



The Flying Wire

**Chapter 124
Experimental Aircraft Association**

**Volume 55 Number 7
July 6, 2016**

Board Meeting - 5:30 pm

Dinner – 6:15 pm (\$7 donation)

General Meeting – 7:00 pm

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www.EAA124.org

www.CafeFoundation.org

www.EAA.org

EAA Chapter 124
5550 Windsor Road
Windsor, CA 95492

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

July 6, 2016 Program

Charlie Taylor

Will present history and commentary on Richard Nixon's Finest Hour - Linebacker II in December 1972.

Events Calendar

Please send info about upcoming events!

Please send us information if it comes your way!

Bob Gutteridge: bob_gutteridge@pacbell.net

Stuart Deal: aaa124newsletter@sonic.net

[Wings Over Wine Country September 24 & 25](#)

NASA Electric Research Plane Gets X Number, New Name

(by Reprint from Nasa press release)



With 14 electric motors turning propellers and all of them integrated into a uniquely-designed wing, NASA will test new propulsion technology using an experimental airplane now designated the X-57 and nicknamed "Maxwell."

NASA Administrator Charles Bolden highlighted the agency's first X-plane designation in a decade during his keynote speech Friday in Washington at the American Institute of Aeronautics and Astronautics (AIAA) annual Aviation and Aeronautics Forum and Exposition, commonly called Aviation 2016.

"With the return of piloted X-planes to NASA's research capabilities – which is a key part of our 10-year-long New Aviation Horizons initiative – the general aviation-sized X-57 will take the first step in opening a new era of aviation," Bolden said.

As many as five larger transport-scale X-planes also are planned as part of the initiative. Its goals – like the X-57 – include demonstrating advanced technologies to reduce fuel use, emissions and noise, and thus accelerate their introduction to the marketplace.

The X-57 number designation was assigned by the U.S. Air Force, which manages the history-making process, following a request from NASA. The first X-plane was the X-1, which in 1947 became the first airplane to fly faster than the speed of sound.

"Dozens of X-planes of all shapes, sizes and purposes have since followed – all of them contributing to our stature as the world's leader in aviation and space technology," said Jaiwon Shin, associate administrator for NASA's Aeronautics Research Mission Directorate. "Planes like the X-57, and the others to come, will help us maintain that role."

NASA researchers working directly with the electric airplane also chose to name the aircraft "Maxwell" to honor James Clerk Maxwell, the 19th century Scottish physicist who did groundbreaking work in electromagnetism. His importance in contributing to the understanding of physics is rivaled only by Albert Einstein and Isaac Newton part of a four-year flight demonstrator plan, NASA's Scalable Convergent Electric Propulsion Technology Operations Research project will build the X-57 by modifying a recently procured, Italian-designed Tecnam P2006T twin-engine light aircraft.

Its original wing and two gas-fueled piston engines will be replaced with a long, skinny wing embedded with 14 electric motors – 12 on the leading edge for take offs and landings, and one larger motor on each wing tip for use while at cruise altitude.

NASA's aeronautical innovators hope to validate the idea that distributing electric power across a number of motors integrated with an aircraft in this way will result in a five-time reduction in the energy required for a private plane to cruise at 175 mph.

Several other benefits would result as well. "Maxwell" will be powered only by batteries, eliminating carbon emissions and demonstrating how demand would shrink for lead-based aviation fuel still in use by general aviation.

Energy efficiency at cruise altitude using X-57 technology could benefit travelers by reducing flight times, fuel usage, as well as reducing overall operational costs for small aircraft by as much as 40 percent. Typically, to get the best fuel efficiency an airplane has to fly slower than it is able. Electric propulsion essentially eliminates the penalty for cruising at higher speeds.

Finally, as most drivers of hybrid electric cars know, electric motors are more quiet than conventional piston engines. The X-57's electric propulsion technology is expected to significantly decrease aircraft noise, making it less annoying to the public.

The X-57 research started as part of the NASA Aeronautics Research Mission Directorate's Transformative Aeronautics Program's Convergent Aeronautics Solutions project, with the flight demonstrations being performed as part of the Flight Demonstration Concepts project in the Integrated Aviation Systems Program.

The Makings of a Test Pilot: Early Days

(from the personal papers of Lt Colonel Oliver E. Deal, USMC)

Early in 1942, the requirement for enlistment as an Aviation Cadet had been reduced from two years of college to mere graduation from high school, and I was qualified. Being under 21, however, I had to have my mother's permission or wait to be drafted. She felt I should wait and was sure her brother would agree. I insisted that he be asked and that we must abide by his decision. To her surprise and to my delight, he agreed that I should enlist.

Mother was still reluctant to let me enlist - for over a month I wheedled, reminding her that she had agreed to abide by Uncle's decision. It is apparent now that that month of delay kept me out of the fighting for at least a year. I have always regretted having seen so little action in WWII; however, the circumstances of my tour were fortunate throughout, and I have gradually schooled myself to less regret.

On May 25, 1942, with the preliminary enlistment steps out of the way in Omaha, I was sent to the Naval Aviation Cadet Selection Board in Kansas City. With me on the train was another would-be NavCad - a tall youngster with a pleasant smile. I recall being somewhat less friendly, and that his clothes struck me as somewhat ill-fitting and outlandish, which, on reflection, I am sure they were not. I was, I suspect, awed at his general sense of well being during such a serious step as enlistment. His name was Don Elder. I understand that he became a rather good pilot with a sideline as a Carrier Landing Signal Officer - a job which requires considerable skill. I would like to meet him again. We remained overnight, guests of the Navy, at an inexpensive hotel.

We arrived at the Cadet Selection Center the next morning. Our first job was to undergo a series of mental tests. The proctor for the tests was young - a civilian as I recall. His eagerness about his job and his sense of knowledgeability - whether or not he deserved it - were somewhat dismaying to me as a would-be cadet.

A group of us had completed the first tests and were awaiting the next step of enlistment, when a naval officer entered the room. The young proctor greeted him, and, motioning toward Don Elder and myself, said somewhat ruefully, "Well, here are two more." Naturally, I was startled when the proctor showed the officer the grade sheet. I had tried hard and felt I had done well.

"I see. Well, we'll take care of it," said the officer, who then left the room to enter his own adjoining office.

If somehow we had done unsatisfactorily, I thought, then why don't they send us home now?

We were then given the next test, which had, I believe, 75 questions, multiple choice, with pictures. It had to do with elementary applied physics. I missed one - it involved the manner in which a barge and a tugboat should be hooked up. After the tests where graded the officer returned. "Look at this," said our young proctor, showing the officer my paper and shaking his head. "Okay, I'll see what I can do," he said.

Don and I then realized that their dissatisfaction was with the *quality* of our grades - not their lack of it. (ed: they scored too high)

We then went through the physical exam. I fully expected to fail after all that had been said about what supermen our pilots had to be. I weighed 139 pounds instead of the minimum of 140 pounds for my height of 6 feet; this was waived. I had two cavities in my teeth, and was immediately sent to to a civilian dentist a few blocks away. These were repaired within minutes it seemed and I returned to the Selection Center to continue the enlistment process.

I was not color blind, had better than 20/20 vision, respiration and heartbeat normal, urine and blood that passed their tests, etc. I was surprised and delighted to qualify since this was the first time I had been examined physically since my stay at Kemper (ed: Kemper Military School which closed 2002)

This done, I was exposed again to the psychologist, the first officer I had met. He tried very hard to talk me out of enlisting, trying to convince me that I would be a misfit as a pilot. I could hardly believe my ears, but it was apparent that the Navy had only set a minimum mental requirement for its pilots, and that this officer, arguing plausibly with me was convince that their should also be a maximum. He tried every approach, including flattery, and while his arguments worried me (they did for many months) I realized that he couldn't stop me and therefore didn't waiver. Evidently, he meant to delay me long enough to prevent my enlistment that day. He was most determined to argue me out of it. I wondered if he thought it was *his* Navy.

I was worried and self-conscious with a knot forming in my abdomen. I wondered what to do, even though I kept replying that "But I'm sure I'd like to fly." "I have enough courage!" or "What if I don't enlist to fly. Wouldn't it be far worse to try Officer Candidate School and fail, and wind up carrying a rifle?" I said nothing about my attempts to get into Annapolis or West Point, which probably would have been successful.

When finally, I might have capitulated, I was rescued by the young Navy dentist who had found the cavities in my teeth. He stepped into the doorway and leaned against the door jam with folded arms. Behind him his dental chair was empty, and the lights in his corner of the Center were extinguished. He had seen his last enlistee of the day.

The psychologist was obviously annoyed at the dentist's presence. The dentist smiled. "Hurry up!" he said. "We've got to enlist this man." I felt and immediate relief at these words. Here was someone on my side! I will never forget the dept I owe that young Navy dentist. "Hurry," he said. "The place is about to close!"

The psychologist, though annoyed, had a final insult for me. With great deliberateness, he opened a side drawer of his desk, reached in, and drew forth a small axe shaped rubber mallet. Somehow I knew precisely what he had in mind. I crossed my legs. He tapped one knee and then the other. Perhaps most of the reaction he got stemmed from my determination to react positively. Perhaps he was aware of this - I will never know. He picked up my papers and handed them to the dentist, who by now was laughing.

The young dentist looked over my papers - only a few formal steps needed to be completed. He took me by the arm and led me into the final area of the center and turned me over to the yeoman at a large desk. "Let's sign up this man as fast as we can," he said. He wished me luck, I thanked him, and he left. How delighted I would be to meet him again - for to this man I owe a career that I have enjoyed from the beginning.



Next time: Flight School and A Mitchell in the Future

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

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

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, 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, 707-508-7500.

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, (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 for information.



(Reprinted with permission of John L Hart FLP)



Santa Rosa Army Air Airfield control tower, after a local hero ran into it in a P-39.

News/Notes From the Editor...

Update on EAA Hangar/Tiedown Situation

6 June 2016

By Andy Werback, EAA 124 Vice President

Greetings –

The purpose of this letter is to identify some issues with the Chapter 124 hangar/tiedown situation. At present, we are one of a very few EAA chapters who have their own facility. We have hangar and tiedown spaces for approximately 34 airplanes. These spaces are leased to members for a very nominal rate, considerably less than that charged by the County on the east side of the Santa Rosa Airport.

Regarding these airplanes, we have several objectives –

1. Rents are paid up-to-date
2. Proof of Insurance is on file and current
3. Tenants have current EAA National membership (this affects our Chapter insurance)
4. The aircraft are maintained in an airworthy, clean and presentable condition (or are actively being worked on/restored), with tires inflated
5. Space around the tiedowns is clean and presentable
6. If aircraft are no longer of value, that they be removed

Regarding Item 1, we very much appreciate that most leases are paid and up-to-date. And in the last year, we have made a significant effort to bring some outstanding leases up-to-date. This has resulted in some positive results, but there are still a number of chronic over-due leases. This takes a lot of time on the part of several members, is unfair to the membership as a whole, and needs to be corrected. We have been, and will continue, to post the list of hangar rents in a conspicuous location, with a pink highlighter as appropriate. This location will be inside the hangar, next to the meeting room entrance on the outside wall.

Regarding Item 2, in order to protect the Chapter, we must have a copy of your aircraft insurance showing coverage (proof of insurance) on file, and up-to-date (each year).

If all else fails, we will be forced to take action by taking ownership of abandoned aircraft and disposing of them, likely with some additional cost to the Chapter. Obviously, we would rather not have to do that, but it is an option. So, please, if your lease is over-due, would you please send in a check on a regular basis (along with proof of insurance) so that we can put away the pink highlighter.

Interesting Aviation Links

(thanks to AvWeb, Larry Rengstorf)

X-Planes (new)– [Click Here](#)

Remember! – [Click Here](#)

EAA Chapter 124 Board Meeting Minutes June 1, 2016

Called to order at 5:30 PM by Pres. Jim Boyer. In attendance were Andy Werback, John Whitehouse, Ben Barker, Dave Heal, Ray Shipway, Sher Miersmann, and Larry Rengstorf.

Steve Waite arrived at 6:00.

There having been no May meeting of the Directors, there were no minutes to review.

Larry Rengstorf said the grass is growing quickly and needs mowing again. Otherwise, the facilities are operating smoothly.

Ray and Sher reported that the Young Eagles event in Cloverdale on May 3 was rained out. They recommended to the Directors that the Chapter should begin to do succession planning for the Young Eagles management jobs. Their work and personal time commitments have been growing and someone else will need to take over the position(s) in a few months.

John Whitehouse submitted a Treasurer's report indicating the Chapter is solvent and in good financial order. Five aircraft owners were noted as chronically delinquent in their rent and members of the rental committee agreed to follow up with them.

Jim Boyer announced a Pietenpol fly-in at Frazier Lake Airpark on June 4.

Andy Werback noted a hole in the speaker schedule had developed for the July 1 meeting. Several suggestions were offered for new or substitute speakers.

Meeting adjourned 6:15 PM.

Respectfully submitted,
Ben Barker, Secretary

EAA Chapter 124 General Meeting Minutes

June 1, 2016

Meeting called to order by Pres. Boyer at 7:10 PM.

Pres. Boyer thanked the cooks and welcomed first time visitors. Pres. Boyer welcomed returning club officer Frank Higdon, who served on the 2013-14 Board before moving.

The May minutes were approved by acclamation as published in the newsletter.

John Whitehouse delivered the treasurers report.

VP Andy Werback asked members to sign up to staff the Chapter tent and/or to display aircraft at the September PCAM airshow. He also invited volunteers for a Chapter team to participate in the Golden West Fly-In at Marysville on October 15.

Larry Rengstorf said the grass is growing quickly and needs mowing again. Otherwise, the facilities are operating smoothly.

Ray and Sher reported that rain cancelled the Young Eagles event in Cloverdale on May 3. They also stated they had recommended to the Directors that the Chapter should begin to look for their replacements in the Young Eagles jobs.

Three fly-out opportunities for June 4 were announced by Bob Guttering and Jim Boyer: Ukiah, Grass Valley and Frazier Lake Airpark (West Coast Pietenpol).

The CAFE Foundation report was given by John Palmerlee. He described a lively technical program and an enthusiastic session at Maker Faire with lots of interest from both pilots and non-pilots.

Brien Seeley related that his Sustainable Aircraft Foundation held a successful meeting with a lot of networking and energy among the participants.

TECNAM USA's representative in Watsonville brought two aircraft for display before dinner. Gryphon McArthur described his operation and the quality of Tecnam's products.

After an intermission to set up the necessary equipment, the chapter was treated to a "geo-referenced" slide show by Steve Smith. Steve described his experiences on two trips to Baja California in the last year. He offered many useful insights into trip planning, dealing with border crossings and intriguing sights.

Meeting adjourned at 9:20 PM.

Respectfully submitted,
Ben Barker, Secretary

Chapter 124 Contact Information

President: Jim Boyer (15/16) (707) 571-8001
Vice President: Andy Werback (16/17) (707) 823-5616
Secretary: Ben Barker (16/17) (707) 838-0238
Treasurer: John Whitehouse (15/16) (707) 539-5549

Board: Ray Shipway (15/16) (415) 584-9682
Marlon Young (16/17) (707) 479-9994
David Heal (16/17) (707) 953-5021
Steve Waite (16/17) (707) 837-9354
Sher Shipway (15/16) (415) 584-9682
Ron Cassero (15/16) (707) 291-8958

Facilities Chairman: Larry Rengstorf (16/17) (707) 575-0331

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Librarian: Walt Ferris (415) 482-8331

**EAA Chapter 124
5550 Windsor Road
Windsor, CA 95492**

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

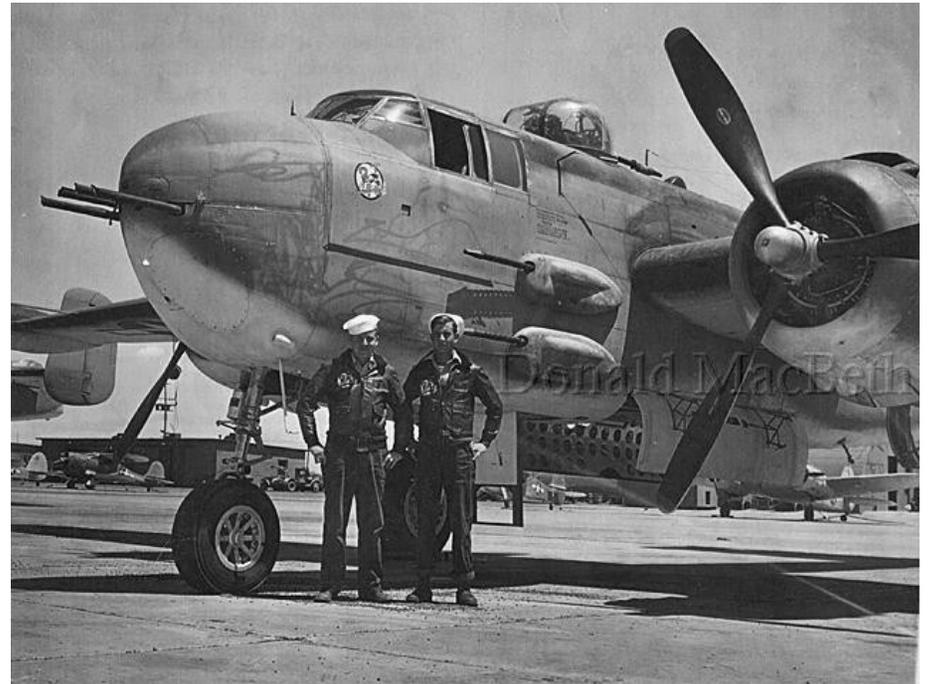
Directions: The site is located on the west side of Sonoma County Airport. Take the Shiloh Road exit from Highway 101 in northern Santa Rosa. Turn left at the stop light (west) and continue to a "T" intersection. Turn left again and follow the road to the EAA sign on the left.

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: ea124newsletter@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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No, a PBJ is not a sandwich