

The C eeco

Experimental Aircraft Association • Chapter 393 • Concord, CA

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

SEPTEMBER 1992

THE 1992 EXALTED ONES

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VICE PRESIDENT	Jim Lewis 283-7047
SEC/TREASURER	Callie Joyner 671-4871
NEWSLETTER EDITOR	Will Price 254-2267

CHAPTER MEETING

September 23, 1992 The 4th Wednesday of every month @ 7:30pm; Old Buchanan Terminal Building, Concord Airport. Note that September is one of those months with 5 Wednesdays. (Larry, don't get confused and show up the wrong Wednesday.)

Bring Chairs. *Wear your \$\$\$@&€@Φ% Badges please!*

You had better not miss this one or you'll really hurt the feelings of Jim Lewis after all his effort in lining up the speaker. I want you to know that he negotiated with the likes of Jose Canseco, Nelson Mandella, Some-thing-or-other McPeak, Dr. Joyce Brothers, and Ann Landers. But persistence paid off and he got Rich Harris, a former Navy fighter pilot who currently teaches parttime for the Air Combat thing. That's the deal where you get a 1/2 day training then go out and fly "combat" in a 260 Sieta Marchetti (spelling??). Rich will have a tape and will talk about any aspect of the program in which we are interested.

MINUTES OF MEETING 8/26/92

What a terrific meeting we had; those of you who weren't in attendance really missed out. I especially liked the meeting opening when the scantily clad young lady jumped out of the cake and danced on the table. After the near-riot was quelled we settled into business as usual.

Glenn brought up the topic of a tool loan program which had been discussed at the previous meeting. Gerry Greth has offered his hanger as the repository for 393-owned tools and the checkout center. Without official action, the membership appeared to feel that the program be pursued along two paths: 393-owned tools and tools owned by individual members that would be available from the member. To provide some insight to the interest, a questionnaire was suggested. As a result, the last page contains a tear-off section. Instructions are included on the questionnaire.

In response to a question from Rich Powell, Callie indicated that CRAMP has not yet returned our \$1,000. She has been in contact with their board. Unfortunately, she was given insufficient notice about the CRAMP meeting she was to have attended. She will keep on it.

Glenn reported on his discussions with the Boy Scouts relative to 393 working with the Explorer groups. He gave quite an eloquent presentation on their behalf. He will attempt to arrange for the BSA representative to be at the next meeting. In the meantime, he requested that each member give some thought as to how he (or she) would like to participate. Rich suggested that we consider how this might fit in with the EAA-sponsored Young Eagles program.

Someone (don't remember who) suggested that we reinstitute our arrangement whereby a Sport Aviation subscription go to Diablo Valley College. Callie will pursue this.

Larry Laughlin passed out a form to use for an experimental aircraft bill of sale. (Unfortunately, the stack did not get around to the front table. I would like one, please Larry--notice that I said please.)

Hey, wait a minute. About that cake and near riot--am I confusing the 393 meeting with something else?

Next came the introductions.

Ryan Young went to Oshkosh and had a great time. He insists that *everyone* should have the experience. Ryan really has a lot of insight and is very observant. His brilliance came through in his observations of what a terrific and dedicated EAAer we have in Will Price (hey, that name sounds familiar).

Lyle Powell says that his Glasair is treating him very well now. He has made significant modifications to a few items such as trim, carb, gear retraction, avionics, and so on. The airplane now has 69 hours.

Stub Pillote flew his Glasair to Oshkosh--the *only* way to go. He is up to 80 hours.

Builder Pete Wiebens has made the transition: please refer to him as *gentleman pilot* Pete, not *builder* Pete. He has 90 hours and all he has done lately is put gasoline in his Glasair.

Larry Kett Laughlin



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Mike Parker is getting there time-wise. He now has 46 hours on his RV. Say, isn't that one of those airplanes made from that new stuff called aluminum?

Ron Robinson tried to appear very casual in announcing that he hopes to fly his Glasair next month.

If you're looking from a *real* accomplishment, Jordan Coonrad is almost finished with his bathroom.

Ed Lester was another Glasair flyer to Oshkosh. It's a real thrill going there in your own airplane, isn't it Ed?

Callie Joyner reported that she got a ride in the Jim Lewis Mustang and found that a real thrill.

As long as everyone is bragging about how much time they have on their airplanes, I now have 75 hours on my Lancair. Damn it, if the engine hadn't busted, I would almost be caught up with Pete by now since I had planned a couple of trips to Boise and one to Spokane.

Regarding visitors, we had more than I can remember ever seeing at a meeting. Among them, David Tutor was at his first meeting and intends to join, as was the case with several others.

Following the break, came the highlight of the year: the nationally renown Gerry-and-Will show. (Except Gerry cheated--he had Will go first to break the ice.)

Will Price (that's me) told about his odyssey from Arnav in Tacoma (working for a week on the avionics/computers) to Oshkosh via Medford and a broken crankshaft. The Oshkosh experience was, as Gerry put it, a real dream--for me, it came true but at a high cost. It is still difficult to imagine how the engine held together long enough to get into Medford.

Gerry Greth (that's not me) told us about his 2 1/2 years of total commitment to a project that ended up in a cloud of dust on the Wyoming plains--real heartbreaking. Gerry was quite frank in talking about some of his errors in judgement in the overall scenario. Regarding the Cirrus design, it sure sounds like some serious work will be required to make it a safe and viable aircraft. Thanks for sharing your distressing experience with us, Gerry.

A following column includes some soul searching comments that Gerry and I share.

MINUTES OF BOARD MEETING 9/3/92

As I am going on vacation the day after the board meeting, I am getting this honorable publication out early. Consequently, you will have to make do without published board minutes. I suggest that you insist on a complete and detailed synopsis of said meeting from our honorable president, Glenn Werner.

THANKS TO HARRY HECKMAN

You can thank Harry Heckman for your reading pleasure as of late. Since I will be out of town come mailing time, Harry is taking over the time consuming task of preparing the Cleco for mailing and getting the copies out on time. He did the same for the June issue mailing when I was gone. The whole routine takes a lot of time and is a pain in the neck. Thanks Harry, we appreciate it.

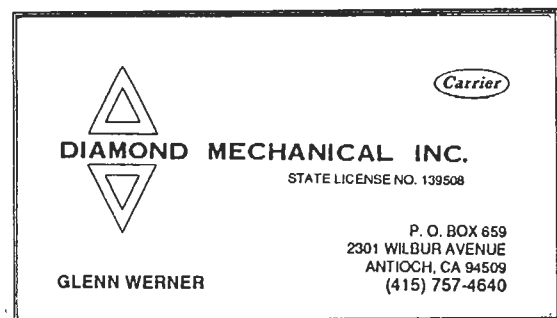
OSHKOSH MANIA

Gerry Greth and I are completely different background-wise: his career is in aviation; I started my flying lessons after buying the Lancair kit 2 1/2 years ago. However, for the past 2 1/2 years we have shared a common goal,

encountered similar barriers, and experienced many of the same emotions. Both of us were definite about making it to Oshkosh last year. Obviously, we both missed--by a long shot. Even with the extra year, we both had to work furiously to make it this year. For both of us, the year had a negative impact on our personal lives because we were so single-minded to our specific objective--Oshkosh. Both of us cut some corners in order to make it. For Gerry, perhaps the most significant related to not having more flying time under the full spectrum of flying conditions. Certainly, I learned that I have two very different airplanes: the one in which I did most of my flying and testing, and the one I flew to Oshkosh (which was at gross with a passenger, luggage, and full fuel). As I mentioned in my presentation, I was lucky indeed that my Lancair was not a jumbled mess at Rock Springs, Wyoming. Lifting off prematurely at 7,000 feet, with high temperatures and a badly gusting wind does not contribute to one's longevity. The 3/4 inch shaved off the bottom of my rudder by the asphalt runway will attest to that. It's kind of a paradox that such a mistake is easily prevented with the use of an angle-of-attack indicator. But in the time crunch, I simply didn't have the half-day necessary to reinstall and calibrate the AOA transducer after returning from Arnav.

In the aftermath of Oshkosh, Gerry's heartbreak and my euphoria, the question arises: "Is this the way to run a railroad?" What we as airplane builders do is really great, but perhaps we should be careful about keeping it in perspective. As Gerry mentioned, he is quite uncertain about his future plans regarding the Cirrus. I certainly have had some doubts about my inexperience and owning a high-performance airplane (although I did gain a hell of a lot of experience in a month's time). The notion of selling my Lancair and resuming my other activities has certainly crossed my mind.

Both Gerry and I feel that homebuilding is great; that setting goals is great; that flying your own airplane to Oshkosh is a dream come true. But be realistic--don't get so wrapped up in the Oshkosh mystique that you end up doing things that, under any other circumstances, you would never consider. Remember, Oshkosh is an *annual* event; there is always next year.



THE RAFFLE

Hey, we had a great raffle this time: *four* (4) prizes--the way to go. Now to keep this thing going, those who won must bring a prize for next month (September). So **Keith Mantz, Lyle Powell, Chuck Hull, and Rick Brophy** don't forget to bring something for the next meeting.

THE BATTLE WITH NATURE

Before you start reading this, I wish to make one thing perfectly clear. That is, I like to keep this publication at a "family reading" level--no raunchy jokes or things like that. So recognize that the following is written to address a genuine problem: the fuel capacity of most of our airplanes exceeds capacity of most of our bladders.

As many of you are probably aware, you can obtain a special little jug for nature's purpose from Sporty's. That's all well and good, but I have never envisioned being able to use one of those things in my Lancair. (Ask Lew Miller--he had one on his trip to Oshkosh and suffered a minor "mishap.")

Recently, a friend told me about an experience he had. Four guys were on a trip in a 182. It seems that the pilot had a desperate need and did not wish to land. So cleverly, he whipped out a condom, proceeded to "connect", then relieved himself. Then he tied off the condom and that was it; great idea, right? Oh, oh--what to do with the condom? No problem, open the window and throw it out. Another great idea, right? Wrong. As he put it into the windstream, the wind shredded the condom, thereby completely showering the inside of the airplane *and* the occupants. Needless to say, the pilot was not popular for the rest of the trip.

But still, that's a great idea--it simply was not fully implemented. Now if he had a jar with a lid in the airplane he could have deposited the condom in the jar when finished.

On telling this solution (to a serious problem) to Mike deHate (of Neico Aviation--Lancair), he told me of another approach. That is, get some large zip-lock bags and put two of those cheap kitchen sponges in each. Then when the time comes, relieve yourself into the bag. The beauty of the sponges is that they immediately soak up all the yellow stuff and you have no problem with it splashing around. Then zip the bag shut and put it in a safe place. I can attest to the fact that it works *great*. My only advise is to make certain you are properly "draped" otherwise.... (I know this from experience. My copilot who was handling the airplane during the one time I "misused" the method laughed so hard that he lost 400 feet of altitude and strayed 10 degrees off course.)

The only other problem I had with this technique was that, after we landed, my copilot refused to wring out the sponges for me so I had to discard them.

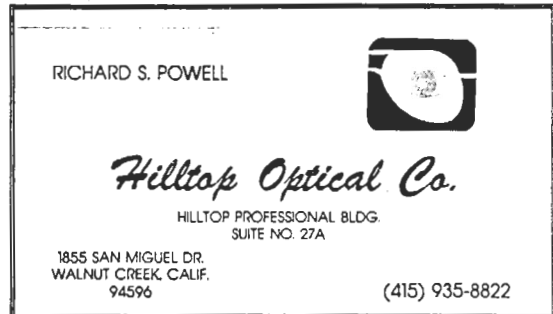
Quit frankly, I think the zip-lock/sponge solution is the better of the two. This is mainly because I am concerned about the reaction I might get from my wife if she found condoms in my airplane.

Because I have had no airplane to fly since returning from Oshkosh, I have had plenty of time to give serious thought to the entire scenario. A couple of sponges cost about 90 cents. Being a frequent "user" my nature costs would start adding up if I made a lot of long distance flights. So, what else could I stuff in those zip-lock bags that's more economical than sponges? Eureka!!! What about a Huggie (a disposable diaper)? Remember, they are specifically designed for *one function*--absorb all that stuff. On mentioning this to my wife, she suggested I consider sanitary napkins since they are available in various sizes and would not need to be cut up as would Huggies. The possibilities here seem to be endless.

Well, I can tell you, that as soon as I get the engine back in my Lancair, I will be making some serious tests.

Keep in mind that you will read about my research only in the Cleco--not in *Sport Aviation*, not in *Flying*, not in the *AOPA Pilot*--only in the Cleco. This kind of reporting is what makes the Cleco alone worth your 393 membership dues.

For those of you who might be prone to scoff and snicker at all this (probably behind my back), remember that this is the type of work that won me the *Design Achievement Award* for innovation at Oshkosh. So just scoff and snicker all you like.



CONTRIBUTIONS TO THE CLECO

It appears that all of my moaning and complaining about lack of contributions to the Cleco is paying off. In previous issues, we've had Dennis Ramano, Lyle Powell, and Ryan Young come through. This issue, we have two contributions: from Ryan Young (two pieces) and from Russ Giffin (some *great* nostalgia). So many of you tell me how much you enjoy the newsletter. Come on now--show me your appreciation by contributing something. I can make your reading good; you can make it even better. P.S. Mustn't forget that other guy who has contributed several articles. His name escapes me right now but I think that at one time he was doing the newsletter.

AIRCRAFT STEEL

by Ryan Young

A supplier that deserves to be better known is Aircraft Steel in Englewood Colorado. They specialize in steel tubing, although they also carry some aluminum shapes. The best thing is that they carry a better selection than either Wicks or Aircraft Spruce (the big 2), including the .035 wall square tubing for my Sonerai canopy frame I could find nowhere else. They run a tiny display add in the back of Sport Aviation, their catalog is xeroxed & looks like a rip-off of Wicks, and they keep weird hours, but they have the goods & their prices are lower than the big two, lower even than AirParts out of Kansas (who has the best selection & price I've found on aluminum sheet). I have also had good experiences lately dealing with Alexander Aircraft, although shipping from the South can be hurtful. My last few orders from Fullerton have not been happy experiences, lots of B/O & screwed up billing, surly phone operators who seem to be saddled with an intractable computer system.

Editor's Comment: Thanks Ryan. This is the kind of input that can really be helpful to others who have trouble getting what they need. If any of you readers have a good (or bad) experience in dealing with a vendor, please

let me know so that the information can be shared in the Cleco.

WANT TO HEAR YOURSELF ON TAPE?

by Paul Berge from IFR

Want to hear yourself on tape? Just ask
Any pilot who's of a mind to do a little self-flagellation can obtain copies of ATC tapes. Having done so myself in a futile attempt to beat a Custom's rap a couple of years ago, I was humbled to find a considerable difference between how I thought I sounded and how I really sound.

I won't go into the messy details here; let's just say I needed to prove to Customs that I hadn't reentered the country under false pretense, evidence of which was contained on the ATC tapes. Since the tapes are normally reused after 15 days, I was advised to contact the tower in question with the request that the tape of my flight be preserved.

Meanwhile, I was given an address at the FAA's regional office and told to formally request the copy under the Freedom of Information Act. (Anyone can request a tape, whether for legal or instructional purposes. In my case, the feds charged a nominal \$25 copying fee. A month later, the copy arrived on a 90-minute cassette.

It's unedited tape covering about a half-hour flight in real time. That means that it's mostly blank tape interspersed with brief radio exchanges. Interestingly, in addition to my transmissions and the controller's replies, the landline between controllers is also recorded so it's possible to hear what a handoff sounds like. ("Eight miles south of Peck, 8000 feet, a squirrel in a Mooney.")

At first, I thought both the controller and I sounded great, all crisp-like and AIM-approved. As the Custom's discussion progressed however, my voice got noticeably nasally and grating. Worse, I seemed to develop an intermittent connection between mouth and brain so that my words got labored and all spaced out. Like Berge says, you have to hear it to believe it, but it's worth the effort to try.

REAL-LIVE VOLUNTEERS

Now why in hell do good things always come along *after* I have finished and can't take advantage. It seems that we have **two** people who are willing to volunteer time for the experience of it all.

Leonard Steffen is interested in a project on downstream but is not quite ready to jump into it yet. So for the time being, he will settle for some experience—a wise thought when I think back of how ignorant about building I was when my kit first arrived. (Laughlin: Please note, the *about building* qualifier in the preceding statement.) In any case, Leonard would like to lend a hand to any current composite project. All he asks is that you show some patience in adding to his store of knowledge. I don't personally know about his intelligence: he may or may not be pretty smart. But he was smart enough to realize that he should get some experience before he jumps in on his own. Also, I would guess that he knows his right hand from his left because he's a building contractor. But wait a minute—does that necessarily follow??? Isn't Pete Wiebens a building contractor? Leonard lives in Danville and can be reached at 837-7646.

The other person interested in some practical larnin' is Ron Goya. He was my copilot on the Oshkosh trip and the guy who really saved my neck when I needed help in Medford. (He attended last month's meeting as a guest and was so impressed with our membership that he has decided to join.) Ron is one of the real nice people that I know and does indeed know his right hand from his left—he can handle himself in anyone's work area. The only drawback with Ron is that he has a lot of stories you'll need to endure while working. (Don't think he ever caught on to the fact that I wore earplugs while we were working—he thinks I'm hard of hearing.) Because he's retired, Ron's schedule is quite flexible. He lives in Walnut Creek and can be reached at 687-9812.

Hey builders, the price is right on these two—they're even worth it at twice the price.

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CALENDER OF EVENTS

The following calender of events has been assembled from a variety of sources. Please note that I don't guaranty the dates. In some cases I have included phone numbers that you can call for more information. Note that some of these do not have details. If you know more, please let give me a call and I will make corrections and/or additions in the next newsletter.

- Sept 25-27 West Coast Splash-In, Clear Lake. Call Stan/Betty Sinn (408) 246-2460
- Sept 25-26 WACO Assoc. Reunion, Porterville Airport
Call (209) 962-6121
- Sept 26 Reid Hillview Airport Day. Static displays, breakfast, EAA booth. Call (408) 727-4892
- Sept 26-27 Reedley, CA Airshow
- Sept 28 Ukiah Airshow, Ukiah Muni Airport.
- Oct 3-4 California International Airshow, Salinas .
- Oct 11 Stockton Airshow
- Oct 11 Placerville Airport Appreciation Day
- Oct 11 Mather AFB community guest day.
- Oct 11 Beale AFB open house
- Oct 11 NAS Fallon open house, Fallon, Nevada.
- Oct 16-18 Moffet NAS open house.
- Oct 17 Santa Barbara Airport Day (50th anniversary)
- Oct 23-25 Unlimited Air Races, Thermal Airport, Palm Springs
Call (805) 499-6184
- Oct 23-25 P-51 Mustang Roundup, Santa Maria Airport
Call (805) 922-8758
- Nov 8 Half Moon Bay Fly-In and Airport Day.
Call Joe Reid (415) 726-3417.


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EMISSIONS REDUCTION FOR AIRCRAFT ENGINES - SPORT AVIATION HAS A ROLE TO PLAY

by Ryan Young

Editor's Note: Please read the following with an open mind. Ryan is to be commended for getting down to the basics and for obviously giving a lot of thought to his subject.

To be blunt, when charcoal lighter fluid is being regulated, and leaf blower makers are forced to retool in the pursuit of cleaner air, how much longer can aviation emissions remain unregulated? We had a good scare earlier this year with the revision of the Clean Air Act, which proposed to eliminate the use of lead in "off highway" engines. Vigorous action by EAA, AOPA & the FAA lead to a clarification that excluded aviation engines from this requirement. But the handwriting is on the wall, action is underway to reformulate aviation gasoline, and lead will probably disappear from AvGas by the turn of the century. Aviation has been able to claim that its total contribution to the problem is small (due to the low number of airplanes as compared to cars, snowmobiles, leaf blowers & barbecue grills), and that any possible emission reduction efforts would compromise safety. Some of this is true, but every industry & every product manufacturer is being asked to make an effort - aviation's time will come.

Here's the opportunity - Experimental aviation means powerplants as well as airframes. The sport aviation community is free to try various technologies on their engines, to see what works & what doesn't. This has historically been a neglected area in homebuilding, with auto engine conversions being one of the few exceptions. Many homebuilders will no doubt be content to let Brand L or Brand C continue to motivate their dreamplanes unencumbered by unproven plumbing, but for aviation enthusiast with the motivation & knowledge, there exists a tremendous challenge to advance the state-of-the-art in aviation, in a socially, ecologically responsible way.

This article is not intended to be the final word on this subject. I'm neither an A&P, nor an expert in Emission Control. My viewpoint is that of an educated layman. My hope is that this article will stimulate those of you in our chapter who do have experience in these areas to come forth & contribute your ideas & experience. Eventually, I hope to raise this idea at a national level through SPORT AVIATION or KITPLANES.

I had hoped to do some research on aviation emissions while back at Oshkosh, but I never even got to the museum, where the Boeing Library is located. What I have so far is based on limited research in automotive emissions and aircraft powerplant. Here's what I see as some areas for Action:

Research On Engine Operating Cycles - This is essential to coming up with a decent, realistic, test procedure. It involves determining how much time a typical engine spends at various different combinations of environment conditions (temperature and altitude the most important variables), load, and RPM. I suspect that much of this data has already been gathered in reliability & failure analysis studies.

Synthesis of Prior Experimentation - I believe that somebody, somewhere has probably done some research in this area. A literature search is needed, with a critical sifting of the wheat from the chaff.

Testing & Publicizing of Simple Operating Technique Changes - Some very simple changes to operating techniques may provide a significant reduction in emissions. Always leaning on the ground, and leaning past max EGT will reduce Hydrocarbon (HC) & Carbon Monoxide (CO) emissions. I suspect improvements on the order of 15-20%. If your aircraft has filtered carb heat, running with full carb heat during warmup will also theoretically reduce HC & CO. There may be other operation & maintenance adjustments that might help.

Testing Simple Engine Mods - First, I think that Positive Crankcase Ventilation can & should be used on aircraft engines. By burning oil mist & blow by, HC & CO emissions can be cut by about 20%, and no more oil on the belly! I understand that the Canard Pusher has mentioned this for use on Eze's, if anyone has the reference, I'd appreciate a copy. I think Mike Melville's Long-Eze was the first to try this. I plan to use a PVC valve with a air-oil separator on my Sonerai (VW powered). I feel this simple change has the greatest potential cost/benefit of any possible change. How do you chose a valve? I'd start by calculating the airflow volume rate of your engine, which is the displacement multiplied by the RPM. Compare your engine to various car engines. I plan on choosing a valve about 20% bigger than a comparable auto engine to reflect the greater blow-by of air-cooled engines. Too big a valve will mean a drop in manifold pressure, and a loss of power. The valve should be replaced at annual. Other "easy" mods might include evaporative emissions control (fuel system) and mild Exhaust Gas Recirculation.

Development of Closed-Loop Engine Controls - After years of fiddling around with basically band-aid add-ons, which turned engine compartments into spaghetti factories, car makers now use systems that adjust the basic engine parameters of fuel mixture & spark continuously, and measure what comes out the tailpipe (using oxygen sensors) to tailor the response. A set of rules, and a few auxiliary sensor inputs get combined in a black box, and the orders go out to the electronic ignition & the electronic fuel injection. Result is a better-running engine, with fewer emissions, with more power & better economy than pre-1967 no-emission control could achieve, and a reduction of complexity from circa 1975 emissions control. At Oshkosh I saw aircraft ignition & fuel systems that could take orders from a such a system. The Porsche Mooney used a similar approach in their single-lever power control. It would take less computing power than Will's Lancair, but a lot more development. Maybe we could use Will's plane to gather data...?

The auto engine conversion types may want to think about leaving the automotive induction, ignition & engine control systems on their engines. If they need more power, there are tuners that can "hack" the chips that

control these engines to get a different compromise of power, economy & emissions.

Anybody having any insight of information on this subject, or having access to portable emissions test instruments, should call me:

Ryan Young
(510)-769-1923.

DID YOU KNOW THAT...?

From Russ Giffin

Editor's Note: The following is only a small portion of some tidbits that Russ wrote up for me to include in the Cleco. The remainder will be in the October newsletter. Thanks a bunch, Russ.

When and where was the organizational meeting for 393?

April 28, 1971 held at the Williams Elementary School, Concord

When was the first raffle held?

May 26, 1971. Tickets were 50 cents; the prize was a B24 book.

Who completed the first 393 homebuilt?

Horace Meyers, October, 1971; it was a Volmes Sportsman.

Who was the first newsletter editor?

Dwain Duis, September, 1976. (I'll bet he was flying a damned Luscombe even then.)

How many members were there in 1971? How has the membership grown?

25 members. 1975: 64, 1980: 104, 1983: 125, 1989: 134.

Currently, we have 96 members who are current dues-wise and 52 who are in arrears. So let's jog those who appear on the "axed" list.


As of 1989, what was the membership longevity range?

Membership for:

1 year or less	26%
1 to 5 years	24%
6 to 10 years	29%
11 to 15 years	15%
16 years or more	6%

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PERSONAL PROFILE--LOU ELLIS

This month we get to the health-care segment of our membership--Lou Ellis, a retired dentist. Almost everyone knows about Lou's two airplanes: the Long Eze (won a Merced award for best workmanship) and the Glasair (won at Merced and Livermore for best workmanship). But wait a minute, I'm getting the horse before the cart.


The last two individuals I featured in this column (Ed Vallejo and Jim Lewis) had a wide variety of interests. In that respect, Lou is different. He has two major focuses: his profession (dentistry) and his single hobby (airplanes). He certainly excels at both.

As with most of us, Lou's interest in airplanes started at an early age. As a kid, his room was crammed full of models that he had built. Every chance he had, he would ride his bike 10 miles to the Cleveland (Ohio) airport to look at the airplanes and daydream. One of his highlights was being allowed to help an attendant wash down a *real* airplane. Much to his dismay he never got a ride even though he left a note on the pilot's seat. Of course, living in Cleveland in the 30s offered another real opportunity: the Cleveland air races. He remembers fondly some of his super heros, especially Roscoe Turner and Tony LaVier. He also recalls seeing the original Gee Bee. With an amusing grin, he tells how he was always drawing the Gee Bee at school--in his books, on his assignment papers--you name it. Paradoxically, a few years ago he took a computer art/graphics course at DVC. For one of his computer drawing class assignments he did the Gee Bee--guess some guys just never grow up (thank goodness).

As did a lot of us who grew up during the depression, Lou had a humble beginning. In grammar school he worked after school cleaning the classrooms to pay for his books. He went to a vocational high school and took woodwork, electrical, foundry, and machine shop. (That accounts for the first-class work he does on his airplanes.) He liked his classes so much that, by the end of his sophomore year, he decided to be a machinist. But the following summer turned him sour on working in any kind of a machine environment--he worked in a galvanized sheet metal stamping factory. His conclusion about that job: "*boring, boring, boring.*" That was a real disaster, definitely not for him. Then one of his relative said "maybe you should be a dentist--they have shorter hours." The more he thought about it, the more he liked the idea. So that fall, he returned to high school determined to have sufficient credits for college. (At that he kept at some of his shop classes--even became class foreman.) Needless to say, his shop instructor was rather astonished at his decision to become a dentist.

He graduated from high school in 1942, received a draft deferment, and went off to John Carroll, a small Jesuit liberal arts college. Shortly after he started, the Navy took over the college and he went into Naval reserve as a student in the Navy college program.


Having had a burning desire to fly all of his life, he applied for aviation cadet training, passed the physical and written, and was set to go. But his dad took him by the collar, pulled him up face-to-face and said "stay in school." He graduated from John Carroll in 1944. From there was shipped to the Samson Naval Training Center awaiting orders for a dental school. Then it was on to the University of Minnesota dental school. After one year the war ended and he was discharged.



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NAVAJO FLYING CLUBS • FAA APPROVED REPAIR STATION COPR935C
AIRCRAFT SALES • FUEL & LINE SERVICES • HERTZ CAR RENTALS

Oh, oh, mustn't forget that he had his first flying experience while a student at John Carroll. Since the Navy paid all of his living expenses the \$50/month he got made him an instant "millionaire." So what did he do? He do took flying lessons in a Piper Cub. Oh, and just as important, he met Grace while a freshman at John Carroll; they married in 1945.

Lou Graduated from dental school in 1948 then went to Western Reserve Dental School and taught clinical operative dentistry for one year. Shortly before the Korean War, he joined US Navy to get his military obligation out of way. Ultimately, he and Grace ended up in Oakland when he was transferred to Oak Knoll hospital. With the start of the Korean War he was assigned to the aircraft carrier Bon Homme Richard in Bremerton. At the time the ship was in mothballs so his first duty was to help bring her back to life. He speaks with a glisten in his eyes when he talks about the experience of seeing the ship come to life. When they first went aboard, the ship was like a lifeless tomb. Slowly things started happening. There were voices of men working; motors coming to life and beginning to hum; elevators moving up and down, and new equipment being brought aboard. He speaks with utter fascination about how the personalities of the crew became intertwined with the emerging personality of the ship. Lou told me with real excitement in his voice about what a moving, unforgettable experience it was. He chuckled when he told me about trading 200 proof medical alcohol for needed equipment and supplies.

After six weeks, they sailed for Alameda to pick up airplanes. Then it was shakedown cruises off the coast of California for two weeks and finally to Korea.

When I asked him if he had second thoughts about being a dentist rather than pursuing pilot training (when in college), he said: "Hell yes. I used to go up on the bridge and watch the aircraft land and take off, all the time wishing I were one of them." (I understand the feeling. I had planned to go to Pensacola but failed a follow-up medical after a car accident.)

He had a helluva time getting out of Navy because he had enlisted as a US Navy regular (a bad mistake). His application went to the senior dental officer, executive officer, captain, 7th fleet, personnel in DC, secretary of Navy, and the President--took about 7 months.

During this time he was at Oak Knoll so took the opportunity to explore private practice in the area. He bought a lot in Concord in 1953 (for \$3,000) where he built his office (for \$13,885). Times and prices have certainly changed.

He and Grace have four children, all adopted. The first adoption was touch and go because of Alameda County Adoption Agency and their policy regarding service transfers. But a sympathetic admiral manipulated that for him (another great story).

When Lou talks about dentistry, he really sounds like an evangelist with his enthusiasm. He was very active in his professional societies, with ethics high on his list. One of his awards that he showed me mentioned his coinvention of the Aqua Flow system for continuous rinsing of the mouth while the dentist is working. He told me about adapting a Thompson Electric vacuum cleaner (that sucks up water), installing a rheostat to motor speed and putting the whole affair in a cabinet. He and his colleague started doing seminars on the device. Lo and behold, a business started. He and his partner eventually signed a royalty arrangement with a dental equipment company and did quite well.

Lou also showed me an award he received from the Cleveland City Council congratulating him on being named to his high school hall of fame. His picture now hangs in the high school hallway as an inspiration to current students. It is really a neat award.

When I asked him about other activities, he said "Oh yeah, I've tried some but never got too enthused." Once some friend said "Let's go fishing"--he tried it but got no turn on. The same for water skiing. Regarding golf, he seems to echo Rick Lambert's description of the game: "An ineffectual endeavor to place an insignificant sphere into an obscure hole with entirely inadequate tools."

Now, what about flying? Lou had wanted to get back to that activity after the military for quite some time but Grace objected--too dangerous. Finally, in 1964 he gritted his teeth and went ahead. He felt he had to because he had become a slave to his dental career (which he loved) but something was lacking. After about 20 hours of flying lessons, he came home one day to learn that Grace had taken her first flying lesson. If that was going to be his outside interest, she wanted to know what it was all about (a terrific story.) As most of you know, Grace became hooked and made a name for herself.

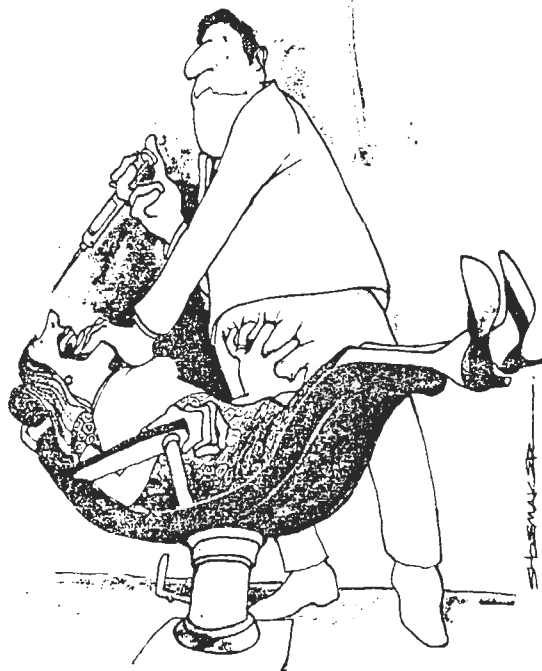
After Lou got his ticket, everyone said he should step up to a higher level. This led to a commercial license, then instrument rating, then CFI, then CFII, and finally an Air Transport Pilot license.

In November, 1991 he retired from his dental practice, a very difficult decision because he still loved what he was doing. However, he simply could not handle the ever increasing paperwork and red tape with which he had to deal. Too bad, his patients lost an outstanding professional. But fortunately, we still have him as a member of 393--he's a great guy to have around.

As all of you know, I am not one to gloss over something without getting all the facts. Unknown to Lou, I checked into his reason for retiring. Through some real digging I ferreted out the entire story. [This is called investigative reporting and obviously ranks with the effort of Robert Redford and Dustin Hoffman in blowing the lid off Watergate years ago. (Oh my, am I confusing

people? Maybe it was Bernstein and some other guy whose name escapes me at the moment.))

Oops, pardon me for getting sidetracked. Following is an authentic sketch made by an eye witness to the event that finally convinced Lou he should hang it up.



Now Dr. Ellis, we're not going to hurt each other are we?

COMMAND AUTHORITY
(second attempt)

Remember in the June issue of the Cleco, Larry Laughlin described his near disaster in accepting clearances from operations when departing the Watsonville fly-in. His comment: "The Pilot is the very last word." As several of you pointed out, the article that I included in the August Cleco making the same point didn't quite have it. (It was an interesting article but on an entirely different topic.) As I perused the Cleco after mailing it out, I just could not believe that I had pasted in the wrong article. Tried to figure out some way to make it sound like I new what I was doing and was just being very clever (you know, maybe a subliminal message or something). But nothing held water, I just screwed up. So let's try again. The article on the next page was taken from the AOPA Pilot magazine and addresses Larry's point.

DUES NOT DUED (OR SOMETHING)

CURRENT CLECO RECIPIENTS: *Come on, guys, PLEASE read over the list which follows. If one of your friends is on this list, get after him or her to return to the fold.*

Following are lost souls who have been axed because of their oversight in paying dues. If your name is included and it should not be, please check with Callie and have her relay it to me. PLEASE accept our apology and have mercy on us.

Name	Dues	Name	Dues
BRUCE BAUMRUCKER	20	NEIL MUNRO	20
DAVE BEHNE	20	RAY NILSON	12
DOUGLAS BLANKENSHIP	20	PAUL ORTIZ	15
JAY BROADWELL	20	STEVE PARIS	20
DAN CANADY	20	RONALD PARTAIN	20
QUENTIN DURHAM	12	BRAD POLING	12
IRV EASTIN	20	LES PORTER	20
EDWARD FERNANDEZ	20	RUSS PORTERFIELD	13
RICHARD FORSETH	20	LEO ROLLEN	20
MARSHALL FREEMAN	20	DENNIS ROMANO	15
JERRY GROVE	18	DAN SANDERSON	20
TOM HOFFMAN	20	Virginia Schaefer	20
JORDAN JONES	20	Rick Schell	20
LAWRENCE JONES	20	Wallace Smith	12
LAWRENCE LANSBURGH	20	NORM SPITZER	12
BUD LEWIS	20	FRANK STORM	12
Jim Mandley	12	DICK STUDER	20
ANDREW MARSHALL	12	HARRY STYLOS	20
MIKE MARTIN	20	JAN SWITALSKI	12
GLORIA MARTIN	20	TONY TIRITILLI	20
MIKE MARTIN	20	CHRIS VAN WOLBECK	20
JOHN McCOMBS	20	DOC WATSON	12
Charles McMullen	12	LARRY WELTER	12
GREG MILLER	20	DICK WHITE	20
PETE MITCHELL	12	BILL WOOD	20
		JOHN YATES	20

The second list identifies those who we would like to bring into the annual cycle. PLEASE take care of this with Callie--don't make us beg month after month. If your expiration date is 9/30, this is the last issue of the Cleco you will receive.

Name	Exp.Date	Dues	Name	Exp.Date	Dues
VERN BOLTZ	12/30/92	3	RONALD ROBINSON	12/30/92	3
RICK BROPHY	10/30/92	7	BILL STAUFFER	12/30/92	3
GERRY GRETH	12/30/92	3	Arthur West	12/30/92	3
PAUL KUNKEL	12/30/92	3	Phillip Young	11/30/92	5
JOHN LORAM	09/30/92	8			

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

FOR SALE--WILL NEGOTIATE!!!
Sea Hawk project/Glass Goose. All difficult parts completed. Materials, many instruments, and manuals/newsletters required to complete are included. Asking \$16,000; willing to negotiate. Note: This is a real winner. R. L. Giffin (510) 935-2887.
0592

FOR SALE
Q200. Structure complete except tail spring and ---- (couldn't read the note) fairing. Chuck Hull, 440 Mills Drive, Benecia 94510, (707) 745-3323
0592

The END

Most general aviation pilots are surprised to hear that almost anyone can learn to fly a jetliner. The big jets are more stable and easier to fly, at least in terms of basic handling, than most lightplanes. I am convinced that I could teach the average general aviation pilot to safely take off and land a widebody jetliner in only two or three hours of instruction.

But manipulating an airplane is only one facet of being an airline captain. Exercising command authority and responsibility is the most challenging. This explains why a first officer upgrading to captain rarely falters because of any difficulty he might have in performing the required maneuvers. Instead, failure to move into the left seat almost always is caused by an inability to assess a problem in a timely manner and take the appropriate action.

Years of apprenticeship spent in the right seat teach by example the concept of command and how to exercise responsibility for the safety of a flight.

One of my first and most memorable such lessons occurred during an otherwise routine flight from Los Angeles to New York in the spring of 1966.

True to the forecast, monstrous thunderstorms had mushroomed from the sultry Kansas prairie, conspiring to block our way. I reached for my microphone and glanced toward the captain, Charles M. (Black Dog) Davis. He nodded his approval and motioned toward the south of the cells.

"Kansas City Center, this is TWA Eight requesting deviation to the right because of weather."

"Roger, TWA Eight. Understand. Unable to approve your request account parallel traffic south of your position."

The captain shrugged and casually motioned toward the north.

"Roger, Center. How about a deviation to the left?"

"Negative, TWA. That area's hot; it's restricted."

I was about to reply with more urgency when I noticed Black Dog picking up his mike with one hand and raising his other to indicate he would take over.

"Center, this is TWA Eight." He stretched out the words, speaking them with emphasized calm and delibera-



tion, wrapping each in a thick, Midwestern drawl.

"Go ahead, TWA."

"Roger, Center. You seem to have a problem."

"Say again, TWA . . . hey, I show you turning right . . ."

"That's what I said, Center. You seem to have a problem."

For the next several minutes, we listened to the controller vectoring other aircraft out of our way and restoring order. Black Dog sat back and grinned, enjoying smooth air and a cup of coffee as our 707 banked gracefully around the pylon of safely distant thunderstorms.

This encounter with weather and an unsympathetic controller turned out to be uneventful because Captain Davis did what was necessary—using his words—to avoid having whitecaps forming in his coffee cup. (Some, however, might criticize his method.)

Taking positive action to eliminate the first indication of a threat is an attitude called aggressive safety, a term coined by TWA's training department. In other words, safety does not just happen; flights must be made that way. Unfortunately, the general aviation

pilot does not receive this kind of training. Nevertheless, he is expected to understand and exercise command authority beginning with his first flight as a private pilot. The captain of a Cessna 152 is no less responsible for the life of one passenger than the captain of a Boeing 747 is for the lives of hundreds.

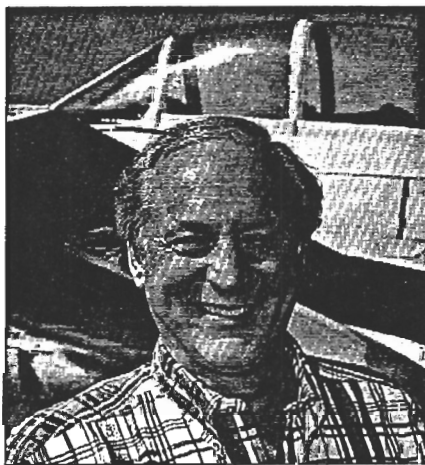
Consider, for example, the low-time pilot who is cleared by a tower controller for an immediate takeoff when he is not ready to do so. The voice booming from his speaker or headset seems like a commandment direct from Mt. Sinai that must be obeyed. Consequently, the pilot may discover during the takeoff roll that—in his haste to cooperate—he has forgotten to latch the door or turn on the auxiliary fuel pump.

And then there is the pilot on final who tries to comply with a controller's request to increase approach speed and then exit the runway at the first turnoff. The result can be overheated brakes, failed tires, or a ground loop.

Pilots often attempt to comply with unrealistic or inappropriate clearances because they usually are not trained to recognize options. They are not taught to understand that a pilot in command is under no obligation to do anything he perceives as hazardous. At such a time, a pilot has the option and perhaps the obligation to refuse the clearance by simply saying "unable" or "negative."

Most controllers do not fly (which is a good reason for them not to tell us how to fly). Instead, their job is to keep apart those who do. Even a student pilot usually knows more about his limitations and those of his aircraft than a controller does. That is why the pilot usually is in the best position to determine whether or not he can safely comply with a clearance or instruction.

Every pilot has the authority and is encouraged to do whatever may be necessary to preserve flight safety. And this includes sidestepping regulations. But many pilots are reluctant to do so because of a fear of repercussion. Such a concern, however, is usually unfounded. A pilot's first priority is to protect his passengers from hazard. That's what Black Dog Davis taught me all those many years ago. □



BY BARRY SCHIFF

At the last meeting, we discussed two facets of a tool loan program. One in which 393 acquires tools and maintains them for loan to members, and the other in which individual members identify tools they would be willing to loan to other members. So, we would like your response. Please bring it to the next meeting and give it to Glenn Werner or you can mail it to him at:

4001 Rhoda Way
Concord, CA 94518

What tools (if any) would you like to see 393 obtain for a loan program?

What tools (or equipment) do you have that you would be willing to loan to other members of 393?

Your name and telephone if you have something to loan _____

The C eco

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