



The Flying Wire



August 2026

Volume 65 Issue 8

Chapter 124 Experimental Aircraft Association

Next Chapter Meeting: Wednesday, August 5

Dinner – 6:15 pm \$15

General Meeting – 7:00 pm

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Program: August 5 Meeting

SUMMER SOCIAL!

It seems the weather has finally turned here in Sonoma County and the heat is on. Summer nights!

Our August Monthly meeting speaker slot is typically reserved for everyone who made it out to Oshkosh and wants to share their story. It's also traditionally been a great time for us all to get together and get in some much needed summer socializing and have a chance to visit. We're not sure if anybody in the Chapter made it out to Oshkosh this year but we're ready just in case for some tall tales. In any case, it should be a great night to get together, have a good meal, and spend some much needed time under the stars on a warm summer evening talking planes and aviation.



For dinner, this month Andy and Sam have earned a well-deserved rest from the meeting's meal preparations and are taking some time off. Filling in, we have some amazing guest Chefs in the Kitchen! Board member **George Marshall** and his finer half **Brenda** are cranking up the culinary heat and preparing something special for all of us.

Think this is gonna be a good one! See you there.

Dinner Menu: Spaghetti with garlic meat sauce or pesto, grated parmesan, garlic bread and salad. Dessert: Spumoni ice cream and apple pie. **\$15**



News and Updates

Beginners' Machinist Class – Inspiring the Next Generation

On Wednesday July 22, Chapter 124 held its first ever machinist class for beginners! The class is free to Chapter members and being held in the old Cafe Hangar at the Chapter facility. Taught by longtime member **Mike Fenn**, it focuses on basic machine tool usage. Mike is a master machinist with a lifetime of experience machining prototypes and production. He was also an active member of the Cafe foundation when it was housed in this historic hangar.

The first class was a great night for all with a wealth of knowledge shared in a collegial atmosphere and a hands-on environment. It's the first class being offered as part of our greater vision of creating a roster of hands-on building classes for members and the community-at-large, with the goal of creating and inspiring builders and craftsman for the next generation. We're hoping it becomes a regular offering that we can expand to share with the community.

Special shout-out to Chapter Secretary **Dave Franco** who has generously installed one of his vertical mills and an engine lathe and requisite tooling so that members can learn and become proficient on these amazing machines. We're very grateful to Dave and we look forward to the future!



A Conversation with Sonoma County Airport Manager Jon Stout

Recommended by Chapter Member **Mike Tovani**



Sonoma County Airport has come a long way over the past two decades. As part of his YouTube series "Explore with Gore," **County Supervisor James Gore** sits down with **Sonoma County Airport Manager Jon Stout** to talk about the airport's transformation from a small regional facility with limited commercial service into a growing transportation hub that connects Sonoma County to destinations across the West and beyond.

In this 40-minute video, Jon shares the story behind attracting new airlines and routes, the investments that helped modernize the airport, and the important role it plays in supporting our local economy, tourism industry, and quality of life. They also discuss what's next for the airport and the opportunities that lie ahead as Sonoma County continues to grow.

It's a fascinating conversation about leadership, long-term planning, and one of Sonoma County's great success stories.

Here's the link: [Explore with Gore, Episode 5: Jon Stout, Sonoma County Airport Manager](#)

Santa Rosa 99s - Poker Night, Saturday October 24

Join the Santa Rosa 99s for an evening of fun, food, planes and poker – with all proceeds going to 99s aviation scholarships!



When: Saturday October 24, 5-10pm

Where: In the historic Redwood Hangar at the Sonoma Jet Center, 8000 Flightline Drive, Santa Rosa.

Tickets: \$99 for players, \$30 for non-players. Tables hold 8-9 players, and each ticket includes one beverage. Buy tickets [here](#). Hurry before they sell out!

Youth Aviation – Something to Yak About!

Chapter 124 held the first meeting of our brand new **Youth Aviation Klub** on July 15th - part of our drive to get more young people involved in the Chapter. Participants will be known as **YAKs** (until someone comes up with a better name!).



We had a fantastic turnout of young aviation enthusiasts, several of whom were coming to an event at the Chapter for the first time. Everyone was really engaged, with plenty of suggestions about what they want from their new club to help them realize their individual aviation goals.

Based on their feedback, YAK will offer a combination of theory and practical sessions. Topics we plan to cover in the coming months include Airspace, Weather, Aerodynamics, and Careers in Aviation. And in the true spirit of mentoring, our more experienced YAKs agreed to share their already considerable knowledge, lead the discussions, and help fellow YAKs navigate the world of aviation.

Of course, the group also enthusiastically agreed that what they most want to do is fly!

But, as we all know, nothing worthwhile in life is free 😊

So – the group decided that the club would set up a “Points-for-Flights” system. *And hopefully you’re still reading, because that’s where all our Chapter members come in...*

How will Points-for-Flights work?

YAKs will be able to volunteer for tasks to earn points towards free flights.

What kind of tasks?

Here are just a few examples we came up with during the meeting:

- ◆ Helping prepare Chapter meals and/or clean up afterwards
- ◆ Participating in Chapter clean-up days
- ◆ Helping members with maintenance tasks
- ◆ Washing planes

Can Chapter 124 members help our young people realize their aviation dreams?

Funny you should ask! **YES**. There are two things we need from you to make YAK a success:

- ◆ **EVERYONE:** suggest volunteer tasks! There will be a suggestion page on the hangar notice board where you can write down your ideas and requests – no challenge is too big or too small for a YAK!
- ◆ **PILOTS:** if you’re willing to offer a flight to a YAK who’s earned his or her volunteer points, please let us know! YAK flights will be administered under the banner of our Young Eagles program. This will provide insurance protection for pilots already registered under the Young Eagles program, plus the Chapter will benefit from each flight given.
- ◆ For more details about offering flights, contact **Paul Hollingworth** paul@bayareagyro.com (408-802-9242) or **Jenny Hollingworth** jennyhollingworth14@gmail.com (650-483-5203)

Hang on, there’s more...

How often will YAK meet?

Meetings will take place on the 3rd Wednesday of every month at 7pm in the EAA124 hangar. This is in addition to our regular Chapter meetings on the first Wednesday of the month, and we hope to see our YAKs at both meetings!

Who is YAK for, again?

Our Youth Aviation club is open to anyone aged 10-25 yrs with a keen interest in aviation, with a special focus on 14-18 yrs.

Next YAK meeting: Wednesday, August 19, 7pm, at the Chapter hangar.

Our topic for the meeting will be *Everything You Always Wanted to Know About Airspace*. If you're a young person wanting to learn more about aviation, we'd love to have you join us!



FOR SALE: Almost-Completed VAN'S RV12is, \$87k

Submitted by EAA Chapter 20 President Alexander Mouschovias

EAA Chapter 20 at KSQL has an almost-completed Van's RV12is for sale that we'd like to offer to other Chapters in the area before we put it on the open market.

This is a Chapter build led by a repeat builder who already finished and flew another RV12is through the Chapter. Unfortunately, life got in the way, and he will be unable to complete the second aircraft, so we are passing it on to a new home.



The empennage and wings are completed. Fuel tank done and pressure tested. The fuselage was intentionally left in two sections so that we could fit everything inside of a half-hangar, but it's ready to join. Plumbing and electrical wiring are well underway. Engine and prop are still in their boxes, ready to be hung, and it's almost ready for the landing gear to be attached. Avionics are not ordered, so you can customize it to your liking!

The Chapter has invested approximately \$110k so far. However, we are asking \$87,000, which includes everything except the avionics. At 20% off our original investment, it's a bargain!

Interested? Contact Curt Taylor at membership@eaa20.org. Photos available on request.

Newsletter Content Needed!

Got any good stories? Fun pictures to share? Send your aviation-themed content to our newsletter editor **Jenny Hollingworth** at jennyhollingworth14@gmail.com

Experimental Versus Experimenting

By Andy Werback

There is a tradeoff between experimentation and sticking with the known good designs. Small changes can have big impacts. Something that seems like a good idea might not work out so well. Even just doing what everybody else is doing can have limitations.

After 20 years of building and flying three airplanes, here is some of the not-so-much fun stuff.

First airplane: Legacy FG.

First, I'd like to note poor performance. Putting a little engine on a 2200lb airframe with a 230Kt, 82.5 sq. ft. wing is not going to work out well with respect to takeoff performance.

Other than that, the major issue with this airplane was main gear resonant oscillation – at first, it appeared to be nose gear, but a video camera mounted under the wing tip showed the main gear. The factory claimed it knew of no issue but “be sure to check for mud in the wheel pants.” There was no mud. It turned out to be a relatively simple fix, but it took about one year to get everything squared away - engine cylinder fracture welded, broken engine mount rewelded. Several other people also installed this fix.

Plus, the Century HSI had bearing problems every 100 hours, so it needed to go. Round gages, TruTrak AP. 300 hours, sold it, it's still flying, I think.



Damaged threads needed cylinder head welding (attach point for intercooler)

The other issue with this airplane was engine cooling. Since I was using an angle-valve IO-360 and the factory baffle kit was for a parallel-valve, I had to fabricate the baffle parts. I chose to put the oil cooler out in front of cylinder #2 with a duct to the lower plenum, and that did not work well. I couldn't get a significant pressure differential across it, which I guess is obvious now that I look back on it. Instead, I copied the factory installation and reinstalled it as part of the front baffle, so it had the full upper chamber vs. lower chamber pressure differential to get adequate cooling.



Initial Oil Cooler installation – blast air with vent to lower plenum

Ready to fly. Not the prettiest install...



Rework installation – the way the factory did it



Final installation – flush with the intake panel and no exit restriction



Second Airplane – Legacy RG

A very nice airplane, started out with a GRT Horizon EFIS. Sort of an early EFIS, lots of software bugs. After five years, we were introduced to the Garmin G3X at the Lancair 30th anniversary fly-in. Holy Cow! This is the way to go.

Rewired the airplane – two weeks to take out a pile of stuff, two weeks to install the new system and autopilot, along with a new panel and artwork from Aerotronics. This also upgraded the ADSB from an experimental box to the Garmin GTX-23ES, which included ADSB 1090 out, and the Garmin GDL-39R ADSB in.



Original GRT Horizon with backup gages

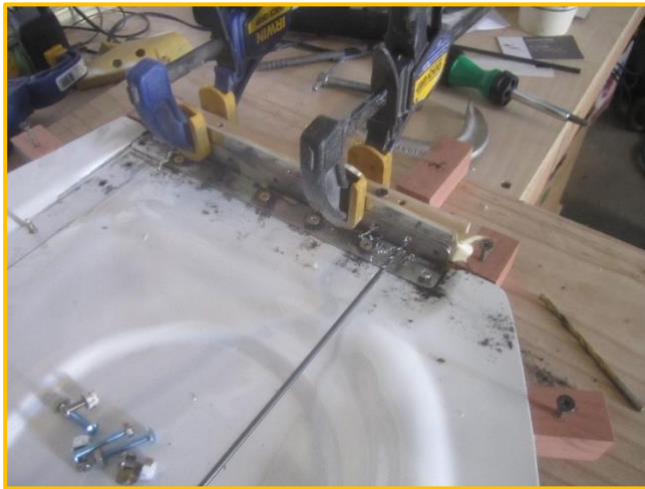
Garmin G3X Touch and G5 backup ADI/PFD



Another area that needed help was fuel efficiency - specifically, running Lean of Peak (LOP). With the Continental "position tuned" injectors, the cylinders did not hit peak EGT at the same fuel flow. Far from it.

I changed to the GAMI injectors and got pretty good matching. This allowed the Lancair to change from 13.5 GPH to 10.5 GPH (25% reduction) for a loss of about 10 kts (5%), and a significant improvement in range and reduced cost of fuel.

Also, it was noticed that the main gear doors vibrated quite a bit. I found out that I had installed the wrong hinges – we were supposed to use a heavy-duty stainless steel hinge. This wasn't especially clear from the plans although they did have a Lancair part number, but it was one of many parts missing in the kit as it was purchased (third-hand).



Match drilling to install the new hinges

Correct hinges installed



Another issue was the leading edge fairings – from a Lancair after-market source. These nice “cuffs” were very light. Too light, in fact. After a couple of years, they bubbled up, and after removal, it was apparent that not enough epoxy was used (infusion can be very light but be careful). So that meant tearing a bunch of stuff off, rebuilding it (foam and carbon this time), and a lot of repainting. While I was at it, I also fixed some low spots in the aft fuselage, below the left horizontal that weren’t apparent while building in the back corner of the dark hangar.



Infusion fillet with inadequate epoxy



Old fillet removed, foam fillet form ready for covering

Replacement carbon fiber ready for finishing



So the airplane was at the paint shop for about one month. Long time. Maybe too long. I started noticing some surface corrosion on a couple of the cylinders and getting poor compression, along with high oil consumption. I took off two of the worst cylinders and had them restored by Ly-Con to mint condition. Much happier. And wallet much lighter!

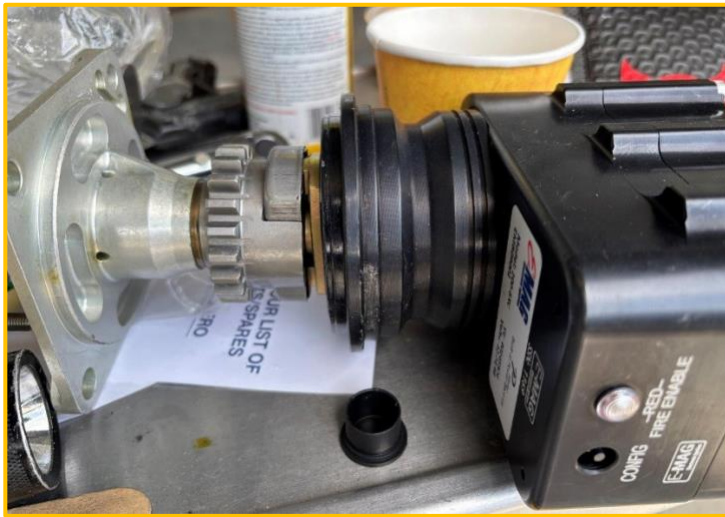
A somewhat similar issue was poor compression in cylinder 6 but with gasses escaping out the exhaust valve. I researched this a bit (primarily Mike Busch at Savvy Aviation), built a valve compression jig, and lapped the valve with a little bit of grinding compound (carbide). I didn't replace the rotocoil at this time, as it was relatively low time and in good condition (but it's recommended...) The valve has continued to operate very well (three years so far).



Valve Compression Jig

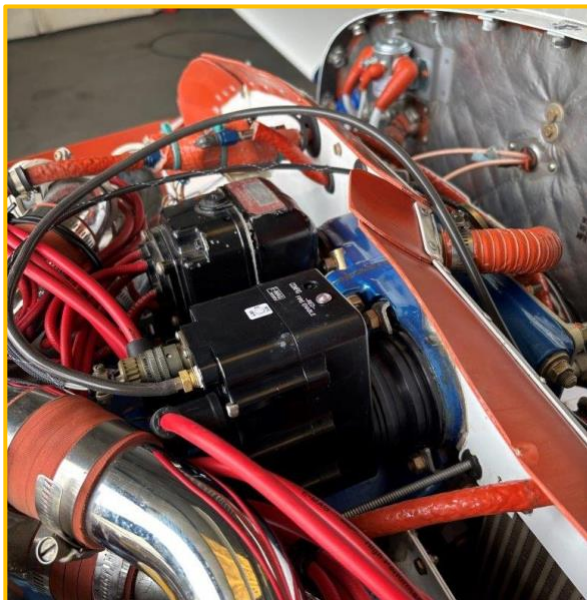
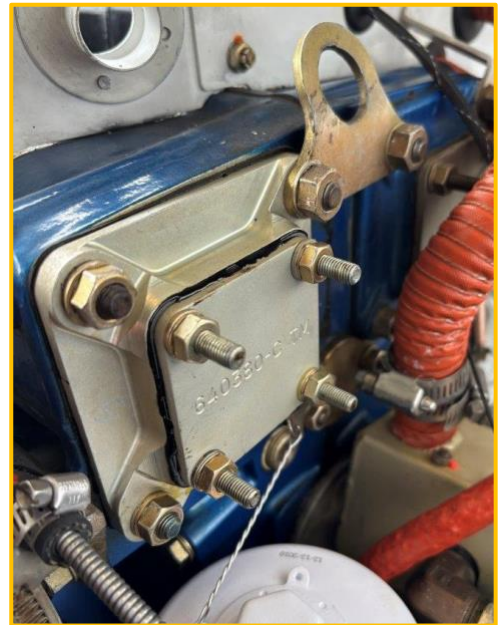
All good for many years, then the experimental electronic ignition started to get flakey at high power. I made several flights to try to isolate the fault - it's not the Bendix magneto and it only happens at high power. Lots of testing on the ground, lots of back and forth with the vendor, doing things exactly as described (I've had more fun hitting my thumb with a hammer...). I could not find any fault, the CDI box tested good on the vendor's bench test. But it was still failing.

I noted that there was a delamination in the crankshaft PCB pickup board but was told that was not a concern. Finally, I just replaced the crank sensor, and it's pretty much working again, except for a nagging issue at full power (again). Tired of chasing this problem, I ripped out the experimental box and put in an E-Mag. Problem solved! But since the experimental ignition did not have a magneto drive, and the E-Mag runs on a magneto drive, I went to LyCon again for support and got the proper engine parts installed in just a couple of days.



Magneto drive and E-Mag ready to install

Magneto drive installed, oil supply verified



Everything installed, just a few details to finish up

The other big Legacy RG issue involved the starter adapter. On the Continental, this is an expensive piece of spring clutch and right-angle drive. It is very sensitive to kick-back, will break the spring and possibly shear some bolts. I had to have it repaired (rebuilt) twice.

A couple of possible issues were a) the light-weight MT prop and b) the long cable to the PC-680 batteries, behind the aft bulkhead. I decided to sell the MT and install a conventional Hartzell aluminum propeller for the rotating inertial mass and upgrade a battery to the EarthX Li-Po for more starting juice (currently flying with one PC680 and one EarthX, with separate bus contactors).

Also, per the Niagara Air Parts recommendation, I replaced the starter motor with a Hartzell SkyTec TCM motor – more efficient, faster rotation, and slightly lighter. (Not a “light weight” starter - I’ve seen “lightweight” starters torqued so much they break apart!).

One final note – some builders had noticed a crack on the engine mount at the firewall, where it supports the nose landing gear over-center link. Sure enough, it happened on this airplane. I took everything apart and had it professionally welded with additional reinforcements. Keeping fingers crossed that it will last for a long time!



The dreaded engine mount crack (middle of picture)



*Original crack
rewelded*



Completed weld with added gusset

Third Airplane: Skybolt

Pretty much always a happy airplane except for a persistent high oil temperature. I went through a lot of scenarios on this, opening up the inlets on the nose bowl, widening the exit air in the bottom cowl, adding a second oil cooler. Incremental improvements, but the main thing was changing the oil pickup tube (The engine did not start out as an AEIO-360, but was converted in the shop). The pickup tube was a non-standard drilled tube, but after observing flakey oil pressure, figured that it was sucking air under some conditions. Replace the pickup and operating with at least 8 qts solved the problem.

The other issue was the radio – a 28v radio that was supposed to work on 12v. Well, turns out that nobody could hear it. So I rewired for a new ICom radio and intercom.

Then there was the engine monitor box – From Aircraft Spruce, but sort of a garage shop specialty item. It worked fine for a couple of years and then just quit. Unfortunately, there was no further support for this item, so I had to install a new GRT EIS box, and it's been fine since.

But overall, the Skybolt has been a very happy airplane – 220 HP, constant speed propeller, inverted oil and fuel, lots of fun. Just lots of work to build (3,000 hours not including the welded structure).

Bottom line: There's a lot to be said for "tried-and-true". It might seem like a good idea, but a little math and science might be a good thing. And just because it works for someone else, it might not work for you.

Editor's note: Andy originally submitted this article in September 2025, so check in with him for any updates.



EAA Chapter 124 General Meeting Minutes

July 1, 2026

There was no Board meeting this month. General Meeting convened 7:05 pm.

The president called the meeting to order. He then went on to thank the culinary team, led by **Sam Werback**, for another delicious dinner. The president then asked new attendees to introduce themselves. Several people described what brought them to the meeting.

Then the floor was turned over to board member **Paul Hollingworth** who is heading youth recruitment. He announced an upcoming meeting that will focus on youthful members telling the club what types of activities they would like to see included in the calendar.

The meeting moved on to the presenters. **Robert Leach** pridefully described his journey from novice aircraft builder to skilled RV-14 craftsman! Despite a steep learning curve and supply chain disruptions relating to the pandemic, Robert pushed forward and finished his plane in near record time. He began by describing how his confidence was nurtured by attending a two-week long Synergy builder assist program in Oregon. That program focused on fabricating tail control surfaces. He took time to express a debt of gratitude to Chapter members who offered technical assistance along the way. In particular, he thanked serial experimental airplane builder **Kevin Quark** for his attentive guidance. Some parts delivery delays were related to the Chapter 11 restructuring that Van's Aircraft undertook during his build. He described the frustration of not receiving his engine as promised from Lycoming. This led to him following up on a fellow member's lead regarding a freshly built engine that he could obtain immediately. The final product is so impressive that Robert was compelled to adorn it with a top-notch paint job. He delivered his plane to renowned paint shop in Idaho. The faultless results raise a standard for all other builders to strive towards.

The next presenter shared an alternate route to building your experimental dream airplane. In **Matthew Fredborg's** case, he purchased a flying RV-6 that, while structurally sound, had some questionable wiring shortcuts. He described how he was initially cautioned against buying the plane and how his ferry pilot warned against "pulling the tread" - a term meant to discourage picking a functioning airplane apart for fear that one modification will invariably lead to others.

In the end Matthew admits he not only pulled the thread, he unraveled everything- and is happy he did! His personal odyssey afforded him the opportunity to rectify early questionable installs and make the plane his own. He thanked Chapter member and experienced A/P **Mike Cingari** for his wise counsel and assistance throughout the rebuild. In the end, Matthew is confident he touched every nut and bolt. As he says, "It took many long days breathing and handling solvent soaked rags, stripping away the previous owner's choices, but in the end, it was all worth it and I would definitely do it again!"

The evening ended with CFI extraordinaire **Campbell Potter** sharing an overview of some new ForeFlight features. Flight planning is much simplified, and airport plates are easier to find. The feature that seemed to excite people is the ability of the system to generate glide range distance circles that integrate GPS-derived topographical detail to identify potential landing spots. Campbell took care to brief pilots that it is intended to give pilots an area to focus their search and cannot substitute good decision making and real world observations.

Meeting Adjourned 8:45 pm

Chapter Business

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	Otis Holt	(707) 953-3946
	David Heal	(707) 953-5021
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Young Eagles:	Jenny Hollingworth	(650) 483-5203
Chapter Roster:	Mike Tovani	(707) 321-2740

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 (\$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.

How to Submit an Article to the Newsletter

Members are invited to submit articles of interest. You will be notified whether an article will appear in the current issue.

Email your article to: jennyhollingworth14@gmail.com

Deadline for newsletter submissions is the 20th of each month. Articles submitted 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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