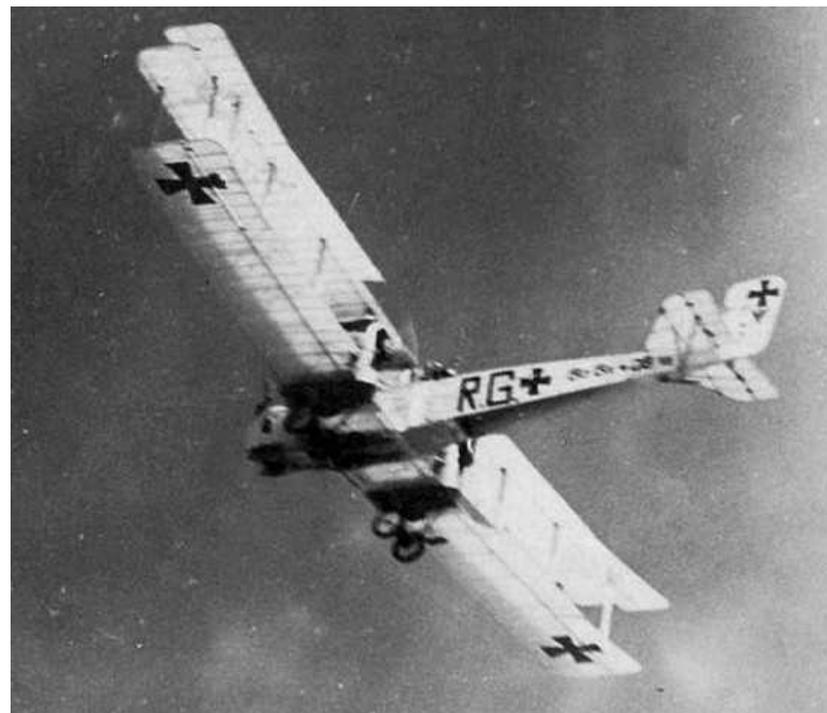


Royal Aircraft Factory designed F.E.2b (Farman Experimental 2b)

If you look at the F.E.2b you see tons of wires to brace the biplane wings. The pushers were considered too slow, but looking at the things that would slow it down the wide steel tube tail structure might have some drag, but many of the aerodynamic upgrades in later biplanes included strengthening the spars and reducing the number of struts and wires. If you made such changes to the French and British pushers I would expect some performance gains.

It seems that both sides tended to copy aircraft features from the other side such as Fokker borrowing the triplane from Sopwith and focusing on tractor planes with prop synchronized machine guns and abandoning the pushers seems like copying what appeared to work for the for the Germans.

The Germans, for their part, adopted the pusher for their large Gotha G.IV bomber which started production in 1916 well after the use of pushers on the French and British side. Pusher twins avoid the problem of an awkward tail structure but there have been very streamlined pushers with just one prop.



Gotha Bomber



Slick Pusher: Barlow Acapella 100

Of course, fiberglass was not used in WW1 but I can imagine that back then the pusher configuration might be more survivable if the

engine takes a hit instead of the pilot when attacked from behind. One of the strange design shifts that happened on the German side is the move from the monoplane Eindecker to less efficient biplanes and triplanes. While the Eindecker shape is cleaner and more efficient than the biplanes, it has 4 landing wires on top and 4 flying wires on the bottom of each wing with a cabane in front of the pilot and a messy landing gear pulling the flying wires down. All of this draggy stuff could not have been good for performance. If the Eindecker had used ailerons instead of wing warping and used a long straight cantilever spar it could have performed much better.



Fokker D-VIII Monoplane as featured in the movie "Blue Max"

Eventually, with the Fokker D-VIII high wing monoplane and the Junkers D-I all metal low wing monoplane the efficiency of the monoplane won the design contest. My theory is that aviation and airplane design was new enough that designers were not confident enough to change designs incrementally.

If you know what works you may clean up your design and keep the good parts. If you are not so confident, you may toss out the old and try the next direction. You can see a pretty good example

of this later in WW2 when the Hellcat looked so much like the Wildcat carrier plane the Japanese pilots could only distinguish them by losing air battles to the Hellcat that had often won against the Wildcat. Grumman was confident of their aerodynamics and used the same root and tip airfoils for the Hellcat as the Wild cat had used. The powerplant was almost the same except the Hellcat engine name has the word "Double" in it. Essentially the bigger and better Hellcat solved the problems the Wildcat was having. While the Wildcat/Hellcat evolution may be the exception that proves the rule, trying new things seemed to be the hallmark of aircraft design during the First World War.

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## President's Post

Thanks to Andy Werback, EAA Ch 124 Pres.

A big Thank You to the crew of the Sonoma County Henry 1 unit – Pilot Paul, TFO Chris, Paramedic Don and Sgt. Pete. It was a nice question/answer session covering their new helicopter (lots of bells and whistles) and their missions – primarily search and rescue, with a bit of fire coordination from last year's Tubbs fire thrown in for good measure. This small dedicated crew flies about 500 hours per year, handles about 900 rescue calls per year, and does monthly training and qualification missions, so really busy. Here's a link to a video of one of their fire observation missions - <https://www.youtube.com/watch?v=zmAmxkTdElo>

We would like to welcome New Members Stephen Hipson and Michael McDonnel! I'm sure that David Franco and the rest of the Chapter 124 crew will do everything they can to make you part of the group.

Otis Holt brought his RV-7A for display – If you haven't seen it, it looks pretty cool with the constant speed Hartzell 74" composite propeller, and really nice workmanship on the installation of the oil line. The new Lightspeed Plasma III installation without the alternator pulley is pretty cool, too. With newer LEDs and avionics, it's getting so that a small alternator will do the job. Very nice!

Facilities – Larry would like to forward a message from the Fire

Marshall – Please do NOT park on the grass around the hangar, it's a fire hazard, for the next few months. For the meetings, we will escort you in to park on the tarmac. (I know, this will be a bit of a zoo for the open house. But we'll get the Do Not Cross tape out...)

Real ID – Has anybody tried this yet? It turns out that California's Driver License does not meet Federal Requirements (passed some years ago) for travel on commercial airplanes, starting in Oct 2020 (a little like ADSB, I guess). Well, my experience was less than encouraging. Of course, first get an appointment at the DMV. Second, make sure you have all the Correct Documents – Passport, Birth Certificate or other form of Federally approved ID (they have a list), Social Security Card (Yes, the Actual Card that was issued 50 or more years ago; Not the "receipt" end of the card that you saved, which has the same info on it), and Proof of CA Residency – Not your driver's license, but something like a PGE Utility Bill.

Well, this gets exciting. My first appointment didn't go well – Sam was out of town and we hadn't dug the passport out of the safe deposit box. So, since my license was expiring and the appointments are about a month out, I went in at 0730 on a Thursday morning to join the line. In about an hour, I finally got to get my ticket number, but found out that only the Actual Social Security Card would work. I have no idea what value a SSN card has for Real ID (It's secret, they won't tell you), but apparently it's important to someone. So, about 3 hours later, I finally got my basic driver's license renewed. Real ID will have to wait. Note - I have no idea why the DMV has 6 positions staffed and 200 people waiting...obviously there's no budget for proper staffing even though we pay fees for everything that the DMV does... There was a nice article in the Chronicle this morning (15 July) discussing this exact topic. Didn't make me feel a lot better, though.

And to get a replacement SSN card? Well, that was easier, but don't get me started. Just incredible where all this is going.

Anyway – bottom line – You don't really need Real ID – a Passport or Global Entry card will do just fine, as will some other forms of ID (see the TSA list at <https://www.tsa.gov/travel/security-screening/identification>).

And the DMV info on Real ID is at

<https://www.dmv.ca.gov/portal/dmv/detail/realid/realidfaq>

But – even better – Fly your little GA homebuilt to where ever you need to go, and put the fun back in flying!

Have a great trip and experience at Oshkosh!! Fly Safe!

Save the Date - August 25 – Young Eagles Event and Chapter Open House –

Young Eagles – 0800 to Noon

BBQ – Hamburgers and Hot Dogs – FREE

Homebuilt Airplanes – Share Rides, Display

Projects – Work in Progress

Kids Projects

Invite local Chapters, Pilots

We'll discuss this more at the August meeting.

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## Fly Mart

Please send changes to [ea124newsletter@sonic.net](mailto:ea124newsletter@sonic.net)

### Looking for a Safety Pilot :

I am an experimental pilot new to the area and based at STS. I am interested in finding other pilots at STS who might be interested in swapping safety pilot functions to maintain IFR currency during the cloudless summer months. While the safety does not need to be IFR rated and current, if he/she is, I would be happy to play the safety in return.

Email: [Lew Nashner \(lewnashner@att.net\)](mailto:lewnashner@att.net)

### Free – ½ cord of cut and dried pine wood:

Good for kindling. Free

Here at the Eaa 124 site, ready to load – come get it now.

FREE Call Larry – 575-0331

### 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](mailto:owenfred@gmail.com)



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## **News / Notes From the Editor...**

I had a great time designing a printed circuit board for an electric vehicle. I look forward to the next one!

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### **Interesting Aviation Links**

(thanks to Larry Rengstorf)

Thud (F-105) - [Click Here](#)

Herk Loop - [Click Here](#)

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## **EAA Chapter 124 Board Meeting Minutes**

**July 11, 2018**

Called to order at 5:35 PM by President Andy Werback. Present: Marlon Young, Ben Barker, John Whitehouse, Terry Freitas, Steve Barnes, Brien Seeley, Dan Steinhoff, Larry Rengstorf (5:47).

Andy stated that we need a chair for the August 25 Young Eagles Day and Chapter Open House. Josh Hochburg and Alan Hernandez will include the open house activities (hot dogs, surplus sale, displays, etc.) in YE outreach.

Larry and Marlon reported that the draft Bump System restatement will be ready for Board review at the August 2018 meeting. There was discussion of filling hangar vacancies before the system is rolled out to the membership. Several members expressed concern about making members aware of openings in the absence of a functioning priority and wait lists.

Chapter participation in the PCAM Airshow on Sept 22/23 was discussed. The chapter will put on the Saturday night Volunteer Dinner and will need volunteers, Sam Werback will lead the food

preparation. Additional possibilities are Fly-by and Taxi-by operations to increase exposure of chapter homebuilt and classic aircraft.

Ben summarized the options and their costs for obtaining 501(c) (3) tax exemption. A minimum cost of about \$700 would be incurred. A motion to table the topic for one year (Dan/Marlon) passed unanimously.

Marlon mentioned that the August program will consist of member reports from AirVenture at Oshkosh.

In his Treasurer's report, John stated that chapter bank balances are normal for this time of year. The chapter is renting several more tie-down spaces than are rented. He recommended that he or Larry write to the airport administration to relinquish the surplus parking spots.

Larry pointed out the extreme fire danger and said he will admonish drivers to not park on the grass for the next three months.

Meeting adjourned by Andy at 6:16 PM.

Respectfully Submitted,

Ben Barker, Secretary

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## **EAA Chapter 124 General Meeting Minutes**

### **July 11, 2018**

Called to order at 7:18 PM by President Andy Werback. Members were enjoying tours of the Sonoma County Sheriff helicopter, Henry 1, on the taxiway outside the chapter hangar.

The program for the evening was brought by the Henry 1 crew of pilot, tactical flight officer and two paramedics They were on duty and subject to immediate call-out, so were invited to begin the meeting. They were able to complete a very interesting

presentation without interruption. The latest helicopter is a Bell 407, custom-built for Sonoma County with a G1000 panel and delivered last February. Paul Bradley, pilot, described Henry-1 as providing unique night rescue capability from Marin County to Oregon. Although the crew members are armed deputies, most of their time is spent in rescues. County budgets have been tight, leading to the formation of "Friends of Rescue Henry 1," a nonprofit (501(C)(3)) charity to accept donations. Dep. Bradley noted that the County does not bill for Henry 1 rescues. The helicopter, deputies and presentation were enthusiastically received.

After an intermission while Henry 1 departed, the cooks and helpers, Sam, Arlene, Ron and Tim were applauded for a fine dinner.

Visitors and new members Stephen Hipson and Michael McDonnell were welcomed.

Andy extended thanks to Stuart Deal for the newsletter and to John Palmerlee for the website.

The Minutes for the June 2018 Board and Members meetings were approved as published (Rengstorf/Whitehouse).

John Whitehouse made the Treasurers report, noting that finances are in good condition except for some delinquent and non-revenue parking.

Larry Rengstorf pointed out the extreme fire danger and instructed drivers to not park on the grass for the next three months. Use the gravel area in front of the CAFE hangar or come inside the gate and park on pavement or gravel.

Andy reminded members of the Young Eagles rally and Chapter Open House on August 25.

Marlon said the August program will be made up of Oshkosh reports by members.

John Palmerlee reported that all is ready for the CAFE Foundation's 2-day electric aircraft symposium in Oshkosh. John also related his adventures driving a Geo Metro, converted to electric power, to the Laguna Seca electric car races.

Wayne Cook gave the Sustainable Aviation report, noting that the speeches given on Friday, 7/27/18, at the Oshkosh Personal Aircraft Design Academy, will be available on the SAF website shortly afterward.

#### Builder's Reports:

Steve Barnes has his engine running well again but is dealing with a magneto issue.

Dave Heal received a Service Bulletin from Sensenich and discovered cracks in his RV's ground-adjustable prop.

Otis Holt described the benefits of relocating the alternator on his RV-7 to the rear of the engine.

John Swanstrom said his RV-12 project is waiting for delivery of a Rotax 912IS.

Andy noted the passing of distinguished aviation author Richard Collins. He also recommended viewing the PBS show "Command and Control."

Meeting adjourned at 9:05 PM.

Respectfully Submitted,

Ben Barker, Secretary



Junkers J1 1915



J1-B Pusher Thanks to Anglefire

## Chapter 124 Contact Information

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**Librarian:** Walt Ferris (415) 482-8331

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### 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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