

The Cleco

Experimental Aircraft Association • Chapter 393 • Concord, CA

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

MARCH, 1993

CHAPTER MEETING

Wednesday, March 24, 1993 The 4th Wednesday of every month @ 7:30pm; At the former USAir terminal building (the double trailer), Concord Airport. Bring Chairs. *Wear your \$\$\$@% Badges please!*

Jim's done it again. This time he has lined up Bruce Arrigonne who will be talking about building a Renegade using a Subaru engine. Apparently Bruce has been involved in development of the engine for aircraft use. As I understand, it will be available in a power range of up to 200 horsepower. Rick Lambert will be presenting the engine at Sun-N-Fun in April. Should be very interesting learning about the state-of-the-art with automotive conversions for aircraft.

1993 WHEELS

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

MINUTES OF MEETING 1/27/93

The meeting was called to order by President Glenn Werner. Following some brief announcements, Glenn introduced our speaker Sean Tucker.

Sean started the evening by letting us in on his experience in learning to fly. He indicated that while working on his private, he had a deathly fear of stalling. In an attempt to overcome this distraction, his first action after getting his license was to sign up for aerobatic lessons. That started him down "the trail." [I found it fascinating that Cecelia Arragon experienced the same problem and resolved it in the same way.]

To attempt describing Sean's presentation would take the entire Cleco; all I can say is that everyone was captivated with the terrific video he brought along and with his personal descriptions. I was especially impressed (as were numerous members to whom I spoke) with his enthusiasm and the warm way he expressed his love for flying. The way he spoke of aerobatics clearly conveyed that he feels he has the greatest job in the world.

Among other things, he emphasized (as did Wayne Handley) the need to stay in good physical condition for the high-speed maneuvers that are part of every program.

Because of the heavy loads he places on his aircraft, he performs a complete rebuild of his highly modified Pitts each year. Prior to switching from a standard prop (constant speed) to the MT composite, broken cranks were a way of life.

He did mention that aerobatic pilots have a fatality rate that will grab your attention. For instance, last year there were 19 fatalities--that out of about 400 active aerobatic pilots. Ouch!! Sobering statistic.

I'm certain that all members of our Chapter join me in wishing him the best in his upcoming performance in Tokyo.

Thanks again for a very enjoyable evening, Sean. (Or is it Shawn????)

Last minute bulletin from Jim Lewis: Sean's airplane was seriously damaged (wings chewed up pretty badly) by another airplane being hand-propped. Its throttle was wide open and it went out of control into Shawn's airplane. Sean just told me that everyone has really pitched in and he expects to make Tokyo. Good luck, Shawn; our best thoughts are with you.

Following a short break, Callie gave us a rundown on CRAMP. Since the last meeting, she has met with Dunn who temporarily serving as the president of that organization. He informed her that CRAMP had indeed put forth an effort to assist in working against the PACE project. In fact, one of our 393 members had met with Dunn and an attorney to go over the entire issue. What's going on here? Dunn hopes to get CRAMP back on the track in evolving to a greater Bay Area organization for protecting our aviation interests. Regarding the \$1,000 donation to CRAMP, it has been returned.

Introductions then followed; following is a brief sampling of some of the comments.

Ron Richman reports that he is making good progress on his Vari Eze. (Hey Ron, its about time you got to a meeting.)

Mike Parker didn't have much to say about his own project but he sure snowed us with his excitement about his ride in a Harmon Rocket. With an I/O 540, 82 inch prop, and weight of 1200 pounds, he insists that it really is a rocket.

Jordan Coonrad is putting the tail back on his Cessna and Gerry Greth is cranking out a couple of Chevie engines right now.

Lyle Powell has his Glasair III up to 270 MPH true and insists that he's never in his life had so much fun with something that's legal.

Russ Porterfield is working on the tail of his Wheeler. He informs us that he has just retired so should be able to spend more time on the *real* important things in life (the airplane). Pete's advise is to avoid telling anyone (about being retired) or he will end up with all kinds of requests for his free time (free in both senses of the word).

John Youngblood reported that he really got fired up at Oshkosh last year and is ready to start looking for a partner.

Ed Lester told us about an outfit in Benecia that makes thermocouples (EGT and CHT) for about 60% the standard price. Times 8 represents quite a savings. Call Ed if you want more information.

Chris Kenyon reported on his ΩΩΩFirst FlightΩΩΩ-way to go Chris. A little oil temp problem cause some headscratching but replumbing took care of it.

Jim Lewis is up to 205 MPH; his VSI has been pegging at 2000 feet per minute. What did you say you were flying, Jim?

Glenn (our illustrious president) put his foot in his mouth again. He made a prediction on when he would be flying; he actually said **this** summer. Be aware that he did not say "by summer" which would give him the out of summer '93, summer '94, etc.. He also said something about flying an ultralight and buzzing boaters. He's got to be crazy. Now a hang-glider, that's something else--real fun.

Will Price (your editor) was thoroughly castigated by Gerry Greth because the Lancair is still in the hangar and not flying as promised at the last meeting. Come on, Gerry; you know we're all liars.

We had several visitors including Kit Porter, Clarence (Callie's friend), and Paul Langenes (who plans to join). As always, visitors are always welcome.

EDITOR'S COMMENTS ABOUT CRAMP

Callie mentioned at the meeting that a member of 393 met with Dunn and attorney about the PACE project. I don't recall any report (written or verbal) of such a meeting being presented to the membership. Perhaps we were off-base in insisting on the return of the donation. I have the distinct feeling that EAA 393 dropped the ball much more so than CRAMP. Personally, the whole thing smacks of sour grapes on our part. (If someone wishes to blast me on that opinion, I'll gladly print it.)

TREASURER'S REPORT

Callie gave the following treasurer's report:

Checking account	
300.27	Ending balance last meeting
763.73	New deposits
117.57	Total expenses
946.43	Current balance
Savings account	
1720.63	Starting balance
3.47	Interest
1000.00	Deposit (from CRAMP)
2724.10	Current balance

TROUBLE BREWING

Just talked to Gerry Greth this morning re: the Airport Advisory Committee meeting last night (3/16/93). Gerry tells me that Buchanans favorite noise complainer was there boasting that he has made 70 calls complaining about the noise. (Actually, noise complaints are down except for this guy.) I've heard numerous comments such as kook, wierdo, and so on, but come on, fellow aviators, he's attracting attention. He and a very few others are pushing hard for ordinances to restrict flight patterns. **Don't be complacent and think it will never happen.** As an organization, we may not wish to be involved in politics but we had better let people know that there are many, many more people with a People *And* Planes attitude than there are with the People Over Planes mentality.


So if you wish to do nothing else, at least write your representative on the Board of Supervisors. If you live outside the area then address your letter to the Board as a whole. Point out that the airport is a significant revenue producing entity in many respects. Emphasize that restrictions (which may even be illegal and jeopardize Federal aid) will surely batter a goose that is laying a needed income egg for the county. [The county can ill afford to lose income. For instance, consider the furor over fire stations/increased taxes/money shortfall at last nights Board meeting.]

For God's sake fellow airplane people--**get mad and express your opinion.** Let's not be pushed around by a few individuals that appear to have made pushing us around their crowning achievement.

A BIT OF PHILOSOPHY

Chris, one of the guys working on Vern's Lancair IV, seems to be a real student of philosophy. The other day he posted the following profound quotes on their board.

TO DO IS TO BE (Plato)
TO BE IS TO DO (Socrates)
DO BE DO BE DOO (Sinatra)




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From the President . . . Experimental vs Certified

On several occasions I've been asked about my plane. "What kind of airplane is that?" Of all the answers I can think of - 'tarbaby,' 'kit built,' 'home built' . . . the name that conjures up the most fear on their faces is the name 'experimental.' I suppose they equate 'experimental' with 'experiment' which is exploring methods, materials or systems that heretofore have not been tried, and therefore should be expected to be fraught with generous amounts of failure. Here, too, is a matter of perspective. Someone asked Thomas Edison how he felt when 10,000 attempts to perfect a practical electric light ended in failure. He replied, "I've merely successfully found 10,000 ways that it will not work."

In trying to answer the question of the difference between a certified and an experimental airplane, I've often used the smug answer that "experimental airplanes are simply faster, stronger and more efficient than certified airplanes." This is sometimes the case but it doesn't seem to remove their fears. So, recently I've just come to say that the hassle is in a different place on an experimental airplane. The hassle in a certified airplane, for example is maintaining the equipment and the appearance of the airplane just the way it was when it was built (certified). This can be a significant hassle especially when the airplane gets older and original parts become scarce. Just try finding a crank

shaft or some exhaust valves for a Franklin engine sometime! We can elect to go through a major hassle to get a special type certificate which may be provided to improve or update an existing design. Experimental airplanes have no such certification to bog you down as you try to find the correct parts to do the job. You are free to re-invent any or all of the parts or systems in your airplane. It's OK to install a Cummins diesel in your 'Volksplane' with the bamboo wing spar and sheet rock skin. Your idea of using bicycle chains to twelve counter rotating ceiling fans mounted on the leading edge will only need to be proved to the FAA inspector as to its airworthiness and safety. If by some chance you find one of these ideas does not work, you may have to rethink and rebuild until you find something that will work and can be approved by 'the man.' A friend told me that he built and re-built his plane so many times that he felt he has built four planes, but he only gets to keep one.

So the hassle of finding and paying for the one and only part that will work on your certified airplane is replaced by the hassle of creating, inventing and experimenting with many parts that may or may not work on your experimental airplane.

Just trying to help . . .
Glenn

Larry Kett Laughlin



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QUIZ OF THE MONTH

Well, last month the exhalted one (Glenn) blew it by not finding out who won the quiz thereby winning three free raffle tickets. Can you believe it??? He even brought his copy of the Cleco with his answers marked. From the glance I sneaked at his list, I don't recall seeing all that many answers. Think I did better than that. Anyway, following are the answers.

A-1E	Skyraider
A-4	Scooter
A-4	Skyhawk
A-5	Vigilante
A-6	Intruder
AV-8B	Harrier
D-558	Skyrocket
F-100	Super Saber
F-101	Voodoo
F-102	Delta Dagger
F-104	Star Fighter
F-105	Thud
F-105	Thunderchief
F-105	Wild Weasel
F-106	Delta Dart
F-117	Wobbly Goblin
F-117A	Night Stalker
F-14	Tomcat
F-15	Eagle
F-16	Fighting Falcon
F-18	Hornet
F-20	Tigershark
F-4	Phantom
F-4U	Corsair
F-5E	Tiger II
F-6F	Hellcat
F-8	Crusader
F-8	Flying Shitcan
F-84	Thunderjet
F-86	Saber
F-8F	Bearcat
F-9U	Panther
FB-111	Aardvark
FM-1	Wildcat
L-17	Navion
L-19	Bird Dog
L-5	Sentinel
Mig-25	Foxbat
P-38	Lightning
P-40	Warhawk
P-47	Jug
P-47	Thunderbolt
P-51	Mustang
P-61	Black Widow
P-80	Shooting Star
PT-19	Yellow Peril
PT-22	Flying Cigar
T-28	Trojan
T-37	Tweet
T-38	Talon
T-6	Texan
TBF	Avenger
X-1	Glamorous Glennis





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GLENN WERNER

If you think some of these answers are wrong, don't gripe at me. The answers as well as the questions were stolen from EAA 170.

After thinking over Glenn's goofup, I felt so badly about the whole affair, that I've decided to run another set. So you can try again. Match them up then bring your answers to the next meeting. Note that this one has fewer entries--perhaps it will tax you brain a little less. Remind Glen to be certain to put it on the agenda. Use the same rules as last time.

Again stolen from EAA 170, San Luis Obispo

- | | |
|--------|-----------------------|
| A-10 | 1. 1950s jet wing |
| A-26 | 2. Blackbird |
| B-17 | 3. Bronco |
| B-1B | 4. BUFF |
| B-2 | 5. Canberra |
| B-24 | 6. Catalina |
| B-25 | 7. Commando |
| B-26 | 8. Dakota |
| B-26 | 9. Excaliber |
| B-29 | 10. Flying Boxcar |
| B-36 | 11. Flying Fortress |
| B-47 | 12. Flying Prostitute |
| B-52 | 13. Galaxy |
| B-52 | 14. Globemaster II |
| B-57 | 15. Harvard |
| B-58 | 16. Hercules |
| BT-13 | 17. Hustler |
| C-119 | 18. Invader |
| C-124 | 19. Liberator |
| C-130 | 20. Marauder |
| C-141 | 21. Mitchell |
| C-46 | 22. Neptune |
| C-47 | 23. Orion |
| C-5A | 24. Peacemaker |
| KC-135 | 25. Starlifter |
| OV-10 | 26. Stratofortress |
| P-2 | 27. Stratojet |
| P-3 | 28. Stratotanker |
| PBY | 29. Superfortress |
| S-3 | 30. The Shadow |
| SNJ | 31. Valkyrie |
| SR-71 | 32. Vibrator/Valiant |
| XB-70 | 33. Viking |
| YB-49 | 34. Warthog |



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A NEW ADVERTISER

Well darned if we don't have a new advertiser this month: our own Jim Lewis. Jim is the owner of *Motoring Performance*. When I asked him for some lies to print saying how good he was, he didn't think he could stretch the truth that far. Unfortunately, I can't think of anything good to say either. In any case, I think he repairs cars--at least that's what his card says. Someone did tell me that he does great work. Must admit that anyone who does the things he does with his airplane must know more than a little about motorized vehicles. So if you are unhappy with whomever is servicing your car (or even if you are happy), give Jim a call. His location is just off North Main (Walnut Creek) not far from all the construction work.



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Jim

BRAKE PADS

From Chapter 170

Here is some informative material about brake pads that I saw in the newsletter of EAA Chapter 170. Thought it useful to reprint here.

There are two types of brake pad materials and each have very different break-in procedures. Semi-metallic pads work well and seem to increase braking effectiveness and extends pad life. It is important however to use the correct break-in procedure for this type of pad or you will not realize its full potential.

The recommended procedure from Cleveland is:

METALLIC, (Cleveland part #66-56):

Remove the wheel pants. Taxi at 40 to 50 knots. Execute three consecutive hard brakings to a stop. Do not allow the brakes to cool between brakings. This procedure will glaze the brake pad surface and prevent uneven pad wear and brake disc scoring. This pad part # is 66-56.

ORGANIC, (Cleveland part #66-2):

Remove the wheel pants. Taxi at 25 to 40 knots. Brake to stop using light pedal effort. Allow the brakes to cool. Repeat this procedure a minimum of 6 times. This will generate sufficient heat to cure the resin in the pads, but will not get so hot to cause carbonization. A Single hard brake application on organic linings can carbonize and prevent attainment of the correct coefficient of friction for the entire life of the linings (which won't be long).

Cleveland has an informative catalog containing lots of wheel and brake information for \$2.00.

Cleveland Aircraft Wheel and Brake Division
Harker Hannifin Corp.

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[Editor's Note: Larry typed this for me. Fortunately, I proof read it. He had typed it as: "Remove the wheel parts. Taxi at 25 to 40 knots." All I've got to say is "that's one helluva trick; I wouldn't want to try it with my Lancair."]

BEING ON THE CUTTING EDGE OF TECHNOLOGY

As many of you know, I have been working with ARNAV in developing their EFIS system. (They develop and make a prototype and I test and evaluate it.) The activity has been both rewarding and frustrating (quit frustrating when things don't work). One of the real rewards is seeing the finished production item that reflects some of my thoughts and tests.

Another neat aspect of the relationship with ARNAV is hearing about planned projects and/or work that is in process. Recently Frank Williams of ARNAV spent a portion of an evening telling me about a new development that is currently being pursued with NASA Langley.

As we all know, a variety of conditions contribute to pilot stress while in the air. For instance, a relatively small thing such as significant air turbulence can help make an otherwise fun trip very unpleasant. Other traffic in close proximity can certainly contribute to our "pucker level."

With the rapidly decreasing cost of computer components and the concomitant increasing use of them in aircraft, a plethora of previously impractical methods and techniques become available. One of the very exciting proposals evolving from work between ARNAV and NASA Langley is a new computer chip called the *Pucker Chip*. The original concept evolved from the realization of the need for the ability to gather, process, and present to the pilot in a meaningful form, a summary of inflight elements that would cause pilot stress. The pucker system will consist of three basic components (in each aircraft).

Transducers in the aircraft would collect data likely to cause stress to the pilot. Typical data would be turbulence at the pilot's current altitude, wind conditions, weather along the pilot's course, other traffic at the same altitude, and so on.

The *pucker computer*, through suitably developed algorithms operating on the transducer output, would calculate the *pucker factor* (PF) for pilot's current location.

The *pucker transceiver* would continuously broadcast the PF and receive PFs from other aircraft in the vicinity.

Then you as a pilot would be presented with not only the PF at your location but an entire pucker factor profile (PFP) of your surrounding area. *Think of it*. No more guess work. For instance, if you are at 7,000 feet and the going gets rough--say a PF of 6--you need only check the PFP. If the PF at 9,000 feet is 8, you had better stay

where you are. But if it is only 3, a 2,000 foot climb puts you in comfy city.

Very early in the brainstorming (a very stormy period) the developers of this system recognized a couple serious flaws. First, numerous transducers would be required to implement the plan and their output would be difficult to standardize. Second, as individuals, we each react differently to different conditions. For example, one pilot might pucker with the slightest bit of turbulence but be hardly bothered by other traffic. Another pilot might be just the reverse. Furthermore, an absolute pucker factor of, for instance, 5 might scare the hell out one pilot but not even faze a more experienced pilot.

The remainder of this article is my attempt to interpret in lay terms the basis of this revolutionary leap forward. I will apologize in advance to the designers (Frank Williams and NASA Langley) for any inconsistencies or errors in my meager attempt to describe the system. Quite frankly, I find it so mind boggling in scope that I'm simply blown away in my own attempt at understanding and in my effort to reduce the concepts to a level the average person can follow and appreciate.

The bases of the system are the determination of an absolute scale of pucker--ASP--(which is independent of the human factor), and a human pucker factor (for each individual). The system would work as follows.

As part of the biannual physical, each pilot would be tested to determine his/her tendency to pucker: called *Pucker factor* abbreviated *Pf* (this will be done with an anxiety meter). Notice the capitalization; it is important to distinguish *Pf* from *pF* (pico Farad) the abbreviation commonly used to measure capacitance. The particular abbreviation is actually quite appropriate as *Pf* is the a measure of the person's capacity for stress (pucker) whereas *pF* is a measure of a capacitor's ability to store charge. In either case, if the capacity is exceeded, a breakdown occurs.

Studies have shown that puckering of individuals to different levels of ASP is nonlinear. Hence, considerable development will be required in establishing reliable measures for individual determination of *Pf*. Furthermore, it is feared that some types of personalities may be prone to conditions in which the individual would find himself/herself so far behind the pucker curve that he/she would not even realize he/she was in trouble. The developers suggest that this may lead to research in an entirely new field of puckerometry.

In flight, the system would work as follows. The pilot's state of pucker in flight would be monitored continuously. Presumably, this could be done by measuring pulse rate, blood pressure, galvanic skin response, perhaps even brain waves, and other physical items. The computer would correlate the data and apply the *Pf* for that individual to determine the ASP. (Note: The heart of this this revolutionary computer will be the newly developed pucker chip.) Every two seconds, the pucker transceiver would transmit the newly calculated

ASP. Each aircraft receiving the transmission, would perform the reverse operation applying the receiving pilots own *Pf* thereby producing a pucker level reading meaningful to the pilot. By integrating similar readings from all aircraft in the vicinity, a pucker profile reflecting the individual pilot *Pf* could be displayed.

The upshot is clear, easy-to-use information that can assist you, the pilot, in making a determination for a more comfortable and fun trip.

Wow!!! Welcome to the excitement and fun of flying in the upcoming 21st century.

Acknowledgement: I wish to thank Frank Williams, president of ARNAV, for his patience in relating the facts of this remarkable system. Again, I offer my apology for any errors or misinterpretations of which I am guilty in preparing this article.

HUMOR IN THE AIR

Heard at LAX after dark:

Bonanza 123: LA Tower, Bonanza 123 ready for takeoff.

LAX Tower: "Bonanza 123, Runway 25R, cleared for takeoff. Make a right turn at the shoreline"

LAX Tower (after 60 seconds): Bonanza 123, the blue lights are taxiway lights. The white lights are runway lights. Please use the white lights for takeoff in the future.

ΦΦΦΦΦΦΦΦΦΦΦΦΦΦΦΦ

This was recently heard on LAX Center frequency, obviously uttered by a pilot who didn't realize his mike was keyed.

Unknown Pilot: Bullsh**

Center: Okay guys, fess up. Who cussed on the radio?
. . . . A long silence followed

American 123 (in a deep confident voice): Uh, Center, American 123, negative on the bullsh**.

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COMPUTER BULLETIN BOARD SERVICE

Here's something that I came across (don't remember where). Sounds great for those of you who have a computer at home (doesn't **everyone**???)

A new FAA Amateur-Built and Ultralight safety computer bulletin board service is available. The menu driven service is only for amateur-built aircraft and ultralight vehicles. (Reporting procedures for certificated aircraft are in the FAR.) The *Safety Data Exchange Bulletin Board* provides an anonymous way for pilots and owners to exchange Service Difficulty Reports and safety information about a particular type of homebuilt aircraft or ultralight vehicle model.

The Bulletin Board is available by calling 1-800-426-3814 from 3:30 PM to 7 AM Central Time Monday through Friday and 24 hours on weekends and holidays. Although the system supports modem baud rate from 1200 to 2400, recommended computer parameters are 1200-N-8-1. The password is SAFETY. NOTE: ONLY UPPERCASE LETTERS CAN BE USED.

No identifying information is requested except for type of model of aircraft or vehicle. Type information desired is anything that has happened to your aircraft or vehicle that can happen to another person's. Desired information includes, particularly if one of the following is the problem, engine make and model, propeller make and model, component make and model, part name and number, location of part or problem, and such additional information as required to help someone avoid the same problem.

User input should be available within 12 to 24 hours. If you have any questions or comments about the service call or write:

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CALENDER OF EVENTS

Here we go on the annual calendar of events. Notice, that some have question marks for the dates. They were "leftover" from last year and I assume that they will be sponsored again this year. If you know the dates, please let me know. Also, give me a call if any of them are incorrect or incomplete. Most of those that have detailed information were obtained from the Intrepid Airman--the newsletter editor does a great job of being complete.

- March 28 Central Valley Lemoore Airshow, Lemoore, CA
- March 28 Vandenberg AFB Open House, Lompoc, CA
- April 17 Riverside Open House. Call Rod Murphy (909) 351-6113.
- April 17 1040 Fly-Out to Columbia.
- April 18-24 Sun'n Fun EAA Fly-in, Lakeland, Florida Telephone (813) 644-2431
- April 20 Buchanan Airport Advisory Committee meeting. 7:30 at the airport office conference room.
- April 24-25 Minter "Warbirds in Action" Fly-In, Bakersfield. Call (805) 393-0921.
- ??? Columbia Taylorcraft Fly-in
- ??? Nut Tree something or other
- April 30-May 2 Camarillo EAA Chapt 723 Fly-in. Call Larry Hayes (805) 373-5144.
- ??? Fresno Air Faire. Chandler Airport
- ??? Yolo County Breakfast Aviation Flea Market
- ??? Corning, CA Antique Fly-in
- ??? Lincoln Fly-in.
- May 15 & 22 Corning, CA Antique Fly-in and Airshow. Exchange Club of Redding.
- May 22, 23 Paso Robles 4th Annual Warbird Fly-In Air Show. Call Glen (805) 238-4858
- May 23 Watsonville Antique Fly-in.
- May 28-30 36th Merced Antique West Coast Fly-in. Call Don Nolte (209) 384-1144.
- June 5-7 43rd Annual Moonlight Fly-In Air Show, Porterville. Call Mike or Frankie (209) 781 0706.
- June 12-13 Lions Airshow, Ukiah. Call (707) 468-8626 (evenings).
- June 19-20 24th Annual Truckee-Tahoe Airshow. Call (916) 587 4119.
- June 26-27 Oakwood Lake Resort Air Show, Manteca. Call Steve Stavrakakis (209) 6322689.
- July 3 Reid-Hillview 4th July Picnic Fly-In.
- July 4 EAA Fly-In, Arlington, WA.
- July 7-11 Budweiser Warbird Invasion, Tracy Airport. Call (805) 498-7221.
- July 17-18 Wings for Charity, Livermore, CA,
- July 23 ??? Evergreen Fly-In
- ??? Madera Fly-In
- July 29-August 4 OSHKOSH. Call (414) 4264800.
- Aug 20-22 Gathering of Warbirds, Madera
- Aug 21-22 Aviation Expo: Tribute to Women, Van Nuys
- Aug 28-29 Hawthorne Air Fair, Hawthorne
- Sept 4-6 California Air and Water Festival, Long Beach
- Sept 10-12 Chico Antique Airshow, Chico
- Sept 19 Santa Maria Air Fair, Santa Maria
- ??? Pacific Coast Air Museum (Sonoma County) Open House
- ??? Reedley, CA Airshow
- Oct 1-2 Calif International Airshow, Salinas
- Oct 2-3 Travis AFB Air Expo
- 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

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

Glasair 3 kit. Fuselage together, horizontal stab and elevator completed. (Editor's comment: There are some other goodies that I did not understand from Glenn's scribbled notes.) Owner has invested \$42,000 in the kit and parts (no engine). Will sell for \$36,000. John Martin (510) 672-8200 (work) or (510) 672-1813 (home). 1092

FOR SALE

Oregon Avionics FLIGHTCOM 401. Complete panel mount hot-mike unit including factory connection schematic. \$90.

Goodyear "floating-disc" brake & 5.00 x 5 wheel, complete with spare brake pads, bearings, & wheel covers. (Good for aircraft under 1,000 pounds.) \$250 obo.

Larry Laughlin (510)741-3000 or evenings at (510)758-3533. 0193

FOR SALE

One third interest in Glasair, fixed tri-gear. IO/360 with constant speed prop. 700 plus hours, runs great, very reliable.

Contact Ed Lester (510) 932-4511.

0293

WANTED

Flyable Long-Eze. Call Charles Atkins at (707) 253-0454.

0293

WANTED

Need hangar space (at Buchanan) for Stinson 108. Phone Garry Stofer at 686-3812.

0393

FOR RENT

Port-A-Port hangar (Exec 3). Large enough for one aircraft in center and two small homebuilts on sides--or maybe even a small blimp. Call Pete Wiebens at 933-7517.

0393.

WANTED

A builder hangar-mate. Call Ray Nilson 672-5139. [Ray: If I got the wrong Ray, please give me a call.]

The eco

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