

The C*ie*cco

Official Publication of the Experimental Aircraft Association
EAA Chapter #393 POBox 272725 Concord, CA 94527-2725

MARCH 1998

CHAPTER MEETING

The next meeting is at 7:30 PM March 25, 1998. The speaker will be Henry J. Kraus, Managing Partner of Air Petro Corporation. He will discuss a Short History and a Future Look--Aviation Fuels, the products and services of Air Petro Corporation, the Chevron Aviation Fuels Division--Hallmark 21 Programs, and A Crystal Ball look at General Aviation--Aircraft, Airports, Navigation Aids, and anything else we want to know about aviation fuels.

Meetings normally begin at 7:30 PM on the 4TH Wednesday of the month in the terminal building at the end of John Glenn Drive.

PRESIDENT'S CORNER

It's not too early to plan on being part of EAA Chapter 393's static display of Experimental Aircraft at Concord Air Show again this year, (Father's Day, June 21, 1998). This is a wonderful opportunity to show off your airplane and to bring an awareness to the general public that there is more to flying than just buzzing around the area in a Piper or Cessna at 100 mph. We are considering a soft drink booth to help raise money for the Chapter as well as a booth to sign up Young Eagles for future flights.

Some of us had a chance to see Rick Young's new Harmon Rocket recently. (#2 and counting!). Beautiful job Rick! I can't wait to see the paint scheme. Dick Rihn is making great progress on his One Design. It's sure to be another beauty and a show stopper. Bob Belshe will soon have his pretty yellow Lancair back in the air with a new larger Lycoming engine. It will be good to have him back. Our very own newsletter editor, Doug Page, is close to moving his new RV-6A to the airport right after it passes through the paint shop. Looks like he will be flying by early summertime. Keep 'em coming guys!

Fly Safely. Ron Robinson

YOUR EDITOR IS FALLIBLE!!!

There were errors in the February edition. Randy Alley was mistakenly called Randy Allen. We apologize and we will try to be more careful. Also your editor and your treasurer both missed a mistake in last month's form for the payment of dues. The PO Box was mistakenly stated to be PO Box 27275 instead of 272725, and many members had their dues payments returned. Louie Goodell has sent a special letter with an enclosed envelope to each affected person that he knows about. Chapter 393 does need your dues, so please mail your payment to the proper address shown in the news letter heading.

Your editor also mistakenly exaggerated some of the facts about the Golden West Fly-in. They expect 95 vendors, not 400.

CHAPTER MEETING MINUTES FOR FEBRUARY 25, 1998:

Hank Huddleston who flies out of San Carlos told us about his activities as an EAA Technical Counselor. A Counselor visits your project. He makes suggestions and gives building tips. He does not sign your log. You log the fact of the visit. The Counselor sends a card to EAA reporting the visit. The main purpose is to help builders, but there are insurance advantages as well. Hank said there were 400 EAA Technical Counselors. There have been no lawsuit problems and Hank felt comfortable with the \$10 million EAA insurance coverage of his activities.

Scott Achelis explained his getting to the meeting at 8 pm. He was held up by weather on a return flight from San Diego in his RV-6A, landed and parked at Los Banos, rented a car and drove to the meeting.

Ken McKenzie reported that EAA had flown him and other Golden West Fly-in Board members to Oshkosh for an

intensive, but productive two day meeting to sort out what was and what was not realistic for the first Fly-in and to make sure that the expectations of EAA Members were met. Ken said that Golden West could well use some early money and suggested that each member consider a gift. Dick Rihn suggested that each Member make a gift equivalent to one hour's pay at the member's usual billing rate.

President Ron reported that EAA's 4th annual Book and Video Sale was March 2 to April 30 at one-half off. He also reported about EAA's Golden Achievement Award, and the Flying Start Program.

Dick Rihn is wiring his One Design.

Ed Perez is working on his Vision in his garage.

Charles Adkin's project currently is being on the Board of Golden West Fly-in.

Bob Belshe is installing an O-320 in his Lancair 235.

Harry Heckman is installing an improve elevator trim system in his Lancair 235.

Gerry Greth told of his appraisal of the plane parts on the Funny Farm Airport in Brentwood.

Rick Alley is restoring an antique Piper.

Bruce Seguine is waiting for parts for his Swift.

Lyle Powell warned that "carburetor ice" was often a vapor lock problem. (See his article below)

Pete Wieben is flying his Glasair III, recently renewed his CFII, and spoke of the need for experienced mature CFI's who were dedicated to teaching flying.

Mark Staffard who works in the CCH tower is moving to the Oakland tower. He invited us to give our input to the tower manager. He is building a Vari-Eze.

Bob Decker is re-doing the panel on his Glasair I.

Bill Jenkins is flying his Glasair.

Ken France is cutting the instrument panel on his RV-6.

Keith Martz is flying his Comanche 250.

Don Baldwin's Teeny Two is soaking in the rain, and is not yet cleared to fly. He has room for two more on his travel trailer trip to Oshkosh.

Al Humbert told of his interest in the Lake California Skypark at Cottonwood near Red Bluff.

Pat Peters and Tracy Peters are working on their RV. Pat has bought a Cherokee to fly in the meantime.

Randy Alley said his L-2 would fly soon.

Note from Editor: Please speak up when telling of your project! Several others spoke but we at the front table could not hear you.

WELCOME TO NEW MEMBERS:

Bob Kenney who flies a Cessna 172

Jeff Hartz whose project is a 1940 Aeronca T-6

BOARD MEETING:

A Board meeting was held in Ron Robinson's Hanger on March 7. Attending were President Ron Robinson, Vice President Scott Achelis, Newsletter Editor Doug Page, and Sec/Treasurer Louie Goodell. The Board discussed possible ways of helping Golden West Fly-in, the fact that EAA wants us to actively recruit new members, Father's day soft drink sales, and recruiting Young Eagles.

THERE WILL BE FLY-OUTS THE SATURDAY FOLLOWING EACH MEMBERSHIP MEETING, WEATHER PERMITTING

The next Flyout will be 11 AM Saturday, March 28, meeting at Ron Robinson's hanger D-17 on the east ramp.

BOB BELSHE'S REPORT ON THE LAST FLYOUT

Four aircraft showed up at Ron Robinson's hanger at 11 AM. The weather was 3000 broken with lots of blue sky showing. The group decided that Half Moon Bay was the best bet, so we took off in two flights of two. Mike Parker and Chris Kenyon in RV's were the first flight, Ron Robinson and Phil Jenkins in Glasairs were the second. A great but short flight over the bay and down the coast to HAF. Lots of planes in the pattern there but no problems. We had a good lunch at the Fishtrap and were soon on our way back. It's a pity that the flight went with three empty seats. Anyone who would like a ride in a nice homebuilt should think seriously about being there next month on March 28. When we taxied back to Phil's hangar, who should show up but Rick Young. Rick started his Harmon Rocket project only eight months ago, and did the whole job, except painting, himself. Congratulations, Rick!

Thank you for the report, Bob!

TREASURER'S REPORT AS OF MARCH 7, 1998

Bank Balance	Checking	\$1767.95
	Savings	\$3014.00
		\$4781.95

LOUIE REMINDS US THAT DUES OF \$20 ARE NOW PAST DUE. Please pay now so that you will not be removed from the mailing list of this brilliant newsletter.

Make checks payable to EAA Chapter 393 and mail with the form below to EAA Chapter 393, PO Box 27275, Concord, CA 94527.

TOOL LIBRARY

Tool Library responses have dropped off. Brad Poling has the following Air Tools:

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Die Grinde
Nibbler
Shears
Rivet Gun

He also has a Tube & Pipe Notcher "Ol Joint Jigger", a Power Hacksaw, all of Tony Bingelis' books, Poly Fiber Aircraft Covering (Stitz Process) Aircraft Dope & Fabric 2nd ed Ruth Spencer, CAM 18, and 22 years of Sport Aviation. Brad is willing to kick in on the joint purchase of big ticket items with other members.

If you have tools or books to share, or if you are willing to reveal your favorite local sources of building supplies, please fill out and return the Tool Library Listing enclosed with this newsletter.

FLASH!!! WE WILL HAVE AN EAA TECH COUNSELOR !!!!!

Rick Lambert has submitted his application to EAA to become a Technical Counselor and is he ever qualified! Rick has built a BD-5B, a Glasair FT 1, a Falcon XP, and SX-300 and a Starduster. Thank you for stepping forward Rick. We badly need you.

SOAP BOX EDITORIAL III

Your editor experienced first hand the help of fellow EAA members on Sunday March 15. On very short notice, Bob Belshe, Tracy Peters, and Franklin Williams answered my request for help in getting my RV-6A out of my garage, on to Pete Wiebens' trailer, and over to the paint shop in Martinez. EAA members have a longstanding tradition of helping each other, but it was really neat to be the recipient of such help and generosity. Thank you Bob, Tracy, Franklin, and Pete.

CALENDAR

March 25 EAA Chapter 393 meeting
March 28 Chapter 393 Flyout
April 4 393 Board meeting
April 19-25 Sun & Fun
June 21 Concord Air Show and EAA static exhibit
July 29-August 4 Oshkosh
September 25-27 Golden West Flyin, Castle Field
Dec 13 Chapter 393 Annual Christmas party at Petar's.

REQUEST FOR WEB SITE'S OF INTEREST TO BUILDERS AND FLYERS

The Board would still like to compile a list of interesting websites. All of you surfers: please submit your favorite websites. For example Scott Achelis has found a website for the Chicago Tower complete with the audio so that one can listen to the Tower and pilots in the background while doing other computer tasks. Scott will have this for next month's Cleco. We have received no replies to this web site request. Please send in your favorites.

CLASSIFIED ADVERTISING

Items for sale by club members may be placed in this newsletter for **FREE!** Please submit your **FOR SALE** items to me in writing no later than the 14th of the month. Normally, your ad will run for two issues, unless you request more or tell me that the item is no longer for sale.

For Sale

Angle of Attack Indicator constructed by Carlos Amspoker, Past President of Chapter 393, following the design of Lyle Powell Cost \$96. Sell for \$50 (Lost my medical) Russell Giffin 925-935-2887.

Supply of molding clay recommended by Sam James for use in making fairings. Releases easily from epoxy and is oil free. Doug Page 925-943-1581

NEWSLETTER SUBMISSIONS

All contributions for the newsletter are welcome! If you have something to say or share with the rest of the club members, do it here! Please submit any articles and/or photographs you think others will enjoy and learn from. Submissions should be done in writing and mailed directly to the newsletter editor. Submissions may be e-mailed, hand written, typed, or on any IBM diskette (in ASCII or MS Word). The deadline for submissions to the editor is the 14th of every month (newsletter is produced and mailed by the 17th). The editor's address is:

400 Arbol Via
Walnut Creek CA 94598
Telephone: 925- 943-1581
E-Mail: reedpage@pacbell.net
Fax # 943-2338 (but call 943-1581 and let me know first)

Thank you Lyle Powell for writing the attached article about vapor lock, and how to prevent it.

Enclosed with this news letter are some pages gleaned from other EAA Chapter Newsletters.

VAPOR LOCK

Vapor lock occurs when a bubble in the fuel obstructs the flow at a small orifice such as the carburetor needle valve or fuel injector metering orifice. The surface tension of the fluid film surrounding the bubble is remarkably tenacious, and it usually requires considerable pressure and some vibration to break it. Because fuel injection uses higher pressure pumps, vapor lock is not seen as frequently in the classic total stoppage form, but as a stuttering of the engine on climbout or on opening the throttle on final approach after it has been closed. The carbureted engine has some reserve fuel in the bowl that will let you just get off the ground on takeoff before it stops.

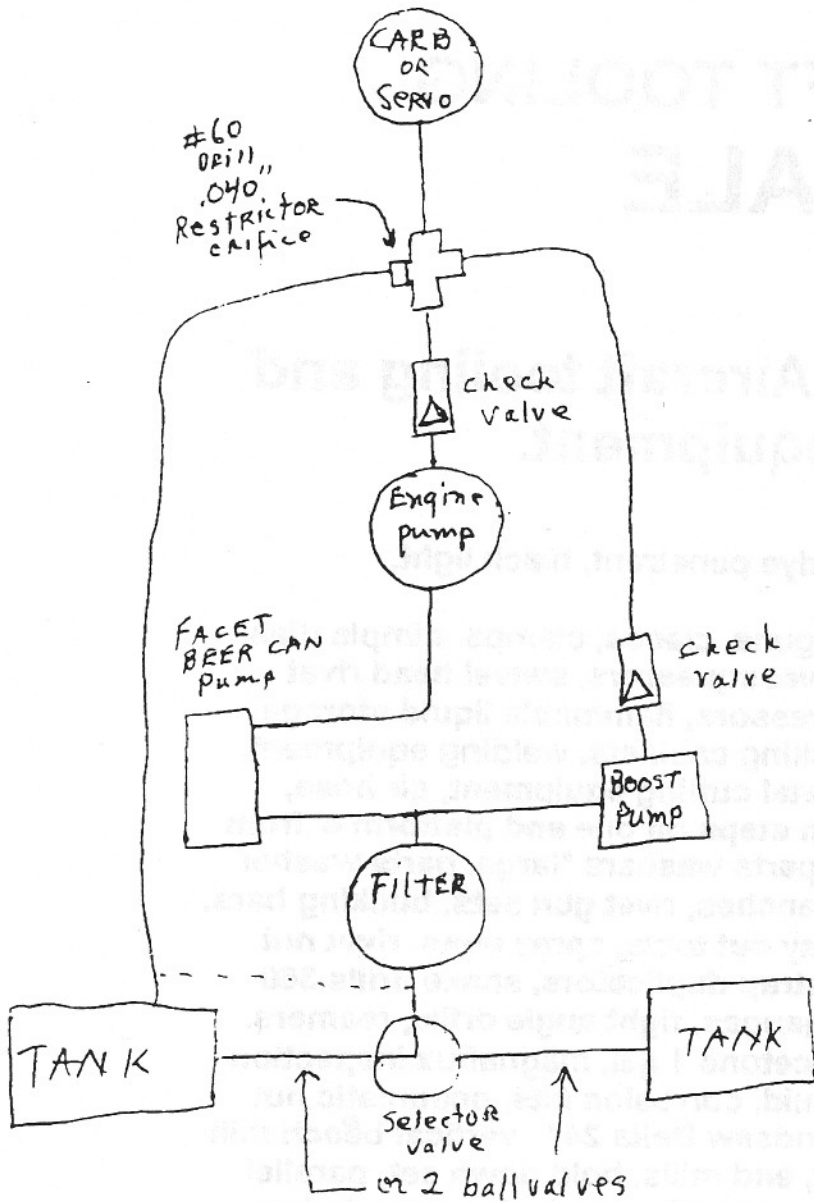
The principal source of all these bubbles is the engine driven fuel pump. This is true because it runs at approximately oil temperature (which will boil fuel) and because of the abrupt pressure drop at the pump entrance. High temperature and low pressure are the two things that will produce bubbles, and both are present in this pump.

The cures for this are three; the first is to use a metered bypass downstream of this pump which returns to the fuel tank or filter. This is the cure that all the automobile manufacturers have adopted and it is the reason we no longer see this problem in our cars, as we used to. This then keeps a flow of fuel going through the pump even when the throttle is closed, thus carrying off the calories that would otherwise boil the fuel. This feature is a part of Continental fuel injection systems.

The second cure is to have the boost pump plumbed in parallel, rather than series, with the engine pump. This is done by using a "T" in the line between the engine pump and the carburetor, with a check valve behind the "T" to prevent backflow in the event of engine pump failure. It is also advisable to have a check valve at the outlet of the boost pump for the same reason.

A third measure which I employ in my Glasair III is a low pressure "Facet" beer-can pump in series with my engine pump, so as to eliminate the suction otherwise existing at the entrance to the engine pump. This pump is always on. This pump will flow-through in case of failure.

I've found that the seriousness of the vapor lock problem is widely misunderstood and underestimated by most pilots, because these problems do not arise frequently. But they do happen, occasionally with serious results. The most dangerous part of a flight, in my opinion, is takeoff and initial climb. In this regime of flight we are completely dependent on that engine working and working well, at a time when we have precious little altitude for alternatives. This is the place when vapor lock bites hard. Don't let it happen to you.



Membership Renewal :Dues are due in February, they are \$20.00 a year. Your mailing address tells when it is due, some have already paid send this form in with \$20.00 check or Bring it to the meeting. MAIL checks to: EAA Chapter 393, PO BOX ~~272725~~ 272725, Concord, CA 94527
Make checks to EAA Chapter 393

First Name _____ MI _____ Last Name _____ Spouse Name _____
 Address _____ Home Phone _____
 City _____ state _____ Zip _____ Work Phone _____
 E-Mail address _____ Pager _____
 Hanger# _____ East or west, Hanger Phone _____
 Project/Plane _____

AIRCRAFT TOOLING SALE

**I am selling my Aircraft tooling and
shop equipment.**

**Inspection tools: magnaflux, dye penetrant, black light,
inspection mirrors,**

**Production tools: drills, rivet guns, clecos, clamps, dimple dies,
Huck tools, cherry riveters, rivet squeezers, swivel head rivet
squeezers, tool boxes, compressors, flammable liquid storage
container 48", file cabinet, rolling cabinets, welding equipment,
sand blast cabinet (small), metal cutting equipment, air hose,
work platforms three tray with steps on one end platform 4' from
ground, sanding equipment, parts washers *large, parts washer
*small, steel drawers, work benches, rivet gun sets, bucking bars,
micrometers, inclinometer, lay out tools, spray guns, rivet nut
pullers, nut plate templates, strap duplicators, snake drills 360
degree head, starrett radius gauges, right angle drills, reamers,
1000's of drills, MEK 1 gal, Acetone 1 gal, magnaflux inspection
fluid, black light inspection fluid, corrosion kits, pneumatic nut
runners, air drills, vertical bandsaw Delta 24", vertical bench mill
18" bed w/ tooling, collet set, end mills, hold down set, parallel
block set, dial micrometer w/ magnetic stand, vice mounted on
mill, parts washing trays, brushes, portable grinder, acetylene
bottle, oxygen bottle, torch set, arc welder, cleco pliers, roper
punches, throat less shear, torque wrenches, rivet shaver, air
hammer and bits, helicoil tools. Circuit board holder, electrical
wire crimping tools, soldering tools, transfer punch set,
horizontal band saw automatic blade oiler, drill press, vice,
compound action clamps, c clamps, shop lights, tool stands,
arbor press, cable tension tester and more. Located in San
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LISTING FOR TOOL LIBRARY

Name: _____

Address: _____

Phone: _____

I have the following tools, books, video tapes, and audio tapes which I would be willing to loan to Members of EAA Chapter 393. I authorize the Cleco editor to publish my name, phone, and the availability of the following tools and other items to be loaned on terms and conditions to be set by me:

_____	_____
_____	_____
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_____	_____
_____	_____

Dated:

Signature

If you are willing to participate, please mail this completed form to Doug Page, 400 Arbol Via, Walnut Creek, CA 94598 Phone: 510-943-1581

THE EXPERIMENTAL AIRCRAFT ASSOCIATION CHAPTER #393 NEWSLETTER, MARCH, 1998

President Ron Robinson 228-3720
Vice President Scott Achelis 935-7920
Secretary-Treasurer Louis Goodell 682-4198
Cleco Editor Doug Page 943-1581

EAA Chapter #393
Newsletter Editor
400 Arbol Via
Walnut Creek, CA 94598



(29) Dues Paid to 2/28/98
Fred W. Egli
1900 Meadow Rd.
Walnut Creek, Ca. 94595