The Flying Wire

Chapter 124
Experimental Aircraft Association

Volume 52 Number 6
June 5, 2013

Board Meeting - 5:30 pm

Dinner – 6:15 pm

General Meeting – 7:00 pm

www.EAA124.org

www.CafeFoundation.org

www.EAA.org

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EAA Chapter 124
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Windsor, CA 95492

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

June 5, 2013 Program

Program Pending Release

EAA 124 Chapter officers have several great options in the works, but I don't have clearance to announce it yet... so come to the meeting and enjoy the surprise :-).

Events Calendar

Please send us info about upcoming events!

We want to keep everyone informed about local and regional events, so send us information if it comes your way!

Bob Gutteridge: bob_gutteridge@pacbell.net
John Palmerlee: jbpalm@sonic.net

June 5: EAA Chapter 124 June Meeting and Dinner, 6:15 pm

June 7, 8 & 9: Golden West Fly-In at KMYV. Chapter 124 will be there, so join us for the flyout. This will include an inter-chapter aircraft competition. Discussion at the meeting.

June 7, 8 & 9: Bellanca-Champion West Coast Fly-In, Columbia KO22, for more info click Here.

July 6: Truckee Tahoe Airfair & Family Festival – Saturday 7am-4pm, more info click Here.

July 29 – Aug 4: Airventure Oshkosh 2013 – for more info click Here.

Saturdays – 12 to 1:30pm BBQ at Sonoma Skypark Chapter 1268
First Thursday each month – 11:30 to 1:30 - *Hot Dog Thursday* at Pacific Coast Air Museum

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My Three Months as a Hang-Glider Pilot

(By Jim DuVander, May 2013)

I am running, not fast, but running into the wind. I can feel the upward tug on my harness, making my steps in the sand lighter and lighter until my feet no longer touch. I am air-born, floating effortlessly, levitating above the sand dune in a shallow glide toward the beach below. This must be what it feels like to be a bird, wind in face, buoyed by air, looking down below. Moments later, I land on my feet, gently, once again on the ground. Did I dream this? No. It's real! I had just made my first hang-glider flight.

It was about 1980, I was four years married, deeply in debt, with two children to raise and a ranch to care for. I knew I wouldn't be flying a single engine power plane again anytime soon. But I hankered to get my feet off the ground any way I could. I went up in gliders at Calistoga, but that turned out to cost as much as renting a Cessna 150.

Then one day I found out someone was giving hang glider lessons at Dillon's Beach. With my (late) wife, her 10 year old daughter and our infant son we went out one Saturday. While our baby sat, we got schooled in the basics. By the end of the next Saturday, we were making mini flights down the gently sloping sand dunes. I was pumped. I had never experienced anything so like the feeling of flying I got in my dreams. My wife was not quite so enthusiastic. However, she indulged my passionate obsession with flying and we spent the next few weeks honing our skills to ride the steady West winds pushing up the sand dunes. For me it was a pure thrill. I still remember the exhilaration of running into the wind and levitating effortlessly above the ground.

My wife confided fear at every flight. Nevertheless, she found challenge in moving through her fear. As a public speaker, she would use our lessons as points to illustrate how we can move through life facing our fears.

As our lessons wound down and our skills improved, we each bought our own personal hang gliders. It was expensive for our budget, but my passions were high and deep. I talked her into it. Looking back she was a good sport.

When we took delivery, we borrowed my parent's pickup and travel trailer and headed to Dillon's Beach. I made two or three flights. They were disappointing. My new glider was a dog. The Raven, the kite I used in training, was a beautiful flying, very controllable wing. On my last flight of the day, the dog stalled

about 30 feet up and I came down hard. I hit my mouth on part of the kite and broke a front tooth. This dampened my enthusiasm.

I was so self-absorbed I cannot remember if my sweet wife flew hers or not. But what happened next was the clincher. We witnessed a young woman, caught by a wind current, crash hard enough to break her arm at a horrible angle. After helping her get medical attention, we packed up and returned home, never to hang-glide again.

Having two young children and seeing the potential for real serious injuries, such as paralysis or worse, death, we decided that hang-gliding was too risky for responsible parents. Our children deserved two whole functioning adults. It was a hard choice, but in retrospect, a wise one.

I loved flying that Raven though. It sure was fun, for me at least, while it lasted.

Ukiah Report – Aluminum Overcast Visit a Success

(Excerpts from an email to our VP Mike Tovani on May 20 from Paul Trexel – EAA 1027, Willits)

I just want to fill you in our B17 Tour Stop at Ukiah. Let me tell you, I was sweating bullets that we were going to come up short, but that was far from how it turned out. It was an outstanding success, as acknowledged by Oshkosh and the B17 flight and ground crew.

We had an outstanding PR company, a friend of our webmaster, do all the promotion. He worked a deal with two local radio stations to advertise, that comped $5000 in radio advertising for a couple of Flight Mission tickets. They were advertising the B17 for about two weeks prior to arrival, with ads about every 20 minutes.

The PR firm got the Hampton Inn to comp 6 crew rooms for three nights, for a couple of tickets. They got Ken Fowler Motors to comp a new Chevy Tahoe for a crew car. Crush restaurant comped the crews dinner the first night . I got the airport manager to provide fuel at $4.95 a gallon, $.10 over cost.

It didn't look good the day before arrival, with 13 rides booked. By the end of the first day, media day, 35 flights were booked, after the plane flew over town. When the plane started flying, the phones started ringing. Total, 77 revenue seats were sold. Averaging 38 seats per day. A previous stop at Torrance, was 100 seats sold, 33 per day. Hayward's weekend stop sold 43 seats total. Our stop was Tueaday and Wednesday, and Oshkosh said it was the most successful weekday stop in the history of the tour. Oshkosh is now rethinking their usual sheduling the plane into large population centers and are looking at smaller venues that don't get the chance to see something like this.

Merchandise and ground tour sales totaled $9,000, and total revenue generated was $45,000.Our commission was over $4,000.

Video of Aluminum Overcast starting up at Ukiah – Click Here
Video of one of it's takeoffs – Click Here

Fly Mart

Wanted: (4-13) Member Don Mackenzie is looking for an aircraft to fly. He'll rent, share, partner or buy a C-182 level aircraft or better. Commercial pilot with Instrument, 1100 hours. Contact Don with ideas/offers. donm@mackenziesystems.com

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 for information.

For Sale: (2-13) Jeff Rose electronic ignition system for six cylinder aircraft engine. Never used, new in 1998. Complete with Plugs, wiring and all tech data. $100. Call CJ @ 799-2878

For Sale: Satellite Phone: (12-12) Iridium 9500 Satellite Phone with 2 batteries, 12v and 120v chargers, case, accessory pouch, reference card and deactivated SIMM card. $400. Contact Bob, 707-483-1985

For Sale: Taylor Titch project: (11-12) $2,500/best offer. 60% complete by master craftsman. Covered in fabric silver painting nearly complete. The wings were damaged in two places during a move, Click Here for pictures. Free delivery in the greater Bay Area. Contact Jenny Hayden 415-308-5944 or

ejennyhayden@gmail.com. Project is located at South County Airport, San Martin.

Help Wanted: (6-12) Building a discontinued Falcon 80% build kit, complete. Seeking experienced Falcon Builders for support. Raymond Hillcrest (707)-963-9281. Angwin Airport.

For Sale: (4-12) RV 6 kit and engine $25,000. Fuselage is a factory built Quick build. All wings, empennage, control surfaces and some other items are built. Engine was removed from a certified plane in Santa Rosa due to airframe corrosion. The engine is a O320 A2B Lycon rebuild with 250 hours. Has all airframe kit parts except finishing kit. Steve Barnes (707) 972-3582

Wing Rack: (2-12) Free to anyone who can use it. Built for an RV-9A wing, but should work for other RVs or perhaps other wings as well. Call John Swanstrom 758-9017 or Email John at: john_swanstrom@agilent.com

For Sale: RV6A - Half partnership available. See it Here. Call Chris Wallner at **364-1195**

For Sale: Partially Built Spacewalker 2 project (1930's open cocpit trainer replica). Wings complete less covering, Fuselage factory welded. No Motor. Must See! Call Ted Baggett: **823-5325**

For Sale: Easy Eagle project – Airframe and 3 out of 4 wings are finished, with accessories: wheels, brakes, VW adapter, starter (and more). Price Negotiable. Fuselage Picture Here. See Great Plains Site for more info. Call Bob Ferguson: **539-5665**

For Sale: Matco Parking Brake model PV-1 plus adapters. Never used. David Lynch **578-2087**

For Sale: 1946 Aeronca 11AC Chief in very good condition. Light sport, fun flyer! Mode C exempt. Contact Kirk Wilder at **895-2949**. Flyer at the following link: Aeronca Chief Flyer

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News/Notes From the Editor...

David Lynch Update

David and Gay made a Caringbridge.com entry on May 31 with some positive news about David's condition. David will be discharged from St. Mary's Acute Rehab Center and going home on June 4th. This doesn't mean things are back to "normal", but it's a positive step. He still has lots of physical rehab to build up muscles and endurance for moving around and visiting a few friends.

We hope to see you at a meeting soon, David!

Builder's Report in a Picture – RV 14 Wing Kit

(Bob Ferguson reports...)

Both wings have been framed and top skins riveted in place. Both outboard leading edges completed and both flaps and ailerons assembled but not yet riveted (see the picture below). I have assembled both fuel tanks but am leaving the messy job of sealing the tanks to the last!! Every rivet and joint of the tanks has to be set with a catalyzed sealant and the stuff gets all over everything within reach. My son, James, has been my rivet bucking buddy.

Lockheed Martin Web Portal for Pilots

Accounts created on the Pilot Web Portal can be linked to your existing Flight Services profile and any modifications you make over the internet (e.g., new favorite flight plans, changes to contact information) are immediately available to specialists, and vice versa.

You can find the Pilot Web Portal at www.lmfsweb.afss.com. Registration and use of all features on the website are free.

We encourage you to sign up and give the website a test drive. This portal is available to registered pilots and offers the following features:

- Access to the same briefing and graphics information used by Flight Services specialists – and make sure to check out how graphics have been integrated into the briefing to make it easier to understand the location of weather phenomena
- Registration for the Adverse Condition Alerting Service (ACAS) – receive email or text messages if a new adverse condition arises after you've been briefed and/or filed a flight plan (read more about the ACAS here)
- Registration for Surveillance-Enhanced Search & Rescue – we'll monitor your SpiderTracksTM position reporting device and detect if you stop moving, stop reporting or send an SOS, enabling a faster initiation of Search & Rescue procedures
- Ability to activate and close your flight plan without calling Flight Services
- Assurance that when you file a flight plan via the Pilot Web Portal, it is always immediately available in its entirety to Flight Services specialists when you call

To register at the Lockheed Martin Flight Service Pilot Portal – Click Here

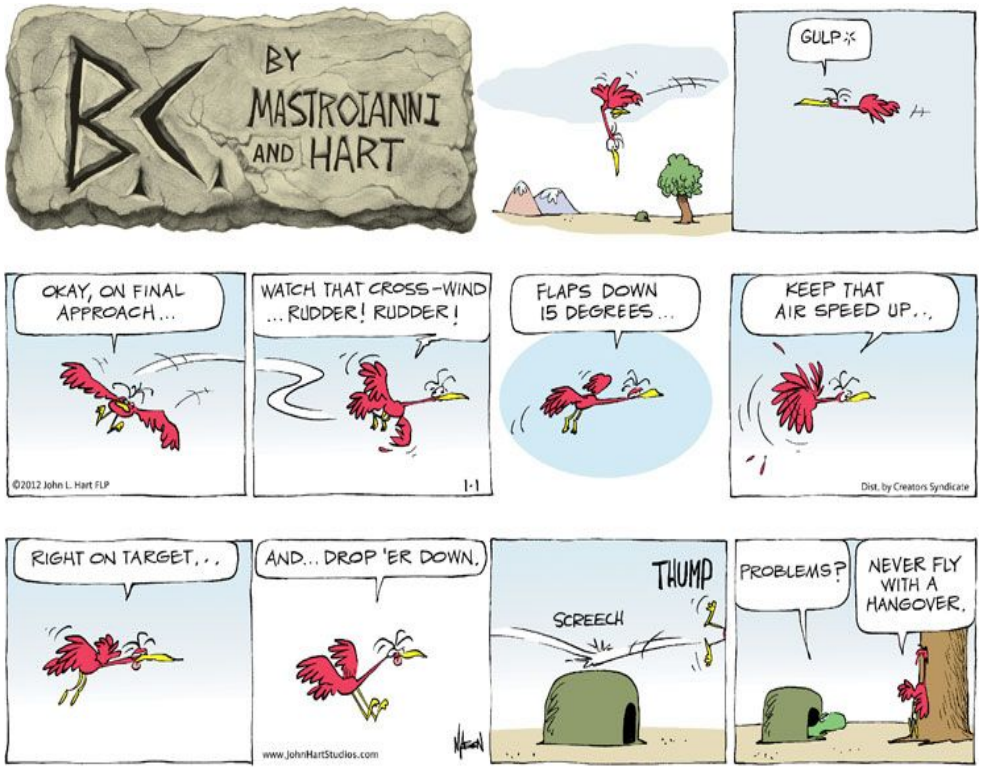
FBO of the Week – AVweb Picks our own Sonoma Jet Center (thanks for the tip, Mike Tovani)

This is an appropriate recognition for this great FBO at Sonoma County Airport. See item#4 on the following AVweb web page.

FBO of the Week: Sonoma Jet Center – Click Here

Interesting Aviation Links (thanks Larry R, Brien S, Mike T)

AOPA Never Again – Kitfox in propwash – Click Here
Lewis Air Racing Team – Reno 2012 - Click Here
Register for EAA Webinars in June - Click Here
Gotta See – Rube Goldberg "Sharing a Coke" – Click Here
Smithsonian Magazine – Spiderweb timelapse – Click Here
Lockheed Martin Flight Service Pilot Portal – Click Here
Steam Powered Box Mill – Click Here
Riding the Shuttle Boosters Video – Click Here
A380 Landing Gear Drop Test – Click Here
June FAA Safety Briefing – Click Here
Beechcraft History Video on AVweb – Click Here
Bush flying in the Pilatus Porter – Click Here



(Reprinted with permission of John L Hart FLP)

Trivia – The V-173 Flying Pancake

The Vought V-173 "Flying Pancake" designed by Charles H. Zimmerman was an American experimental test aircraft built as part of the Vought XF5U "Flying Flapjack" World War II United States Navy fighter aircraft program.

This aircraft was able to fly at such a high angle of attack that it was said to be stall-proof. Fabric and tube construction, lightweight and using two Continental A-80 engines, it had short field capabilities and looked at by the Navy as a carrier aircraft.

The disc wing design featured a low aspect ratio that overcame the built-in disadvantages of induced drag created at the wingtips with the large propellers actively canceling the drag-causing tip vortices. The propellers were arranged to rotate in the opposite direction to the tip vortices, allowing the aircraft to fly with a much smaller wing area.. These slow turning props are 16.5' in diameter. Very quiet.

For a short video about the V-173: Click Here

Wing Tips

Reciprocating Engine Compression Testers

The differential pressure compression test is used as part of periodic reciprocating engine inspections and as a diagnostic tool for operational issues. Many readers are familiar with this, but I hope some of the following points are of interest to you.

The test uses equipment that can be purchased as a kit, or can be constructed by the operator in accordance with specifications outlined in AC 43.13-1B, paragraph 8-14. For a PDF of this document, Click Here. The following is a summary of some construction points, but the actual document and engine manufacturer instructions must be referred to for maintenance work, particularly because safety and accuracy considerations are extremely important when performing the test.

Note that for larger engines with cylinder bores above 5.0”, a different compression tester is used than for an engine with smaller bores. The tester for larger bores compensates for the expected greater leakage rate around parts such as piston rings and valves associated with larger bores.

The tester consists of two pressure gauges separated by a calibrated orifice, which produces a specific pressure drop for a given air flow rate. This pressure drop is written as a ratio of the two gauge readings, for instance, the reading 70/80 means that with an input air pressure of 80 psi, air flowing through the orifice results in a pressure drop such that the downstream gauge reads 70 psi.

The orifice is the key ingredient. It must be manufactured exactly and kept clean because its accuracy determines the accuracy of the reading.

The following orifice specifications are listed in the Advisory Circular:

“(1) For an engine cylinder having less than a 5.00-inch bore; 0.040-inch orifice diameter; .250 inch long; and a 60-degree approach angle.”

“(2) For an engine cylinder with 5.00 inch bore and over: 0.060 inch orifice diameter, .250 inch long, 60 degree approach angle.”

This can be constructed out of a metal rod sized to accept pipe threads on each end (typically 1/4”). The rod is drilled with a bit ground to have a 60 degree approach angle so that there is exactly .250” left end-to-end. At the center of this depression, a #60 bit is

used to drill the orifice (.040”).

Select pressure gauges of the exact same type, and test the gauges in parallel to be sure they indicate the same at all pressures. If you are careful, limited calibration of (bourdon tube) gauges is possible.

All this is fine, and I own a compression tester I manufactured in this way. However, as I write this, a question comes to mind that I've never resolved: Must the orifice have the 60 degree approach angle at each end, or does “approach angle” suggest that it is done only on the end of the orifice facing the “approaching” airflow? I made the assumption that the approach was required at both ends. The difference probably has to do with turbulence at the orifice.

Also, I've assumed up to this point that the 60 degree approach is created using a bit with a 120 degree cutting angle, but I suppose some other interpretation of 60 degrees may exist.

Let me know your thoughts about this at the meeting!

ATC Quote...

A DC-10 had come in a little hot and thus had an exceedingly long roll out after touching down.

San Jose Tower noted: “American 751, make a hard right turn at the end of the runway, if you are able. If you are not able, take the Guadalupe exit off Highway 101, make a right at the lights and return to the airport.”

EAA Chapter 124 Board Meeting Minutes

May 1, 2013 (Austin Rennard, Secretary)

Called to order 17:43 by President Wayne Cook.

Attendance: Wayne Cook, Mike Tovani, Austin Rennard, Mark Tuma, Ray Shipway, Tim Peterson, Jim DuVander, Larry Rengstorf, Jason Wildman, John Swanstrom, Rolf Unternaer

Lease agreement is getting wrapped up in the next few weeks here. It is under revision to make sure everybody content with the terms of agreement on the lease.

David Lynch is improving and should be returning to EAA 124 soon. John Swanstrom asked to have a celebration for his return, Wayne Cook made it a motion, second by Mike Tovani. Board agrees yes.

Roster is being published.

Name tags are in progress (lanyard style)

Motion by Mike Tovani, second by Larry Rengstorf to send hard copies of news letter to members who do not have email. Motion passed.

Program tonight: John Swanstrom is going to talk about flying in Germany.

Adjourned: 18:42 Wayne Cook.

EAA Chapter 124 General Meeting Minutes

May 1, 2013 (Austin Rennard, Secretary)

Called to order 19:17 by President Wayne Cook

Thank you Liz for another wonderful dinner! We appreciate it!

April, 2013 Minutes approved

Roster due in a week or so

Name tags are coming along

Cloverdale Open House May 4th. Young Eagles will be there as well.

Pilots encouraged to offer an empty seat to any member who would like to join a “Fly-Out”

Young Eagles: sign up to be a pilot or ground crew with Sher. The event is at the Cloverdale Open House this Saturday.

If anybody wants anything put in the “Flying Wire” contact John Palmerlee.

Adjourned: 19:59 Wayne Cook

Chapter 124 Contact Information

President:	Wayne Cook (13/14)	(707) 217-4439
Vice President:	Mike Tovani (12/13)	(707) 321-2740
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Board:	Ray Shipway (13/14)	(415) 584-9682
	Frank Higdon (13/14)	(707) 537-9850
	Mark Tuma (12/13)	(707) 953-2403
	Jason Wildman (12/13)	(707) 523-4361
	Tim Peterson (12/13)	(707) 538-8860
	Jim Duvander (13/14)	(707) 838-2174
Facilities Chairman:	Larry Rengstorf (12/13)	(707) 575-0331

Facilities Committee:

Dwayne Green, Dale Wittman, Jim Long

Technical Counselors:

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	Jerry Rice	(707) 431-0206
	Kevin Quirk	(707) 539-8589
	Doug Dugger	(530) 526-4997
	Rolf Unternaehrer	(707) 763-7729

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jbpalm@sonic.net (707) 566-8560

Young Eagles:	Sher & Ray Shipway	(415) 999-0949
Librarian:	Walt Ferris	(415) 482-8331

EAA Chapter 124
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Windsor, CA 95492

Meetings are held on the first Wednesday of each month at 7:00 pm. FOOD ($5) AND SOCIALIZING (free) from 6:15 to 7:00pm. 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: john@eaa124.org
or mail to: John Palmerlee
1209 Hexem Avenue
Santa Rosa, CA 95404

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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