



April 4, 2007
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Board Meeting:
April 4, 2007 6:30pm

General Meeting:
April 4, 2007 7:30pm

WWW.EAA124.ORG

WWW.CAFEFUNDATION.ORG

SPECIAL ANNOUNCEMENTS:

April 4, 2007 PROGRAM: Brian Cluer will discuss flying and photographing wild animals in South Africa.

The AeroElectric Connection Weekend Seminar with Bob Nuckolls

Aircraft electric, avionics and homebuilding seminar on **April 21/22** at EAA Chapter 1268 facilities. Please sign-up at: <http://www.aeroelectric.com/seminars/Sonoma.html> or contact Darrel Jones at wd6bor@vom.com or 707-996-4494 for info. He will need twenty confirmed registered by March 1 to buy airline tickets and confirm the class. You can also go to <http://www.aeroelectric.com/seminars/seminars.html> to review the course materials.

Open House at the Cloverdale Airport on May 5th

If you're looking for a place to go on Saturday May 5th, Cloverdale Airport will have lots to see: Quality Sport Planes will have their annual Spring Open House that day, including BBQ, sheet metal workshop and regional Zenith fly-in. (See article within)

Young Eagles Scheduled for June 16, 2007

We will hold this event as part of the Sonoma County Airport Open House. It should be a lot of fun. Be sure and sign up at the next meeting to help out with this event.

Café Foundation to test PAVs in August

The CAFE Foundation is planning to hold a PAV try-out event in May, and the actual contest during August 4 - 12, 2007. Call David Lynch (707) 578-2087 for info and to help (and see the airplanes up close). (See article on page 3)



MESSAGE FROM THE FRONT DESK...

APRIL, 2007

Joe Lacchia, President

We had the luck of the Irish on Saint Patty's Day with perfect weather for our fly out to Sonoma Skypark. There were 17 members of Chapter 124 that showed up to enjoy the delicious Skypark hamburgers. Their chapter has a weekly hamburger cook-out every Saturday with the exception of the second Saturday of the month. That day is reserved for the Shellville cook-out. And that brings me to the next subject.

Our next trip is scheduled to Shellville on the second Saturday of April for their hamburger cook-out. We will meet at the Chapter 124 facilities around 10:30 am on the 14th and head to Shellville, rain or shine (fly or drive). We all had a great time in March so I'm sure April will be a repeat.

We are ending March and entering April and late July seems a long way off, but it's actually just around the corner. Its time to start planning for Oshkosh! If you've never been to Oshkosh in late July you don't know what you are missing. If you like airplanes, and obviously you do or you wouldn't belong to the EAA, you'll love Oshkosh. I just made my airline reservation and there are still some good buys out there.

I'll say it again. Our Young Eagles Program is one of our major activities as a Chapter during the year. It usually occurs twice in the year and is supported by many of our members. Dave Lynch has been our leader for this activity since April of 2005 and, due to other commitments, can no longer commit to this leadership role. We are looking for a replacement! This is a very rewarding and important role in our organization.

Happy flying...
Joe Lacchia, President

Message to EAA Chapter 124:

Dear friends at EAA,

I wish to express my deepest gratitude for being able to hold Glenn's memorial at the EAA facilities.

Everyone said it was a wonderful memorial. What touched everyone the most, including me, was the (missing-man-formation) flyover. That really packed an emotional wallop in a very good way. Many, many people spoke to me of that.

So, my many, many thanks again.

Jeanette Brizee



CAFÉ Foundation and the PAV Challenge (Thanks, David Lynch)



Personal Air Vehicles (PAVs) are a new generation of small aircraft that can extend personal air travel to a much larger segment of the American population. As a solution to America's future mobility needs, NASA aeronautics developed the PAV concept to provide a more distributed and less centralized system of air travel. Near all-weather STOL PAVs will be able to transport people to within just a few miles of their doorstep destination at trip speeds three to four times faster than airlines or cars. NASA predicts that up to 45% of all miles traveled in the future may be in PAVs. This will relieve congestion at metropolitan hub airports and the freeways that surround them, reduce the need to build new highways, and save much of the 6.8 billion gallons of fuel wasted in surface gridlock each year.

To stimulate rapid innovation and progress in PAV performance, NASA Centennial Challenges has funded \$2M in cash prizes for a flight competition called the PAV Challenge. The PAV Challenge is modeled after the "X Prize" and will be held annually at the CAFE Foundation's Flight Test Center here at the Sonoma County Airport. The first annual PAV Challenge will begin August 4 - 12, 2007 with a prize purse of \$250,000. The innovations that come out of this event will be able to improve general aviation aircraft, reduce costs, improve community acceptance of airplanes, and make our transportation system better in the future.

The CAFE Foundation will be testing the PAVs and awarding cash prizes for the following events:

- Best Takeoff Distance
- Lowest PAV Generated Noise for both Community Noise and Cabin Noise
- Best Handling and Ease of Use
- Fastest Speed
- Most Fuel Efficient

So far we have over many letters of intent from various potential contestants, and we are starting to get applications and entry fees for this event. The CAFE Foundation is planning to hold a PAV try-out event in May and the actual contest in early August of this year. This should be a lot of fun and a real way to help improve aircraft over the next couple of years.

We need your help to put on this event. You'll get a chance to see some new airplanes/PAVs you've never seen before and have a great time of it. If you helped out during the CAFE 400 events back in the '80s you know how much fun it is. Well the PAV event will be like that, only better. Please volunteer at the next meeting to help out or call David Lynch (707) 578-2087. Right now we are having an electrical problem at the CAFE hangar. If you can help us with this, please give David a call.

You can get more information on this event at the CAFE Foundation PAV website: http://cafefoundation.org/v2/pav_home.php



Young Eagles On for June 16, 2007 (Thanks, David Lynch)

Announced at the last meeting was the start of this year's Young Eagles Program. We have been very successful over the years and have given our local children a chance to experience the joys of flight. Hopefully we got them started on the road to a pilot's license and a career in aviation. Since we started we have given the joy of flight to over 1,700 kids in the Sonoma County area. This year our next event is scheduled for June 16th at the base of the tower, just like we have been doing for the last couple of years. We will hold this event as part of the Sonoma County Airport Open House. It should be a lot of fun. Be sure and sign up at the next meeting to help out with this event.

*** Need Organizational Help *** And now for a more difficult part: I have enjoyed running the Young Eagles program for the last couple of years but due to work commitment and other work load issues I can not continue to run this wonderful program. If you have the time and inclination, you are needed to run this program. I have set it up, it is all documented, the footwork has been done, but I need someone to take over my job. If I don't get someone we may not have a September Young Eagles. Give me a call if you want to help, David Lynch (707) 578-2087.

(And thanks, David, for the great picture of our friend, Glenn Brizee...ed)



ENGINE FAMILIES

By Jim DuVander

I don't claim to know much about airplane engine details. But I can multiply and divide by $1\frac{1}{2}$ and that's all that is necessary to see what the potential for a "family" of engines is. What I've done below is show the engine displacement of 4, 6 and 8 cylinder aircraft engines, as if the "family" used the same cylinder heads, pistons and stroke. I have put the displacement in cubic inches for one cylinder, next to the family #.

FAMILY #	MAKER	4 CYLINDER	6 CYLINDER	8 CYLINDER
#1 50 cu.in.	Continental	0-200	0-300	
#2 59 cu.in.	Lycoming	0-235	(0-352)	
#3 60 cu.in.	Continental	0-240	0-360	
#4 72 cu.in.	Lycoming	0-290	0-435	
#5 78 cu.in.	Continental	(0-313)	0-470	
#6 80 cu.in.	Lycoming	0-320	0-480	
#7 87 cu.in.	Continental	0-346	0-520	(0-694)
#8 90 cu.in.	Lycoming	0-360	0-540	0-720

I have written the engine displacements that I do not recognize in parentheses. The ones that I do recognize are without. For instance, let's look at family #2. We know that Lycoming makes the 0-235. This is a four cylinder engine. If they were to make a six cylinder engine using the same cylinder heads as the 0-235, it would have a displacement of 352 cu in. So far as I know, this engine is not available. But we do know that Lycoming could make one. Look at family #5. We do know that Continental makes the six cylinder 0-470, but the 0-313 is not to my knowledge available. Look at family # 7. I didn't recognize the 0-346 as a manufactured engine, but as I was going through Trade-a-Plane one day, there was a Beech Skipper listed with this engine. I don't think there are too many of them, but cylinder heads should be readily available for them, if you have one, since I would bet the heads from an 0-520 would fit.

The newest engine shown above is the Continental 0-240. The Continental six cylinder 0-360 has been in production for a long time, so it was a natural for Continental to bring out the 0-240.

The above information ignores other factors such as angle valves and geared engines. It is simply a look at engines using simple arithmetic.

Another thing has happened recently to engine displacements. That is boring and stroking. Although this has been done forever in auto engines, it is not all that common in aircraft engines, where reliability trumps displacement. But one of the clone makers of the Lyc 0-360 has forged a larger crankshaft blank and are boring and stroking this engine to come out with an 0-390. I've seen it advertised in [Kit Planes](#). But, it is still in the same family as the 0-360.

Also note that when one talks about an 0-360, this could be either the six cylinder Cont or the four cylinder Lyc.



For Pilot Weather Information:

(Thanks, David Heal)

www.weather.com (For future general area weather picture)

http://www.weather.com/maps/activity/aviation/index_large.html?from=aviationf (For future general area aviation weather picture)

<http://sat.wrh.noaa.gov/satellite/1km/satmap.html> (Click on various regions to get a closer view)

<http://www.aopa.org/members/wx/> (Good stuff)

<http://adds.aviationweather.noaa.gov/progs/> (Good for icing info, etc)

<http://www.vansairforce.net/weather.htm> (Good assortment of information)

<http://www.dispatcher.org/brief/adfbrief.html> (Good assortment of information)

<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/weatherpilot.php> (Good assortment of information)

<http://www.duats.com/duats.cgi> (DUATs supplier)

<https://www.duat.com/> (DUATs supplier)

<http://weather.noaa.gov/weather/current/KSTS.html>

www.usairnet.com (Click on the weather function)

For Pilot Flight Planning, try:

<http://members.eaa.org/home/flightplanner/flightplanner.html>

www.aopa.org (Click on the weather function)

<http://skyvector.com/> (For sectional chart excerpts)

<http://www.runwayfinder.com/> (For airport pictures)

<http://flightaware.com/live/> (For flight tracking)

<http://www.airnav.com/> (For airport info)

"The Piper Cub is the safest airplane in the world; it can just barely kill you."

***** Attributed to Max Stanley (Northrop test pilot)**



THE FLYING MARKET

180 HP Engine: Runs like a clock. Burns no oil.
Has inverted system. George Mackin 928-649-8111
(For local info, call Remo Galeazzi 707.762.8261)

Schellville Antique Escadrille

The Schellville Antique Escadrille meets at noon every 2nd Saturday of each month (except June) at the Sonoma Vintage Aero (George Dray) hangar at the Sonoma Valley Airport. No-host BBQ follows. Aircraft display – noon to 4pm.

Sonoma Skypark EAA 1268

Sonoma Skypark EAA 1268 meets at 7pm on the 2nd Tuesday night of each month at Sonoma Skypark, hangar N-3. Dinner is served (\$5) and business meeting/program follows. Provides “Historical Aircraft Display” Days. Contact Darrel Jones 707-996-4494 for info.

EAA CHAPTER 124 2007 OFFICERS AND BOARD MEMBERS:

President:

Joe Lacchia (07/08) (707) 824-2891

Vice President:

Mike Tovani (06/07) (707) 838-1891

Secretary:

Steve Fredericks (07/08) (707) 829-1214

Treasurer:

John Whitehouse (07/08) (707) 539-5549

Facilities Chairman:

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Facilities Committee:

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Technical Counselors:

Jim Smith (707) 763-0833

Remo Galeazzi (707) 762-8261

Bob Gutteridge (707) 539-5188

Jerry Rice (707) 431-0206

Kevin Quirk (707) 539-8589

Board:

Ray Shipway (07/08) (707) 999-0949

Charles Nelson (07/08) (707) 573-6882

Dennis McGuire (07/08) (707) 824-9948

Brian Cluer (06/07) (707) 824-0701

Ken Vaughn (07) (707) 431-0844

Joe Wiegand (07) (415) 665-8871

Newsletter Editor:

Donna Turrentine (07) (707) 823-6132

Webmaster:

John Palmerlee jbpalm@sonic.net

Librarian:

Walt Ferris (415) 482-8331

Young Eagles:

David Lynch (707) 538-2531

Flight Advisor:

CJ Stephens (707) 523-4352



March 5, 2007 Board Meeting:

President Joe Lacchia called the Board Meeting to order at 6:35 P.M.

Joe Lacchia, Pres.	P	Charles Nelson, Board	P
Mike Tovani, VP	P	Dennis McGuire, Board	P
Steve Fredericks, Sec	P	Brian Cluer, Board	A
John Whitehouse, Treas.	P	Ken Vaughn, Board	A
Larry Rengstorf, Facilities	P	Joe Wiegand, Board	P
Ray Shipway, Board	P	Donna Turrentine, Newsletter	P

Minutes: Minutes from prior meeting were moved, seconded and approved with out corrections.

Treasurer's Report: John Whitehouse reported on activity for the month, submitted statements on finances and parking fee collections. Report was moved, seconded and approved.

New business: Mike Tovani updated the Board on the recent progress he has achieved on the A/V System in the meeting room. The Chapter can now give a Power Point presentation with a newly donated computer from member George Nervo. The system also can also play a DVD or VHS through the large screen projector. Mike expressed concerns about the security of the equipment. Mike and Larry will work to find a cabinet to house the valuables. Joe Lacchia thanked Mike for bringing this project to its completion.

Elmer Crandon has his Piper Comanche stored on the site. Elmer is no longer a member as he has not paid his dues. He is also in arrears on his tie down rental payments. Joe Lacchia has asked Secretary Steve Fredericks to send a letter to Elmer requesting that he remove his aircraft from the site, as he is in violation of his lease with the Chapter.

Meg Hurt, representing the CAFE Foundation, has requested that Chapter 124 provide the use of the facility to the CAFE foundation for the upcoming PAV Challenge that CAFE is hosting. Joe Wiegand entered a motion to allow said use of the Chapter's facilities from August 3, 2007 through August 10, 2007 for the purpose of hosting the PAV Challenge. Motion was moved, seconded, and unanimously approved.

March 15 the Airport will host an Open House to welcome Horizon Airlines and their Bombardier Q-400.

March 17 the group at Sonoma Sky Park will host a burger lunch and airport tour.

Facilities Committee: No report.

Budget Committee: Budget Committee (Ken Vaughn, Larry Rengstorf and Dennis McGuire) received next year's proposed budget from Treasurer John Whitehouse. John stated that the budget for last year provided a good framework for how the money actually was spent.

Young Eagles: David Lynch reiterated his desire to hand the position of Young Eagles Coordinator off to another Chapter member. Joe Lacchia remarked on the importance of the Young Eagle's mission. If anyone is interested please talk to David or Joe.

Respectfully Submitted,
Steve Fredericks, Secretary



March 5, 2007 General Meeting:

President Joe Lacchia called the Board Meeting to order at 7:35 P.M. 60 members were present.

Minutes: Minutes from previous General Membership meeting were approved.

Treasurer's Report: John Whitehouse reported on activity for the month, submitted statements on finances and parking fee collections. John stated that tonight's meeting is the deadline for payment of dues in order to be placed in next year's roster. The roster is the defining document for the calculation of bounce points. The report was moved, seconded and approved.

General: March 15 the Airport will host an Open House to welcome Horizon Airlines and their Bombardier Q-400.

March 17 the group at Sonoma Sky Park will host a burger lunch and airport tour.

Please update your roster information with John Whitehouse. He is especially concerned with getting your correct e-mail address, but would appreciate receiving all correction relative to the information as printed in the roster.

Facilities Committee: Larry would like a heads up from anyone who is coming on to the site after hours. Please remember that he is providing the site's security.

Mike Tovani has recently put a lot of work into the A/V system. The Chapter can now give a Power Point presentation with a newly donated computer from member George Nervo. The system also can also play a DVD or VHS through the large screen projector. Thanks Mike.

Lease Committee: C.J. Stephens updated everyone on how the Chapter ended up with the facilities that we now enjoy. He also reminds us all that the lease expires in February of 2008.

When the lease expires the county will own the buildings. The county will be expecting more rent from the Chapter. The good news is that the county appears to want us to continue as tenants. Expect to see some changes, such as the Hamilton Hangar leaving sometime around July. Also Larry's mobile home will be leaving.

The Chapter will probably end up with an agreement with the county that will allow us to rent tie down spaces, the spaces in the hangars and the meeting room. We will also probably continue to rent space to the CAFE foundation. The terms of the lease will probably be month to month, with a 12 month notification clause.

Young Eagles: David Lynch said the San Francisco Chronicle ran a nice story about the Petaluma EAA chapter recently. See the story at

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/03/06/BAGCQOG6601.DTL&hw=Petaluma+EAA&sn=001&sc=1000>

June 16 will be the Airport Open House and the next Young Eagle's event. At last year's Open House the Young Eagle's rides were the event that drew most of the people. The Airport Manager's office was most appreciative of the Chapter's efforts to engage the community. Please come out and help.

CAFE: Larry Ford reminds everyone that the CAFE Foundation needs helpers for the upcoming PAV Challenge. Take a look at the CAFE web site http://cafefoundation.org/v2/main_home.php for more information on how you can help.

Tech Counselors: Bob Gutteridge reports that Larry Rengstorf can hand prop a 0-470.

Builder's reports: Donna Turrentine presented Rolf Unternaehrer and Steve Barnes with ceremonious wheel chocks for completing their home built projects.

David Lynch reported that Donna climbed into his tail cone and drilled some holes for him, thanks Donna.

John Whitehouse says that he will be putting the wings on his RV-4 in early April.

Thanks to Dale Wittman for cooking again. Dale would like to thank Joe Lacchia for shopping, Donna Turrentine for prepping the veggies and all who helped with the clean up.

Respectfully submitted, Steve Fredericks, Secretary