



# The Flying Wire

**Chapter 124  
Experimental Aircraft Association**

**Volume 55 Number 2  
February 3, 2016**

**Board Meeting - 5:30 pm**

**Dinner – 6:15 pm (\$7 donation)**

**General Meeting – 7:00 pm**

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[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  
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--- Mail ---  
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## February 3, 2015 Program

### Myron Meek

Myron Meek is a long time EAA member. He resides in Hidden Valley (Lake County) and has a first-hand experience to relate regarding the recent fires. In addition, he will present highlights of his Namibia Air Safari trip, and a discussion on How to Improve Heat Engines.

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### Dinner Menu

Lasagna, Super Salad, Garlic bread, wrapped up with cookies.

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## Events Calendar

### Please send info about upcoming events!

Please send us information if it comes your way!

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

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

**January 29:** Movie Night: Howard Hughes' Hell's Angels starring Jean Harlow, Ben Lyon and James Hall. Billionaire Howard Hughes produced and directed Hells Angels, the most expensive film ever made in its time. Hughes spared no expense in capturing an exciting dogfight between R.A.F. and German fighter planes, using 137 pilots in all. Set during World War 1, Hell's Angels is the story of three Oxford buddies: two brothers (Ben Lyon and James Hall) and one German (John Darrow). When all three are conscripted to fight on opposing sides of the war, each is torn between obedience to his country and that of his conscience. Jean Harlow is the woman who comes between the three men in the lavish period adventure.

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## You Can't Buy It But Can You Fly It?

(By Stuart Deal)

After getting my pilot's license in 2001, with the economy going south and programming jobs being hard to come by, it looked like if I wanted an airplane, I would have to build it. I had no idea at the time how naive that was, you don't know what you don't know. I did gather the impression that building an RV was a mainstream project here at Chapter 124. After hearing Larry Ford say it took 20 years to finish a Glasair, I was pretty sure that a plans built "[Vision](#)" (sleek low wing plans build fiberglass) would take a very long time and it just seemed like too big a commitment.

It was the fabric workshop we had here at Chapter 124 that made things clear. The tube and fabric airplane was the one for me. At that particular time, I had more time than money so I took a welding course at Santa Rosa Junior College and learned how to weld with an Oxy-Acetylene gas torch and since it is a basic welding course it included stick welding which is the most basic arc welding skill.

I was not the only previous generation welder in the class but it really didn't matter much since welding is possibly the least sociable skill. You don't want to be distracted when you have molten metal inches from your skin. Since things happen pretty fast when welding, you would not be chatting it up while you are lighting it up unless you have done it a lot longer than me. There is lots of time in between, but the instructor, an every day welder, filled that.

Melting steel just has an intensity about it that attracted me and steel is tough rather than brittle which is probably why it went into use in aircraft almost a century ago. So steel tube airplanes have been around for a while, from Yaks to Piper Cubs to Sonerails.

My issue when choosing an airplane has always been size, since I am tall enough to bump my head more than most people. I am pretty sure if I were smaller, I would have built an Evans Volksplane since that had simple and cheap written all over it, and a slow airplane seemed okay if all I wanted to do was build hours instead of put in building hours. While I have actually never met somebody who built or flew one, I have read that they are very tough and survivable, but just tough to fit into or get out of for me, so I kept looking.

My interest in building moved to the larger Volksplane II, but since I was all interested in steel, I redesigned it as a steel fuselage

cantilevered wing inspired by a large, detailed photo set that I can no longer find that showed the construction of the "[EZ Flyer](#)" brand "[EZ Harvard](#)" which is a low wing steel fuselage.



The straight steel spar is a truss that extends out from the sides of the fuselage like a "[Jodel](#)" or a "[Thorp 18](#)" or an "[Fairchild Republic A-10 Thunderbolt II](#)" or the "[Ken Rand's KR Series](#)". The idea being that a straight through spar is simpler to build in most cases. The Jodel is the most complex being a wood box spar and is the only one where the wings don't detach (except the Falconair variants) As soon as you use a fastener to attach the wings, a straight spar can work and can provide an attach point for the landing gear on these low wings.



So the restructured VP2 or VolksPlane II plan I worked up I call the MVP for Mostly VolksPlane. The idea was to keep the aerodynamic design and change the structure. The VolksPlane II uses a compression strut which I designed out using a 1.5 margin of safety and the generous thickness of the airfoil for moment calculations. It is a fairly thick NACA 4415 high lift airfoil which is the same one used in the "[Air Tractor](#)" line according to the "[Incomplete Guide to Airfoil Usage](#)" put out by the University of Illinois. This leads me to believe that it is pretty mainstream aerodynamically.

The outer wing I planned has a Douglas fir and birch plywood "I" beam and wood ribs, but aluminum would work great also. I do think the fabric covered steel tube low wing has potential, but the high wings do seem to dominate in this arena. Before putting ribs on, it would make sense to build the spar system and test it directly with bags of sand or other heavy building material.

Okay, so this brings us to the high wing that I started building called a Double Eagle. The plans come from a guy named Leonard Milholand who lives in Texas and claims to be from Kansas City and if you visit the Team Mini-Max booth/hangar at Oshkosh, you find that the wing design of his "Legal Eagle" and "Double Eagle" are remarkably similar to a "Mini-Max" wing. While sketchy on moral grounds, from an engineering standpoint, copying success is a fairly safe bet. You could argue that designing from scratch is more risky than using what already works, so I give Leonard credit for being risk averse and bold at the same time.

There is some slight complication with making sure that my height can be accommodated by making small changes to the Double Eagle and there are some adjustment yet to make on the fuselage I have produced. I had been building the Double Eagle for some time when I actually got to Oshkosh and roomed with Dwayne Green who knows all the ropes and then some.

I met Leonard Milholand next to an example of a Legal Eagle, build by Scott Johnson, out on the ultralight area at Wittman Regional Airport. What I found out was that when he demonstrated either of his "Eagles" the tail would lift up during light braking. It became clear that it was a balance issue and that the landing gear was too far back which makes it very simple being directly in line with the front wing spar. The gear needed a re-design to move the wheel forward and so my airplane was suddenly on hold.

If funding had been more steady, I bet I would have finished the Double Eagle, but it may have to wait a little. I always hope to have some take-away that feels like a lesson learned. Somewhere

in the process of getting interrupted and buying a Tri-Pacer and changing jobs a few times, it seems like you have to be pretty steady financially and pretty goal oriented to finish a plans built airplane, even if it is one of the simpler designs. At the time, moving on from the activity of planning out a design (my MVP) seemed acceptable since there are so many designs, but Leonard Milholand got out there and sold his plans in spite of the fact that they were not really completely his, and I let mine sit just because I had a 9 to 5 again.

So I am taking a page from Leonard's book and giving my ideas more backing and support. I hope I can convince them to support me back.

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## Fly Mart

**For Sale: (10-15)** Stainless Steel firewall material. 26 gauge 4ft X 7ft. \$90 for all or \$50 for half. Jim Duvander 707-953-0129 [jim@duvander.com](mailto:jim@duvander.com)

**For Sale: (8-15)** disassembled continental A65 – needs crank and camshaft. New engine gauges, ammeter, airspeed indicator, new aluminum prop extension and new brake actuator. Paid \$400 - Byron Barnes 707-980-4818 [barnesbyron75@gmail.com](mailto:barnesbyron75@gmail.com)

**For Sale: (7-15)** Seat Parachute - needs a fresh repack but otherwise in very good condition. Will sell it cheap to a member if interested \$350. Steve Pizzo, 707-829-7038

**For Sale: (7-15)** RV-6A Tricycle, Less than 80 TT, 180 HP - \$79,900. See Flickr link below. Ogden Utah. Call Angelo at 801-391-3873 <https://www.flickr.com/photos/angelosrv6a>

**For Sale: (7-15)** Two Bendix magnetos for 4-cylinder Lycoming (O or IO 320); converted Falco to dual electronic ignition. 1 left, 1 right rotation; both with impulse couplings. Harness, impulse coupling adapters, long mounting studs included. Time in service: 344 hours. Also available: 4 new Tempest massive electrode spark plugs, 4 well-used Champion fine-wire spark

plugs, 1 brand-new TSO'd magneto noise filter. \$250 each, \$450 for both. Peter Lert, [peter.s.lert@gmail.com](mailto:peter.s.lert@gmail.com), 707-508-7500.

**For Sale: (7-15)** Garmin D2 pilot watch with GPS, worldwide airport database. Bought for Atlantic ferry flight that was canceled; worn 1 day to prove it works great, so basically new. Original box and all accessories included. New \$450, will sell for \$375. Peter Lert, [peter.s.lert@gmail.com](mailto:peter.s.lert@gmail.com), 707-508-7500.

**For Sale: (5-15)** 1947 8E Luscombe, 85 hp Cont. Engine and airframe TT 1907, 836 SMOH. Annual 2/2015. 800 x 6 tires. Apollo SL60 GPS Receiver and VHF Comm Transceiver. Worn paint. New battery. Ellen Jori (707) 823-7150 [ellinsearby@aol.com](mailto:ellinsearby@aol.com)

**For Sale: (3-15)** Looking for a partner in a PA24 Comanche. Please contact Don: [Donm@mackenziesystems.com](mailto:Donm@mackenziesystems.com)

**For Sale: (11-14)** Aero Tug E-200 with New Batteries - \$800 – contact Bill at (707) 938-1465

**For Sale (11-14)** Engine Stand for Lycoming and Continental engines - \$250 – contact Bill at (707) 938-1465

**For Sale: (8-13)** RV8 – 1/3 Share. Superior IO 360/9.5 pistons, Hartzell Blended Airfoil C/S Prop, IFR Equipped all Glass Panel, Auto Pilot, Smoke System, Approx. 300 hours total time, Contact: Carl von Doymi, [cvondoymi@gmail.com](mailto:cvondoymi@gmail.com), (415) 845-6448

**For Sale: (3-13)** AirTech Fuel Cap Tool. This high tech tool helps pilots open many types of aircraft fuel caps, doors and latches. Contact Ryan Beck, [ryan.beck1@yahoo.com](mailto:ryan.beck1@yahoo.com) for information.

## News/Notes From the Editor...

Actually from Larry Rengstorf...

### Air museum eyeing move to new space at airport

(reprinted from Windsor Times)

By Stuart Tiffen Times Editor editor@windsortimes.com  
Wednesday, January 20, 2016 12:30 pm

Short move to add iconic hangar

The Pacific Coast Air Museum (PCAM) is finalizing a deal with the Sonoma County Regional Airport to move just a few hundred feet north along Laughlin Road. The multi-million dollar deal will net PCAM three buildings and a slight improvement in acreage over its current site at the corner of Laughlin Road and Becker Boulevard.

Pending the completion of the deal, expected in the spring, the museum would be moving one property north to the former site of Dragonfly Aviation, at 3631 North Laughlin Road.

Two years ago, the county sent out a letter to anyone who might be interested in leasing the property, according to Jim Sartain, president of the board for the museum.

"Things progressed from there, becoming more and more serious," Sartain said. "At the end of last year we signed a term sheet with the county, just the big bullet points on what the move would be if we were to do it."

Two weeks ago, Sartain said he got word that the airport completed the contract and sale and lease contract, purchasing the three buildings involved. PCAM would be seeking a 30-year lease for the land, rather than the month-to-month agreement that it has been beholden to up until now. The deal would cost "some millions of dollars over some number of years," the museum chief said.

PCAM would be buying Dragonfly's former office building, a small hangar the flight school had operated as well as the piece de resistance, the Butler Hangar. A large hangar with spaces for 12 aircraft, the Butler is a quonset hut, one of two original buildings left on the airport from its origins as an Army Air Force Base during World War II.

The Butler featured in the 1963 slapstick film "It's a Mad, Mad, Mad, Mad World" when actor Mickey Rooney flew a plane through the length of it, an historical anecdote that Sartain said increases the value of the building to the museum immensely.

With the two hangars, the museum would gain covered parking

for its eight aircraft flight wing, as well as for other aircraft not on display. The static display aircraft would also gain some more solid footing, moving from the dirt onto asphalt.

Despite the unfinalized nature of the deal, and while acknowledging that it wasn't 100 percent, Sartain said he was fairly confident that the move would go ahead.

"The airport wants it to happen, the county wants it and we want it," he said.

At the county level, Fourth District Supervisor James Gore said he was a big fan of the move.

"I am extremely supportive of the museum and this move," Gore said. "They are a true asset to our community and this would create a permanent place for their operations."

He said he couldn't foresee any roadblocks for the deal, adding that the museum had worked through the process with the county and airport officials collaboratively.

Gore mentioned the Butler Hangar as a major coup for the museum to acquire.

"The air museum is great at letting us embrace our past and heritage," he said. "What they do at the air show every year and with their many events throughout the year is create a hub for people that are passionate about flight."

Gore added that he counted himself among those with a passion for slipping the surly bonds of earth.

He said he has designs on the next Wings Over Wine Country Air Show.

"I want to get myself on one of those crazy biplanes," he said. "I don't know if my wife will let me."

Assuming the deal closes as expected in the spring, the move could ostensibly happen as soon as the ground is dry enough to move the planes, Sartain said.

After settling into the new space, PCAM is already planning some new exhibits including an EA6B Prowler cockpit simulator, a Beechcraft T-34 Mentor and a Navy SH-60 Seahawk helicopter.

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## Chapter 124 Accomplishments for 2015

(compiled by Jim Boyer)

1. 12 months of really good food prepared by a dedicated group of good cooks, helpers and people willing to clean-up pots, pans, microwave, tables and chairs

2. Members who on a regular basis stock up the refrigerator with sodas, shop for the food for our dinners, clean up the club room, haul out the garbage and recycle and provide coolers to hold food for WOWC and other functions in which the EAA Chapter 124 participates

3. 12 excellent programs were put on by members and outside aviation people through the efforts of chapter members and our Vice President Andy

4. 12 excellent newsletters with color and pictures published through the efforts of John Palmerlee and Stuart Deal

5. Many messages sent out each month by John Palmerlee to alert members of various aviation activities

6. Long term delinquent rents collected – Jim, Andy and John

7. All fire extinguishers on-site charged/verified and painted red - Larry

8. Member dues and rental rates increase to maintain chapter financial security – entire board

9. Hangar roof major work to reduce/stop rain leaks – Larry and Andy

10. Area grass mowed and maintained – Larry and Mike T.

11. Mower repaired by John Deere – Larry and Mike T.

12. Complete upgrade and installation of new Audio/Visual system components – Steve Smith

13. Officers manuals copied and handed out to all officers and board members – Jim

14. Several Hundred Young Eagles flown by Chapter pilots

15. Donation from Sandy Beer from sales of parts and miscellaneous from Arts hangar

16. Wings Over Wine Country Air show – club showed 4 aircraft, booth manned by 11 members, with PCAM coordination by V.P. Andy

17. Chapter newsletter picked up by Stuart Deal from John Palmerlee

18. State Senator Mike McGuire spoke at October chapter meeting

19. Contingent from Sonoma Valley (Schellville) Airport presentation at Chapter 124 meeting and many EAA Chapter 124 members wrote letters supporting Sonoma Valley Airport at Sonoma County Airport Commission Meeting

20. Many EAA Chapter 124 member supported keeping Cloverdale Airport open and operating at several meetings in Cloverdale this year

21. Nominating Committee of Jim DuVander, Bob Gutteridge, and Time Peterson put in many hours setting up slate of new officers and board members for November election. They also counted and tallied ballots at November election.

22. Service Awards were handed out at December 2 meeting to members who have supported the chapter at many events this year Jim and Andy

23. A brochure promoting EAA Chapter 124 being developed by Andy with Stuarts help

24. Member participation in fly outs and air shows; Hayfork, Willows, Booneville, Vacaville, Sonoma

Sky park, Sonoma Valley Airport, Rancho Tehama, and ...

25. Member participation at Oshkosh Air Adventure - many; and judging – Andy

26. CAFÉ Symposium attendance/participation by chapter members

27. Oil barrel on-site for member use monitored and emptied as needed – Larry

28. Water leak in pipes to EAA hangar and Larry's house dug up and repaired – Larry, Frank and Jeff

29. Weeds on-site sprayed quarterly monitored by members and Larry

30. Taxi-ways swept of loose gravel semi-annually – Mike

31. TSA/County Gate Tenants list monitored and paper work maintained with airport security – Larry

32. AOA badge list monitored and maintained with airport security - Larry

33. Damaged door on Closed Hangar #1 repaired – Steve and Larry

34. Frozen water line and bathroom repair to club hangar – Larry and Frank

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### Interesting Aviation Links

(thanks Larry R, Jim B, Mark T, David H)

Pilotless F-16 - [Click Here](#)

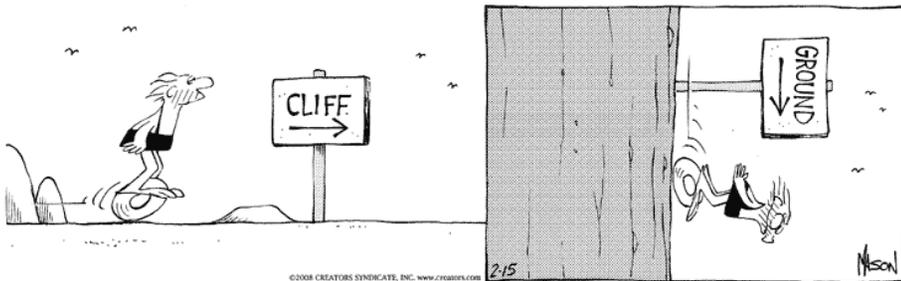
Cameron Air Show - [Click Here](#)

Superbowl NOTAM's - [Click Here](#)

Stuart's Kindle Book - [Click Here](#)

VolksPlane II Plans - [Click Here](#)

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(Reprinted with permission of John L Hart FLP)

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## Remembering the Challenger

Everybody who was following the space program remembers where they were when they first saw the image of the explosion of the Space Shuttle Challenger. The shock and pain was only amplified by discovering that it was completely preventable and that sensible engineers had been ignored by people with "get-there-itis".

In the 30 years since the disaster, people can refer to the Challenger to take a stand on safety. It reminds me of something my father point out to me. "Things have to get really bad before people will pay attention".



# EAA Chapter 124 General Meeting Minutes

## January 6, 2016

**Call to order** by the President – 1912 Hours

**Roll Call of Officers:**

President Jim Boyer – Present, Vice President Andy Werback – Present, Treasurer John Whitehouse – Present, Secretary Ben Barker – Absent. Minutes taken by past Secretary Mark Tuma at the request of the President.

**President** – Thanked the cooks and helpers. Welcomed guests who introduced themselves.

The President still has a couple of 2015 service awards. He will bring them to the next meeting. Reminded everyone that the 2016 dues have to be paid by the close of the March meeting in order to be in the roster. There is a master roster on the front table. Please check it for accuracy, or if you have changes.

Approval of the minutes – Minutes of the 11/04/15 meeting – passed by voice vote. Minutes of the 12/02/15 meeting – passed by voice vote.

**Treasurer** – We had a red month due to paying the insurance and the club dues to the National, and the 2016 dues can be paid now. Reminder that the dues are now \$35 a year. Also a new membership application reflecting the proper amount of the dues is on the website, or see him for a paper one.

**Facilities** – Larry Rengstorf - With all the rain, if you parked in the grass and leave any ruts, please coe back with a shovel and fix them. Do not park in the grass – use the CAFÉ lot if you have to.

**CAFE** – John Palmerlee reports in Larry Ford’s absence that CAFÉ is working on the 10th annual electric symposium. Past CAFÉ President Brian Seeley spoke that he is now working solely on electric aircraft projects and development. He has formed a new, non-profit organization. Check it out at [sustainableaviation.com](http://sustainableaviation.com)

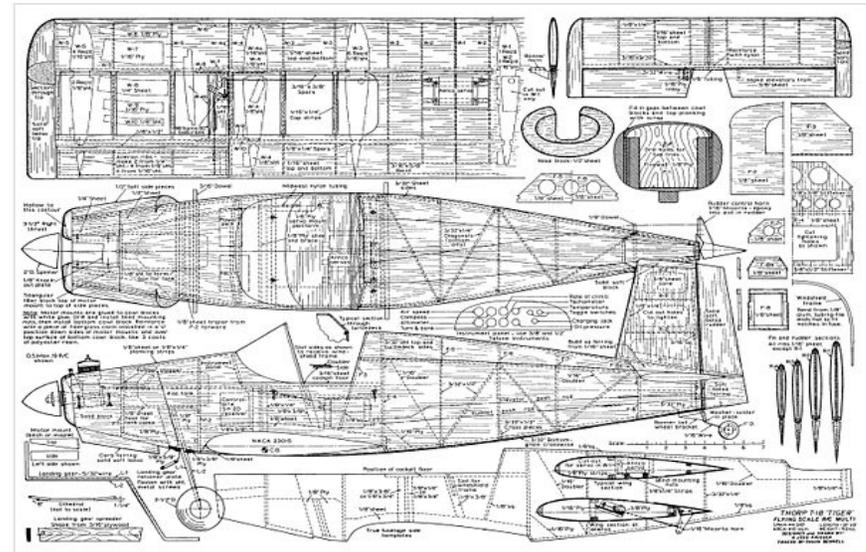
**Flyouts:** 8 members flew out January 1st to NutTree (Vacaville) and had a good time. Ron Cassero is working on a fly out to Half Moon Bay to the Moss Landing Distillery. Also the Petaluma pilots have fly outs. Check their website – [papapetaluma.org](http://papapetaluma.org) for info. Andy Werbeck showed a couple slides from a website that features old and closed airports that some might find interesting. [Airfields-freeman.com](http://Airfields-freeman.com)

**Meeting adjourned** (break for program)- 1945 hours

**Program** –Members Steve Smith and Bob Gutteridge spoke on their flight to Alaska.

Respectfully Submitted,  
Mark Tuma – Past Secretary

Thorp T18 plan view



## Chapter 124 Contact Information

**President:** Jim Boyer (15/16) (707) 571-8001  
**Vice President:** Andy Werback (15/16) (707) 823-5616  
**Secretary:** Ben Barker (16) (707) 838-0238  
**Treasurer:** John Whitehouse (15/16) (707) 539-5549

**Board:** Ray Shipway (15/16) (415) 584-9682  
Marlon Young (16) (707) 479-9994  
David Heal (15/16) (707) 953-5021  
Steve Waite (16) (707) 837-9354  
Sher Shipway (15/16) (415) 584-9682  
Ron Cassero (15/16) (707) 291-8958

**Facilities Chairman:** Larry Rengstorf (14/15) (707) 575-0331

### Facilities Committee:

Dwayne Green, Dale Wittman, Jim Long

**Webmaster:** John Palmerlee  
[jbpalm@sonic.net](mailto:jbpalm@sonic.net) (707) 566-8560

**Newsletter Editor:** Stuart Deal (707) 328-4206  
[aaa124newsletter@sonic.net](mailto:aaa124newsletter@sonic.net)

### Technical Counselors:

Bob Gutteridge (707) 539-5188  
David Heal (707) 953-5021  
Jerry Rice (707) 431-0206  
Kevin Quirk (707) 539-8589  
Doug Dugger (530) 526-4997  
Rolf Unternaehrer (707) 763-7729

**Flight Advisers:** CJ Stephens home: (707) 836-1458  
cell: (707) 799-2878

David Heal home: (707) 838-0261  
cell: (707) 953-5021

**Young Eagles:** Sher & Ray Shipway (415) 999-0949

**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) 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: [aaa124newsletter@sonic.net](mailto:aaa124newsletter@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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