



November 7, 2007
Volume 46
Number 11

Board Meeting:
November 7, 2007 6:30pm

General Meeting:
November 7, 2007 7:30pm

WWW.EAA124.ORG

WWW.CAFEFOUNDATION.ORG

SPECIAL ANNOUNCEMENTS:

November 7, 2007 PROGRAM: John Whitehouse will discuss the building of his RV-4.

ELECTION OF CHAPTER 124 OFFICERS AND BOARD

The Chapter will be having its annual election of officers at the November 7th meeting. The positions of Vice President, Secretary, and three (3) Board members will be open. Everyone in the Chapter should consider volunteering for a spot. We need your participation to help make our Chapter a vibrant, thriving organization with new ideas and active members. See current Board/Officers if interested in serving. Nominations from the floor will be encouraged.

The Chapter needs you!

CHAPTER WORK PARTY

President Joe wants to schedule a work party for the clubhouse during the month of November. We need to do some work on the restrooms, including installing motion detector light switches, etc. We hope that a few volunteers will step forward to assist in the renovation of our clubhouse.

Dues are now being accepted by Treasurer, John Whitehouse, for the year 2008. Please pay your annual dues (\$25) by/at the March, 2008 meeting to be included in the Chapter roster. Also, please contact Jim DuVander to update any missing/incorrect information for said roster.



MESSAGE FROM THE FRONT DESK...

NOVEMBER, 2007

Joe Lacchia, President

On October 20th we awoke to another perfect day in Sonoma County and a Young Eagle's day at that. We had an excellent turn out of members and a good turn out of kids. Sher and Ray Shipway had things running smoothly from the start, and we processed somewhere around 35 new pilots through the system. Meanwhile we were entertained by the B-17 "Liberty Bell" departing and arriving with people viewing the autumn colors of the vineyards from above.

Our October 13th a fly out to Cloverdale was another fun event with Michael Heintz and his crew providing food and entertainment along with seminars covering various aspects of Zenith building.

Chapter 124 will have its annual Election of Officers at the November 7th meeting. We are looking for a few good men or women to help run this club for the next few years. Nominations will be accepted for the positions of Vice President and Secretary along with 3 Board slots before the actual election.

This month I would like to see a work day at our facility. There are a few things that need to be done, and getting a group together always makes things go quickly and with more fun. Date and time will be announced at the meeting.

Things coming up:

November TBD
November 7th

Work Day
Elections for Vice President, Secretary, and 3 Board Positions

Happy Flying,
Joe Lacchia

The modern airplane creates a new geographical dimension. A navigable ocean of air blankets the whole surface of the globe. There are no distant places any longer: the world is small and the world is one.
---Wendell Wilkie

Unlike the boundaries of the sea by the shorelines, the "ocean of air" laps at the border of every state, city, town, and home throughout the world.
---Welch Pogue

I've never known an industry that can get into people's blood the way aviation does.
---Robert Six, founder of Continental Airlines.



Termination of 121.5 MHz Beacons for Satellite Alerting is Coming Soon

Notice Number: NOTC0981

(Thanks, David Heal)

On 1 February 2009, the International Cospas-Sarsat [1] [1] Organization (U.S. included) will terminate processing of distress signals emitted by 121.5 MHz Emergency Locator Transmitters (ELTs). This means that pilots flying aircraft equipped with 121.5 MHz ELTs after that date will have to depend on pilots of over flying aircraft and or ground stations monitoring 121.5 to hear and report distress alert signals, transmitted from a possible crash site.

Why is this happening?

Although lives have been saved by 121.5 MHz ELTs, the downside has been their propensity to generate false alerts (approximately 98 percent of all 121.5 MHz alerts are false), and their failure to provide rescue forces with timely and accurate crash location data. Both of which actually delay rescue efforts and have a direct effect on an individual's chance for survival. Rescue forces have to respond to all 121.5 MHz alerts to determine if they are real distress alerts or if they are being generated by an interferer, an inadvertent activation (by the owner) or equipment failure.

Is there an alternative?

Yes, the Cospas-Sarsat System (U.S. included) has been and will continue processing emergency signals transmitted by 406 MHz ELTs. These 5 Watt digital beacons transmit a much stronger signal, are more accurate, verifiable and traceable to the registered beacon owner (406 MHz ELTs must be registered by the owner in accordance with Federal Communications Commission (FCC) regulation). Registration allows the search and rescue authorities to contact the beacon owner, or his or her designated alternate by telephone to determine if a real emergency exists. Therefore, a simple telephone call often solves a 406 MHz alerts without launching costly and limited search and rescue resources, which would have to be done for a 121.5 MHz alert. For these reasons, the search and rescue community is encouraging aircraft owners to consider retrofit of 406 MHz ELTs or at a minimum, consider the purchase of a handheld 406 MHz Personal Locator Beacon (PLB) which can be carried in the cockpit while continuing to maintain a fixed 121.5 MHz ELT mounted in the aircraft's tail.

Remember, after February 1, 2009, the world-wide Cospas-Sarsat satellite system will no longer process 121.5 MHz alert signals. Pilots involved in aircraft accidents in remote areas will have to depend on pilots of over flying aircraft and or ground stations to hear emergency ELT distress signals. For further information concerning the termination of 121.5 MHz data processing visit www.sarsat.noaa.gov.



Good Item from Cessna Pilots Association Newsletter

(Thanks, David Heal)

Dear Mike:

I am still confused. I don't have an AFM for all of our types, but I do have the 182T and the 172R here at the house. Both AFMs recommend 50 rich of peak as recommended lean. But the letter you refer to below indicates that is absolutely the worst mixture setting. What's a pilot to do? Go against the AFM?

On the other hand, we have been burning a lot of valves recently, especially on the 182s. I would like to know why.

Any of you who have received this email, do you have a good engine A&P, or an engineer friend at Lycoming or Continental, that we could ask this question to? I would really like to know.--Rick

It is an incontrovertible fact that approximately 50F ROP mixture results in the maximum CHT and maximum peak internal cylinder pressure, and is therefore the worst possible mixture setting to use from the standpoint of engine longevity. I'm not sure whether Lycoming publishes any data on this, but many TCM operator's manuals (specifically the one for the TCM IO-550 that I'm looking at right now) contains a graph that plots EGT, CHT, BHP and BSFC curves as a function of mixture. If you look at that graph, it is crystal clear that CHT is maximum at 50F ROP, BHP is maximum at about 100F ROP, EGT is maximum at peak (duh!), and BSFC is minimum (i.e., best economy) at a significantly LOP mixture.

All of these relationships apply to all piston engines, not just TCM engines, because the laws of physics work the same regardless of who built the engine.

Many POHs recommend 50F ROP because it provides a good compromise between best power and best economy. What 50F ROP does NOT provide is good engine longevity, which is something that the manufacturers don't care much about but owners definitely do. (Engine overhaul and cylinder replacement are major expense items for owners; they are revenue items for manufacturers.) Note that the mixture recommendations in the POH are NOT limitations, they are mere suggestions (and often bad ones), and the pilot is under no regulatory obligation to use them (which in my view is a good thing).

CHT is the best proxy we have in the cockpit for peak internal cylinder pressure (ICP). Peak ICP and peak CHT occur at the same mixture setting. This is the mixture that's hardest on the engine because it creates the greatest stresses. Except at low power settings (e.g., when flying a normally aspirated engine up above 10,000 feet), it's a good place to avoid if you care about longevity.

Lycoming sets the CHT redline at 500F. TCM sets it at 460F. Both of these numbers are absurdly high, and operating cylinders with CHTs anywhere close to those numbers will result in exhaust valve problems and increased incidence of cylinder head fatigue cracking. We do not like to see CHTs above about 400F -- which is the temperature at which the aluminum alloy from which the cylinder head is made loses one-half its tensile strength. (The strength decreases rapidly as the temperature rises above 400F.) In fact, we recommend a maximum target CHT of about 380F just to provide a little extra cushion, and consider any CHT above 400F to be abusive and a reason to "do something right now" to get it down.



Good Item from Cessna Pilots Association Newsletter (continued)

The higher the power setting, the further away from 50F ROP you need to stay to keep CHTs at or below the target. As power decreases, this "zone to avoid" around 50F ROP becomes narrower and narrower. When power gets down to 60% or less, the avoidance zone disappears and you can run the mixture pretty much anywhere you please without overtemping or overstressing anything.

In my view, the best way to manage these engines is the same way we manage turbine engines: by temperature, specifically by CHT (which is the best proxy we have for ICP). For best engine longevity, set the mixture somewhere that produces CHTs no higher than 380F. This can be very ROP, or LOP, or even right at peak if the power is low enough.

What's important is that you limit CHTs to a maximum target value -- how you accomplish that is less important from the standpoint of longevity.

I'm personally a big fan of operating LOP, and my engines clearly love it because they're now at 800 hours past TBO and still healthy as one could wish. But you can also achieve excellent longevity by running very ROP, or by running at reduced power settings. Whatever it takes to keep the CHTs down where they need to be.

Mike Busch, CPA Tech Rep

This is all about fun. You can grab ahold of an airplane here, and literally take your life in both hands. One for the throttle and one for the stick, and you can control your own destiny, free of most rules and regulations. It may not be better than sex, but it's definitely better than the second time. Adrenaline is a narcotic; it may be a naturally induced narcotic, but it is a narcotic. And once you get it movin' around in there, it's a rush like none other, and when this puppy get moving...

---Alan Preston, air race pilot

...The fundamental magic of flying, a miracle that has nothing to do with any of its practical purposes -- purposes of speed, accessibility, and convenience -- will not change as they change.

---Anne Morrow Lindberg, "North to the Orient" 1935

I may be flying a complicated airplane, rushing through space, but in this cabin I'm surrounded by simplicity and thoughts set free of time. How detached the intimate things around me seem from the great world down below. How strange is this combination of proximity and separation. That ground -- seconds away -- thousands of miles away. This air, stirring mildly around me. That air, rushing by with the speed of a tornado, an inch beyond. These minute details in my cockpit. The grandeur of the work outside. The nearness of death. The longness of life.

---Charles A. Lindbergh, "The Spirit of St. Louis."



YOUNG EAGLES A GREAT SUCCESS...

(Thanks, David Lynch)

Here is a copy of an email I got from an old work friend. I took his daughter flying. I thought the Chapter would like to read the reaction from a parent of one who flew with us:

Hello All.

This weekend Kerry had an opportunity (I heard it announced on our local radio station) to take a short flight on a small aircraft from Sonoma County Airport in Santa Rosa.

The local chapter of the EAA (<http://www.eaa.org/>) does this annually and has voluntarily flown over 1M kids in the age group of 8-17 to share in the enthusiasm and experience of flight with them. They have exceeded their original goal which was to fly 1M kids in time for the Wright Brothers 100th anniversary in 2000.

Kerry really enjoyed the flight which she took over our house and over to the coast. She even had a chance to take over the controls.

Her name, along with all the other 1M+ kids is entered into a log book at a museum in Oshkosh , Wisconsin . She also picked up a certificate signed by Harrison Ford, the honorary Chairman of the EAA, a world-wide organization.

My thanks to Dave Lynch, an ex-colleague from HP/Agilent for bringing her back safely, it was a wonderful surprise to see you yesterday Dave! Keep in touch.

Who knows, perhaps in a few years she might just be your airline pilot! :-)

God Bless,
XXXXXXX

(Thanks for sharing this with us, David...Editor)



David Lynch with Kerry on Young Eagles Day



THE FLYING MARKET

FOR SALE/TRADE: Early straight tail Cessna - 1957 CESSNA 182A. 3780 TT, 1070 SMOH, May 2007 annual, NDH, hangared in Kansas near factory. King IFR Avionics with STEC-30 3-axis autopilot, Dual King KX-155 Nav/Comms, KN64 DME, GS, KR86 ADF, KLN89B GPS, 3 LMB, Narco AT50A, 4-place Sigtronics. TRADE for C190/C195 Phone: 316-729-9761 – 316-208-3140 (cell) for delivery information to your airport. Asking \$49,500 OBO

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) (707) 829-1214

Treasurer:

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

Facilities Chairman:

Larry Rengstorf (07/08) (707) 575-0331

Facilities Committee:

Art Beer, Dwayne Green, Dale Wittman, and Jim Long

Technical Counselors:

Jim Smith (707) 763-0833

Remo Galeazzi (707) 762-8261

Bob Gutteridge (707) 539-5188

Jerry Rice (707) 431-0206

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

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Flight Advisor:

CJ Stephens (707) 523-4352



October 3, 2007 Board Meeting:

President Joe Lacchia called the Board Meeting to order at 6:30 P.M.

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

Minutes: Minutes from prior meeting are moved, seconded and approved.

Treasurer's Report: John Whitehouse provided the usual reports on activity for the month. Paint for the meeting room was the significant hit, but the results were worth it. Report was moved, seconded and approved.

Announcements: Flyout to Zenith Open House at Cloverdale Airport. Meet up at the chapter at 9:00 for a 9:30 departure.

Joe Lacchia would like to schedule a November work party to get a few loose ends around the buildings tidied up.

Lease: Steve Fredericks will write a letter to all who store aircraft on the site detailing new rental rates. Steve and C.J. Stephens are working on updating the leases for the renters. The committee has a meeting October 18 with the County.

Facilities: Donna Turrentine has updated the status of the bump system points. This update reflects aircraft that are known to be on the way to the site. Donna provided print outs of her updates.

Young Eagles: Ray and Sher are working hard to make the October 20 event a success. Insurance is a current issue. Also the area at the base of the tower that has been used in the past is now rented to the new restaurant.

New business: Ray Shipway was given permission to purchase a new Polaroid camera for use at Young Eagles events.

Nominating Committee: Is looking for candidates for Vice President, Secretary, and 3 Board seats. If you are interested in serving your chapter, please come to the November meeting and let your intentions be known. Nominations will be open until the final election process at the November meeting.

Respectfully Submitted,
Steve Fredericks, Secretary



October 3, 2007 General Meeting:

President Joe Lacchia called the Meeting to order at 7:30 P.M. 45 members were present.

Minutes: Minutes from last meeting were moved, seconded and approved.

Treasurer's Report: John Whitehouse provided the usual reports on activity for the month. John says that paint for the meeting room was the big expense from last month, and he thanks Donna Turrentine for getting it on the walls and Remo Galeazzi for his help in re-hanging the Chapter pictures.

John also notes that he will be accepting chapter dues for 2008. Dues will remain \$25.00 for the year. Report was moved, seconded and approved.

Announcements: Young Eagle's are hosting an event October 20. Volunteers are still needed, especially pilots. Ray and Sher are first time organizers and would like your help.

Michael Heintz reports that the regional fly in for Zenith Aircraft will be held October 13 at the Cloverdale Airport. Hours will be 10 to 4. They will be having a BBQ, which will be free if you fly in. This is also the chapter fly out for October. Meet up at the chapter at 9:00 if you are interested in flying up.

Copperstate Flyin is October 25-28.

BUIDER'S REPORTS: John Whitehouse ran up the engine on his RV-4. John reports that it taxies smoothly. He is hoping for an FAA inspection soon.

Chris Hoover has started to work on an RV-7. He is making good progress on the tail kit.

David Lynch installed the seats in his RV-8A. He also ordered the engine and propeller "taking advantage" of Vans discounts if you order them together.

Bob Gutteridge has renamed his Jabiru, "Parts-no-fit-m".

Doug Dugger started the engine on his CH701 up in Cloverdale.

Thanks to Steve Waite for cooking and Donna Turrentine for shopping and chopping the veggies.

CAFÉ: Brien Seeley recently attended a Society of Automotive Engineers' conference. He asked the attendees at the conference for their opinions on what they would like to see in the PAVs of the future. The choices were a car/plane with a 100 mph cruise or a plane with a 200 mph cruise. He posed the same question to the members present at the meeting. The chapter overwhelmingly chose the 200 mph airplane by the roughly the same margin that the SAE members chose the car.

The foundation is meeting to formulate the rules for next year's PAV completion.

Respectfully Submitted,
Steve Fredericks, Secretary