

The Cleco



Experimental Aircraft Association • Chapter 393 • Concord, CA

Mail to: EAA Chapter 393 P.O. Box 272725 Concord, CA 94527-2725

SEPTEMBER, 1993

CHAPTER MEETING

Note that the first day of the month was Wednesday so our meeting pops up early this month. It is September 22, 1993 (the 4th Wednesday of every month) @ 7:30pm; Old Buchanan Terminal Building, Concord Airport. Bring Chairs. *Wear your \$\$\$@% Badges please!*

YOUR 1993 ACOLYTE & HIS THREE AIDES

PRESIDENT	Glenn Werner 676-8786
VICE PRESIDENT	Jim Lewis 930-9429
SEC/TREASURER	Callie Joyner 671-4871
NEWSLETTER EDITOR	Will Price 254-2267

PROGRAM

Jim Lewis is up to his old trick of arranging for a great speaker. This time it's Craig Catto (Catto props). Craig has been making props since he was a teenager and really know the business. I heard him speak at the Livermore EAA meeting a couple of years ago; he gave a great presentation. He will tell you everything you ever wanted to know about props and then some. After hearing him I promptly ordered. I've have been quite happy with the way his little fiberglass covered stick pulls my airplane.

MINUTES OF MEETING August 25, 1993

President Glenn Werner called the meeting to order.

Lisle Knight had invited our Young Eagles for presentation of their Eagle Flight Certificates. Included with the certificate was an appropriately mounted photograph of the Eagle together with the sponsoring pilot. Lisle has done an outstanding job in coordinating this activity and deserves a special accolade.

We also had the pleasure of Mr. and Mrs. Joe Klein. Joe was one of the founders of 393; the big event happened at the Williams Elementary School (Concord) on April 4, 1971.

As this was our first post-Oshkosh '93 meeting, we had no formal speaker but instead listened to experiences of '93 attendees.

We were well represented this year--a number of our members spoke of their good times. Tony Tiritilli told us about the fun he had poking around the seaplane base. Since most of us fly aircraft with wheels, we don't get over to the seaplanes. He urges everyone to make it an agenda item next time they attend.

You would think Dwaine Duis had just discovered Mecca the way he spoke so enthusiastically about his Oshkosh experience. (Maybe he kissed Marie.) This was his *nth* time there and he urges everyone to make it. There is an article elsewhere in the Cleco from Dwaine.

Yours truly was there with his yellow bird; it caught plenty of attention as it did last year. It was rewarding to me to be able to pass on tips and suggestions for new builders. Kind of an indirect payback for the assistance many of you provided me way back when.

RAFFLE

Darn, I never seem to get all of the raffle winners in order to remind them for the next meeting. But I did get the names of Dwaine Duis (a frequent winner) and Ed Lester. So you two, past winners who have forgotten, and anyone else--please bring something for the raffle. Thank you.

CONGRATULATIONS DUE

Chris Kenyon announced that his RV has been signed off and is now completely legal. Congratulations, Chris.

ABOUT PAINTING

Following are some significant facts about painting. These were taken from the President's Corner (Darrell Radford) of Chapter 170's newsletter. I can attest to the validity of his observations.

1. The best paint job is on the underside.
2. The paint runs in the places everyone sees first.
3. Doing everything possible to avoid runs guarantees them.
4. The gun plugs or the compressor fails when needed the most.
5. Insects love wet paint.
6. Two cans of paint out of the batch are not the same color.
7. Paint bonds beautifully to everything but what you're painting.

VENDORS TO KNOW ABOUT

One of our members announced some positive dealings with a cable-maker in Oakland. Apparently this outfit will make any kind of push-pull cable (whatever length) you need. The company is:

California Push-Pull
131 Filbert Street
Oakland 94607
444-3730

Probably everyone in 393 except me has long known about Bay Auto Stripping. They recently did some bead blasting for me—a good job at a reasonable price. I shudder to think of the amount of time it would have taken me to remove the paint with a chemical paint stripper. And they are close to the airport, too.

Bay Auto Stripping
1915F Arnold Industrial Way
Concord 94520
825-6785

For those of you who have not heard, an electrical conducting fiberglass is now available. Sold under the trademark RoMHOglas, the conducting mat is a non-woven fabric mat composed of a dense intersecting network of very fine aluminum coated glass fibers. I understand that it can be used on the inside of fuel tanks as a conducting medium for static electricity. (I know nothing about it, myself.) If you're interested, contact:

Lundy Electronics and Systems
3901 N.E. 12th Avenue
Pompano Beach, FL 33064
(305) 943-1500.

A NEW MOVEMENT—PEOPLE OVER JOGGERS

From Pete Wiebens

Editor's Note: The following does not necessarily reflect the opinions and beliefs of your editor or of your Board. I present this solely as reporting (and at the insistence of Pete) reflecting one person's opinion. I will gladly publish any and all rebutals or other viewpoints.

Our favorite slumlord Pete Wiebens is one of the most creative individuals I know. The other day he stopped by my hangar complaining bitterly about joggers. Seems that as he was driving to the airport he had to swerve to avoid hitting one of them. Then he went into a diatribe about joggers and jogging. (The minute he started I sez to myself "Forget your oil cooler Will, you won't get it mounted today.")

His list of complaints about joggers would fill several pages but let me describe a few to give you an idea of what I had to endure.

He says that joggers are disruptive to his marriage. When he and Melody are driving along and they pass a shapely young thing in one of those Lycra Spandex outfits he is automatically in trouble. Even if he doesn't look he is accused of peeking out of the corner of his eye and having disgraceful thoughts. He considers that as being "guilty until proven innocent."

If the jogger is some guy who is 25-30 pounds overweight his fictitious image of himself as young, trim, and handsome is immediately dashed--total demoralization.

The degree to which joggers disrupt his thought process while he is working on his airplane is an absolute disgrace. Every weekend he can hear that "clap-clap-clap" as joggers go by.

Worst of all, they seem to be having a great time, mindlessly plodding along listening to their Walkmans while he must face up to the harsh realities of life (his landing gear). What an absolute disgrace.

Although Pete feels that joggers have as much right to be here as he, they should be regulated. To that end, he suggests forming an anti-jogger organization with the name *People Over Joggers*. [The resulting acronym POJ is really quite appropriate because Poj is the name of an obscure god from Babylonian mythology: the god of lethargy and solitude.]

The primary charge of POJ would be to work for a Federal ordinance to regulate joggers and jogging. He feels that this really makes sense because it would eliminate the hodgepodge of local regulations that are so confusing to visitors. Then a jogger visiting from, for instance, New York would find no confusion as the regulations in California would be the same as those to which the individual is accustomed.

Pete has a myriad of others thoughts regarding activities of POJ including standardization and certification of jogging shoes, walk-to-jog transition zones, and on and on. If you have a burning desire to be in on the ground floor of this project, give Pete a call. However, he stresses "no hotheads please!"

BITS-N-PIECES OF USELESS INFORMATION

Stolen from various sources

There are an estimated 2,000 EZ's flying worldwide. Some 5,000 sets of EZ plans were sold up until 1985, when Burt got out of the home building business.

Alexander Graham Bell invented the concept of ailerons. One side goes up while the other side, connected by a wire, goes down, causing the airplane to turn. In his 1909 invention, the ailerons, were on the ends of the wings rather than at the trailing edge.

Thought you-all might be interested in the "high cost" of hangaring elsewhere. The following ad was taken from the Grants Pass newsletter.

T-Hangar at Grants Pass airport. 42' wide by 39' deep, has own power meter, cement floor. \$13,900.

If you do not already know, Reno is home to the new National Air Race Museum. A small theater shows continuous air race videos. Thirteen planes are on display: some originals, some replicas. To get there, go three miles east on I-80. Take the Rock Street off-ramp and turn right on Rock to Hymer. Left to 1570 Hymer. Worth the \$4.95 fee.



Off.: (415) 685-4959

RANDY ALLEY
Insurance Agency, Inc.
Agent

1850 Mt. Diablo Street
Concord, CA 94520

RICHARD S. POWELL



Hilltop Optical Co.

HILLTOP PROFESSIONAL BLDG.
SUITE NO. 27A

1855 SAN MIGUEL DR.
WALNUT CREEK, CALIF.
94596

(510) 935-8822

FORMER MEMBERS

Following is a list of members who have dropped off the roll this year. If you know anyone on the list, give them a call and urge them to connect up again.

Name	Telephone	Alt. Phone
AMSPOKER, CARLOS	798-4141	685-1150
BLEY, MARK	415 564-3887	
BROPHY, RICK	798-1247	654-6611
CALDWELL, RONALD	451-6086	
DEPROSSE, BILL	827-0199	
DIEGOLI, JOHN	893-7046	466-4876
DURHAM, QUENTIN	254-7843	
FERRERO, LOU	672-7539	
GONZALES, BOB	798-5100	
GRAVES, ROBERT M.	935-0769	
JONES, VICTOR	706-1631	734-4236
MACICA, STEVE	792-7510	
NELSON, HOWARD	935-7302	
PILOTTE, STUB	883-7067	
Smith, Kay E.	825-4211	
Smith, Tom	707 426-6388	
STEFFEN, ROBERT	930-7701	
Walker, David A.	686-3243	685-3171
West, Arthur	370-2037	689-5055
Yoskowitz, Ken		

NEWS RELEASE

The following was taken from the Intrepid Airman, the EAA 62 (San Jose) newsletter.

Aircraft Designs, Inc. has opened its AIRCRAFT TECHNOLOGY CENTER at beautiful Ryan Ranch in Monterey, California 93940. The street address is 5 Harris Court, Building S. The purpose of the new facility is to promote aircraft technology, aircraft safety, and education. The facility consists of an upper floor where all engineering activities and publishing efforts take place and a lower floor where the Stallion and gyroplane rotor blades are built and classes are conducted. Our telephone number is still 408- 649-6212 but the fax number has changed to 408-649-5738.

The activities at the AIRCRAFT TECHNOLOGY CENTER consist of:

- Design aircraft and aircraft structures. In the past we have designed and analyzed the structures on the Lancair 200, 320, and Lancair IV, Prowler, Discovery, Kitfox, Sportster, Stallion, Condor, Nova, Trio, KIS, and many more.
- Write and publish books about how to design and build aircraft. Some of the books that we publish are: MODERN AIRCRAFT DESIGN, VOLUME 1 and 2;

COMPOSITE AIRCRAFT DESIGN; MODERN SUBSONIC FLUTTER ANALYSIS; MODERN AIRCRAFT DRAFTING; MODERN GYROPLANE DESIGN; DESIGNING with CORE; and many others. We just completed a new book title "MODERN PROPELLER AND DUCT DESIGN."

- We are presently building the all graphite/epoxy Stallion and we have started to assemble it.
- We build rotor blades for gyroplanes. One of our customers is Israel Aircraft Industries, Ltd.
- We develop and write computer programs for the PC and the Mac for the purpose of aircraft design.
- We conduct hands-on-classes about designing and building composite aircraft to educate future aircraft designers and builders.

Anyone is welcome to drop by. We are not far from the Monterey Airport. Classes and seminars are conducted by: Martin Hollmann, MSME.

MOTERING PERFORMANCE

Specialists in the repair of

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James D. Lewis

President

1433 Mazda Dr., Walnut Creek, CA 94596 (510) 930-9429

MANIFOLD PRESSURE, WHY BOTHER?

Taken from the Monterey Bay Flyer, EAA 204

So your homebuilt is reaching the point where you are thinking about engine instruments and where to put them in your limited panel space. If you're not installing a constant-speed propeller, you need not think about making room for a manifold pressure gauge, right? WRONG! Unless your proposed engine is going to be one with only two throttle positions, WIDE OPEN and CLOSED, you should think about manifold pressure as a means of controlling engine power output.

The prop you chose will determine the RPM range your engine will operate in but the amount of POWER it produces is determined by the combination of engine RPM and manifold pressure.

Now why would one need a manifold pressure gauge with a fixed-pitch propeller when the only control one has over RPM is the throttle? But you don't control the RPM with the throttle, you control the manifold pressure with the throttle and the engine/propeller/pitch relationship determines the power output.

A manifold pressure gauge measures the air pressure inside the intake manifold and, like a barometer, is calibrated in inches of mercury. When the engine is not running the gauge will indicate ambient atmospheric pressure. With the throttle closed and the engine idling, there is strong vacuum inside the intake manifold and the manifold pressure will be quite low. At full open throttle, the manifold pressure will be within approximately one inch of ambient air pressure. At this point, altitude (decreasing air density) enters the equation as a

changeable and limiting factor on obtaining maximum manifold pressure.

Usually with your store-bought airplane you get a POH (pilots operating handbook) which will have a set of charts or graphs showing manifold pressure/RPM combinations at various altitudes to determine engine power output and theoretical fuel consumption. You could do the same for your homebuilt if you take all of the engine performance charts from the engine manufacturer and do extensive flight testing. But, there is a simpler way!

If the manifold pressure in inches (e.g. 22") and the RPM in hundreds (e.g. 26) are added together, the sum (in this case 48) will equate to a number that will consistently represent the percent of power the engine is producing. And to make it even better, this value automatically compensates for altitude. The numbers are: 42 = 55%, 45 = 65%, and 48 = 75%. A change of 3 in the sum represents a change of 10% in power so different values may be computed. However, these three numbers (42, 45, 48) represent the most frequently used power settings and are easy to remember.

So, whether you are installing a constant-speed or a fixed-pitch propeller, find a spot in your panel for a manifold pressure gauge and you will always have a quick and easy method to determine your engine setting.

Article submitted to Monterey Bay Flyer by Carl Potter, edited from an article by Pete Stevenson, an RV-6 builder.

SOME HISTORY

Thought you all might be interested in regulations for military pilots, circa 1920. I especially like the first two.



REGULATIONS For Operation of AIRCRAFT

United States of America War Office

Commencing January 1920

1. Don't take the machine into the air unless you are satisfied it will fly.
2. Never leave the ground with the motor leaking.
3. Don't turn sharply when taxiing. Instead of turning sharply, have someone lift the tail around.
4. In taking off, look at the ground and the air.
5. Never get out of a machine with the motor running until the pilot relieving you can reach the engine controls.
6. Pilot's should carry hankies in a handy position to wipe off goggles.
7. Riding on the steps, wings, or tail of a machine is prohibited.
8. In case the engine fails on takeoff, land straight ahead regardless of obstacles.
9. No machine must taxi faster than a man can walk.
10. Never run motor so that blast will blow on other machines.
11. Learn to gauge altitude, especially on landing.
12. If you see another machine near you, get out of the way.
13. No two cadets should ever ride together in the same machine.
14. Do not trust altitude instruments.

15. Before you begin a landing glide, see that no machines are under you.
16. Hedge-hopping will not be tolerated.
17. No spins on back or tail slides will be indulged in as they unnecessarily strain the machines.
18. If flying against the wind and you wish to fly with the wind, don't make a sharp turn near the ground. You may crash.
19. Motors have been known to stop during a long glide. If pilot wishes to use motor for landing, he should open throttle.
20. Don't attempt to force machine onto ground with more than flying speed. The result is bouncing and ricocheting.
21. Pilots will not wear spurs while flying.
22. Do not use aeronautical gasoline in cars or motorcycles.
23. You must not take off or land closer than 59 feet to the hanger. [Editor's note: The spelling *hanger* was in the original document--it is not my error.]
24. Never take a machine into the air until you are familiar with its controls and instruments.
25. If an emergency occurs while flying, land as soon as possible

	TERRY TRESSELL Manager, Aircraft Sales & Business Development
BUCHANAN FIELD 145 JOHN GLENN DRIVE CONCORD, CA 94520 (510) 685-1150 (510) 685-0238 FAX	 <small>Pilot Center Sales Center Service Center</small>
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FOR OSHKOSH '94 FUN

Dwaine Duis submitted the following tips for anyone having thoughts about going to Oshkosh '94.

The Oshkosh contact for dorm reservations is:

Gruenhagen Conference Center
Att: EAA 1994 Reservations
208 Osceola Street
Oshkosh, WI 54901

1. Send check for \$29.00 to above Center for one room.
2. State dates you plan to be there.
3. Do the above by October 15th 1993.
4. Make flight arrangements at least six months prior to the Convention.
5. United Airlines can deliver you to the Oshkosh Airport.

What to bring with you:

Clothing for your stay.
Extra towels and wash cloth.
Shower shoes, light weight bathrobe (walk down the hall to the bathroom), light weight rain gear, sunglasses, sun screen,
broad brim hat, good walking shoes.

Extra bag to carry home loot you purchase at the flymarket.

Accommodations

Your room includes two beds, two chairs and two desks, two towels and two wash cloths. The beds have sheets and pillow. Bed spread may be available.

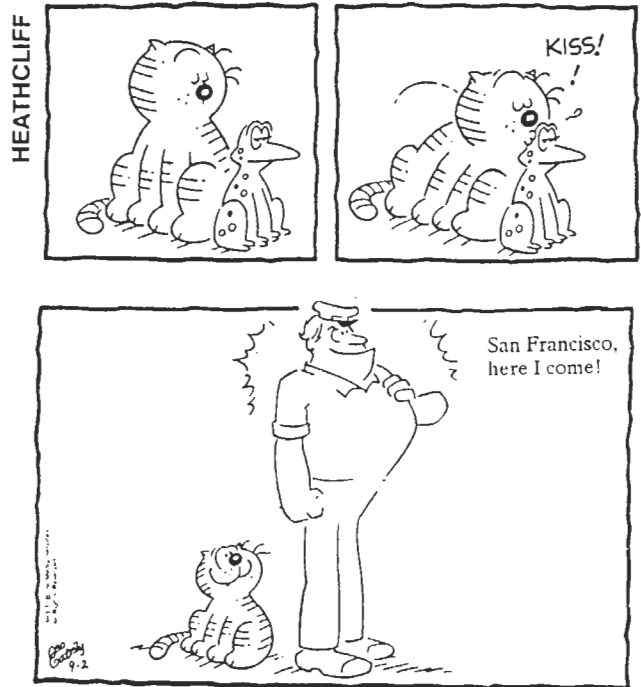
Money

In April 1994 you will be asked to anti up the entire amount for your room in advance. Any refunds due you will be sent to your home six weeks after the Convention is over.

For further information call the convention center -- especially if you have medical needs that need to be considered.

Plan now to attend. It is a great show and you will have a great time.

A tip for Dwaine: Frogs have been know to speak with forked tongues--be cautious.



COMPOSITE BUILDER SUPPORT GROUP

For information about the Composite Builders Group, call Lyle Powell at 938-3217. To be placed on the mailing list for the CBG, send your name and address to Jordan Coonrad, PO Box 2878, Alameda, CA 94501 or call him at 769-9766.

UNCLASSIFIED ADS

WANTED
Flyable Long-Eze. Call Charles Adkins at (707) 253-0454. 0293

WANTED
A builder hangar-mate. Call Ray Nilson 672-5139.

WANTED
Hangar space for Tri-Pacer fuselage. Call Eric Sweet at 531-9330.

FOR SALE
Practically new flux-gate compass with digital display (experimental, not certified). Works like a charm. Cost \$350, sell for \$200. Call Will Price, (510) 254-2267

CALENDER OF EVENTS

- Sept 19 Santa Maria Air Fair, Santa Maria
- Oct 1-2 Calif International Airshow, Salinas (408) 754-1983
- Oct 2-3 Travis AFB Air Expo
- Oct 9 Auburn Air Fair/Fly-In. For info contact Tony Wright, (916) 878-0219.
- Oct 16 Santa Barbara Airshow
- Oct 16-17 Chino Air Show
- Oct 23 Edwards AFB
- Oct 23-24 Pt. Mugu Air Show
- Oct 24 Castle AFB Airshow
- Oct 30-31 March AFB Open House
- Nov 7 Fall Fly-In and Airshow, Half Moon Bay

NAPA COUNTY AIRPORT OPEN HOUSE

Saturday Oct 16, 1993
10 am to 4 pm

Come and see vintage airplanes
WWII warbirds, gliders, and
hot air balloons.

WE ARE ALL INVITED TO BRING AND
DISPLAY OUR EXPERIMENTAL PLANES.

The C eco

Experimental Aircraft Association
Chapter 393
P.O. Box 272725
Concord, CA 94527-2725