

# The Citeco

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

AUGUST 1996

## CHAPTER MEETING:

Meetings begin at 7:30PM on the 4<sup>TH</sup> Wednesday of the month in the terminal building at the end of John Glenn Drive. This month's meeting will be on August 28<sup>TH</sup>. Latecomers who expect to sit should bring their own chair.

### Program:

No formal program this month. We'll talk about Oshkosh, etc. Bring pictures. Let Bruce Hobbs know if you need any audio-visual equipment.

## CHAPTER MEETING MINUTES:

The July meeting was the annual Chapter picnic, held July 20<sup>TH</sup> on the lawn next to Navajo Aviation. It was a nice warm (read HOT) day and we had a great turnout. Lots of good food and talk, as well as first flights for eight young eagles.

Thanks to everyone who helped make the picnic a success, especially Don Baldwin, who brought a big table to hold the food, and Nancy Seguine & Melody Weibens who took care of all the last minute items.

### Treasurers Report:

Louis reports: Checking \$924.29, Savings \$2707.54.

## YOUNG EAGLE EVENT

*By Lisle Knight*

On a lovely but hot Saturday afternoon beginning at 1:30 PM, after most of us had gulped, guzzled and stuffed ourselves on our sumptuous picnic edibles and brew, we flew 8 Young Eagles..and (1) "Older" Eagle. The young ones were excited, delighted and totally enthused- as usual. The "Older" one, welllll ..though Bob D. did look somewhat bleary-eyed and sweating(which I don't think it was from Ron's flying or his Glasair's performance), he did confess the reception he received at the conclusion of the flight and the subsequent Young, uhh... Older Eagle Flight Certificate, was an experience he won't forget.

Again, many thanks to our Flight Leaders: Bob Decker, Lou Ellis, Lyle Powell, Dwain Duis. On page 5 are a couple

photos of our flight line and the Pilots, Parents, and Youngsters who participated in our Young Eagle Rally on June 16th on the Observation Deck, just below the Buchanan Field Control Tower.

## TECH TOPICS:

### HIGH OIL TEMP?

*By Larry Laughlin*

I told this story at my very last Concord Chapter #393 meeting prior to my final departure to Colorado Springs, but it bears repeating here and for every EAA homebuilder. After 4 years of frustration, I was finally able to solve an enormous mystery and somewhat of a serious engine problem in my Long-Eze:

Before I ferried the Long-Eze over the Rockies to Colorado Springs, I wanted to get a handle on the 250 degree oil temperature problem I've been plagued with for 4 years. These O-320s shouldn't have this kind of problem and I've done nearly everything to make air flow through the cooler better (tighter baffles, larger cooler, dedicated exit box, etc.). Nothing helped, never saw even 1 degree less with any changes (tip #1)! I was so frustrated that I finally went to our local guru, Dr. Powell, and pleaded for help. He suggested what I basically already knew, but didn't really want to try: Move the cooler up to the front left corner of the lower cowling and install a small, reverse scoop. "All right, I'll do it", I said, and that's just what I did. After a little effort cutting a large hole in the cowling, making the mounts and all, it was time for the final re-plumbing of the existing dash #8 oil lines. I took the remote oil filter out of the system for the time being, so I only had to remake two lines instead of three. I cut down the first one and couldn't help but notice that I couldn't see daylight through the 3 inch long piece I had just cut off (the part with the reusable fitting still attached)(tip #2)! In fact, I couldn't stick a small screw driver through it (tip #3)! To my amazement, I concluded that yes indeed, it was completely closed off and so were 3 of the other 5 fittings in the rest of the old oil hose system. This sucker was basically running with no oil cooler and no remote oil

filter since day one! That's ten years folks! I contacted the original builder of the airplane and he said he was never satisfied with the high oil temperatures of this plane and he too, was a little frustrated when he flew it. Once he learned of the faulty oil line fitting installation, he was both surprised and relieved. In fact, his E-Racer, with only 25 hours on it, suffered from the very same problem until he found one bad hose. The lesson here is clear - check ALL hoses carefully before installation or modification when delivery or restrictions COULD be suspect. This will never happen to me or the original Long-Eze builder again!

So what's the fix? How do you make up your own hoses without screwing up the inner liner? Well, you've got to install the fittings properly. The trick starts when you cut the hose. Don't cut them with a band saw or a hack saw! In fact, any cutting method short of a high speed carbide wheel ends up loosening the rubber inner liner just enough to allow it to slide down in with the installation of the fitting, mandrel or not. Once you've sized your hose (in length), use a very sharp, new exacto knife to carefully chamfer the inner hose just slightly. Next, screw on your outer fitting until it just bottoms out on the hose, perhaps even back off 1/32 on an inch or so. Finally, install the mandrel on the inner fitting and lubricate the heck out of it and the hose, using the best lubrication product you can get your hands on, (here's where many screw up - USE THE PROPER MANDREL - don't try this with just a dead plug and a wrench). With careful, steady pressure, screw the mandrel/fitting assembly onto the hose/outer fitting assembly. Drive it down until the "B" nut is just 1/32 to 1/16 off of the outer assembly, then remove the mandrel. After wiping out the lubrication, you should be able to hold the hose up to a strong light and look through it, revealing very clearly where the fitting meets the hose inside. Another excellent method is to use the sun and a mirror to shine light down inside so you can inspect your work. If so much as a tiny piece of rubber is CUT and flapped up off of the inner fitting, you're screwed and you've got to do it again! There may be some minor controversy on the methods and steps, but this was how I made my NEW HOSES and it worked out well (forget attempting to make nice hoses after they've been put into service for any length of time). The high-speed "cut-off" and "lubrication" seem to be two key factors in your successful hose assembly.

By the way, my O-320 Long-Eze now shows it's oil temperature around 190 degrees in a steep climb, 180 degrees in cruise, and drops down to 150 degrees in a descent. Life is good (engine life, that is).

## TRIP REPORTS

### JACKSON HOLE

*By Bob Belshe*

On the 3rd of July, Sally and I set out on our first long trip in the Lancair 235. Several planes from the Mt. Diablo Pilots Association were flying to Jackson Hole for the 4th of July, and a last minute cancellation made a room available. The

weather was perfect, with only a few high clouds and not much wind. The plan was to leave early and make a breakfast stop in Elko, then fly on to Jackson Hole. We flew with two other planes; thanks to our Loran and GPS we were able to find each other in the air, and flew together for most of the trip out.

We learned a few things about our airplane: It climbs much slower than a Cherokee 235, but cruises faster. At 8000' density altitude, you need lots of runway to get off, but it flies eventually. We flew at 10,500 and 11,500 feet and it was warm but not seriously uncomfortable. The Northstar Loran worked flawlessly. The stick-on sun shades from Monument Aircraft Supply were very useful.

Jackson Hole is a great vacation spot. Beautiful natural scenery. Board sidewalks, lots of stores, restaurants, hotels, and PEOPLE. The 4th of July started with a pancake breakfast, then a parade featuring local talent, a rodeo, and a spectacular fireworks show. They launch the fireworks from a spot about 200 feet up the ski slope, and we sat at the bottom, about 1/8 mile away. Also managed to get in a short raft trip down the Snake River, and a drive into Yellowstone National Park. Old Faithful erupted on schedule just after we got there.

Leaving Jackson Hole at 7am Sunday I found the flaps would not retract. The problem was a balky reed switch in the flap circuit, which fixed itself after I bypassed it with a paper clip to raise the flaps (new switch on order). We took off into an absolutely clear sky with the Grand Tetons a couple of miles to our left. Long climb out to the south end of the valley, past Idaho Falls and Pocatello, then it was time for breakfast in Elko again. Takeoff from Elko seemed easier somehow, and we arrived in Concord about noon. A truly great way to travel!

Here are the performance figures from this trip. The Lancair has a Lycoming O-235, 118 hp engine, with a fixed pitch wood prop.

	MILES	TIME	MPH	MPG
Concord to Elko	394	2:19	170	25.1
Elko to Jackson Hole	329	2:10	152	25.3
Jackson Hole to Elko	329	2:13	148	22.8
Elko to Concord	394	2:22	167	25.6

### OSHKOSH

At 6AM on July 30, the "Squadron DeQuad" left for Oshkosh. In the lead was Rick Young in his RV-6 with Stu Bowers. Next came Chris Kenyon in his RV-6 with Terry Gong, followed by Scott Achelis and his wife in their new RV-6A. Your editor followed in his Lancair 235, with the passenger seat empty. Also with us was J.R. Gibb in his Mooney with two of his friends. I was a little anxious, I guess, so when I saw what looked like a RV-6 and a Mooney taking off just before sunrise, I jumped to the conclusion that they were leaving. (My hangar is on the Northwest side, and the others are on the East side). Quickly I taxied out to 19R

and took off, only then hearing that they were still on the ground.

We soon joined up, flying into the rising sun direct to our first waypoint, Lovelock. We stopped for fuel in Wendover, Utah. Wendover is a former Air Force base which was built during WWII for the training of the B-29 crews who dropped the atomic bombs. The Wendover to Casper leg took us just north of Ogden, Utah. Under my bubble canopy, I can tell you it was HOT!

On the ground in Casper, as soon as the Mooney arrived, we jumped into a van for a ride to the motel. Soon found a good Mexican restaurant for an early diner. Chris, why did you buy a whole pitcher of margaritas?

Leaving Casper the next day, it was a bit cooler— we stopped in Worthington, Minnesota for gas, then on toward Oshkosh over a broken cloud deck. When it began to thicken up we decided to go under the clouds. It was a great sight to see the four planes spiraling down through a big hole in the overcast. Fearless squadron leader, Rick, got us a transition through the La Crosse airspace, then it seemed just a short way at about 1000' AGL with occasional rain to Ripon, where you join the other planes inbound for OSH. What thrill it was for me to touch down on the monster runway 36, Rick had already landed and turned off onto the soft, wet grass, Chris on my right (land now CK- LAND NOW!) Plenty of parking spaces left, the three RV's were nestled together at the end of row 19, while I parked over about 9 rows with the other Lancairs.

What can I tell you about Oshkosh? If you've been there you already know. It was hot, noisy, crowded, covered a vast area, with more interesting airplanes and exhibits than you can ever see. We soon established the "Beer tent" as a place to meet for rides back and forth to our residence. We stayed with some very nice folks in two houses that were next door to each other.

We decided to fly home by a southern route so we could take in some different sights, and avoid most of the unpleasant weather west of OSH. We finally got out of OSH about 8:30 on Sunday, Aug. 4. Flying over a broken cloud deck and under a high overcast, we thought we were home free, but the overcast descended, and it started to rain, so we landed in Webster City, Iowa, on a nice concrete runway in the middle of miles of corn fields. The FBO there had a DUAT computer that showed the current weather radar. We could see that we were almost past the bad stuff, so after about an hour the ceiling lifted a little and we took off for what turned out to be an uneventful flight to Farmington, New Mexico, with a fuel/lunch stop at Goodland, Kansas.

The last day was the greatest. The first leg took us through Monument Valley to Page, AZ, for breakfast. Flying past the huge columns that stick up from the desert floor is truly awesome. Out of Page, we headed for Bryce Canyon, another place of incredible beauty. High green valleys, and amazing pink colored cliffs. Our last stop before CCR was Cedar City, Utah, for fuel and lunch. Flying just inside the

Desert MOA, allegedly inactive, Scott and I saw a couple of jet fighters chasing each other a few thousand feet below us. Soon we were passing Tonopah, then Mono Lake, over Hetch Hetchy with Half Dome visible to the south, then a long descent into CCR, landing at 3:15.

Flying in a group is a lot of fun. Someone's always there to talk with, and at least one of the group had flown the route before. You get to look at beautiful airplanes up close, and there is a feeling of security in case there should be a problem. What a trip!

DATE	ROUTE	MILES	TIME
Jul 30	Concord>Wendover>Casper	888	5:42
Jul 31	Casper>Worthington>Oshkosh	903	5:42
Aug 4	Oshkosh>Webster City>Goodland>Farmington	1154	8:12
Aug 5	Farmington>Page>Cedar City>Concord	788	5:36

### MISCELLANEOUS:

*Several people asked for this recipe at the picnic. Enjoy!*

#### Nancy Arthur's Chocolate Cola Cake

2 c. flour  
2 c. sugar  
Sift together in a bowl and set aside.

Place in a saucepan:

2 sticks oleo  
3 heaping Tbs. cocoa  
1 c. Coke

Bring the above ingredients to a boil and add to the flour and sugar mixture.

Add:

1/2 c. buttermilk  
1 tsp. soda  
1 tsp. vanilla  
2 eggs, well beaten  
1 c. miniature marshmallows

This will be quite thin. Pour into a well greased pan, 13 x 8 1/2 inches. Bake at 350 degrees F for 45 minutes

#### Icing:

1 stick oleo  
3 heaping Tbs. cocoa  
3 Tbs. Coke (the rest of the can)  
Bring to a boil and add:  
1 box powdered sugar (3 packed cups)  
1 tsp. vanilla  
2 cups miniature marshmallows  
2 cups salted peanuts

Frost cake Immediately when out of the oven.

The following item was contributed by Ken McKenzie.

United States of America - War Office  
REGULATIONS For Operation of AIRCRAFT

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 sharp, 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 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 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 takeoff or land closer than 50 feet to the hanger. (sic)
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.

## NEWSLETTER SUBMISSIONS

All contributions for the newsletter are welcome! If you have something to say or share with the rest of the club members, do it here! Please submit any articles and/or photographs you think others will enjoy and learn from. The deadline for submissions to the editor is the 14th of every month (newsletter is produced and mailed by the 17th).

Submissions should be done in writing and mailed directly to the newsletter editor. Submissions may be hand written, typed, or on any IBM diskette (in ASCII or MS Word).

## CALENDAR

- 
- August 15 Buchanan Field's 50th Anniversary dinner.  
August 24-25 Central Oregon Airshow, Redmond, OR  
August 30-31 EAA end-O-Summer Fly-In, Madera, CA  
August 30-31 EAA Antique/Classic Chapter 29 Antique Fly-In and Airshow, Hayward, CA  
August 30-Sept 1 Annual Gathering of Taildraggers and Swinetasteing, Georgetown Airport, CA  
Sept 1-2 Annual Lancair fly-in, Redmond, OR  
Sept 21-22 Gathering of Warbirds Airshow, Fresno, CA  
October 4-6 Golden West Fly-in at Tracy airport, volunteers needed.  
October 26 EAA Chapter 204 Fly-In, Marina Municipal Airport. 408-646-9310  
Nov 1-3 Antelope Valley EAA Fly-in. Fox field, Lancaster, CA

## CLASSIFIED ADVERTISING

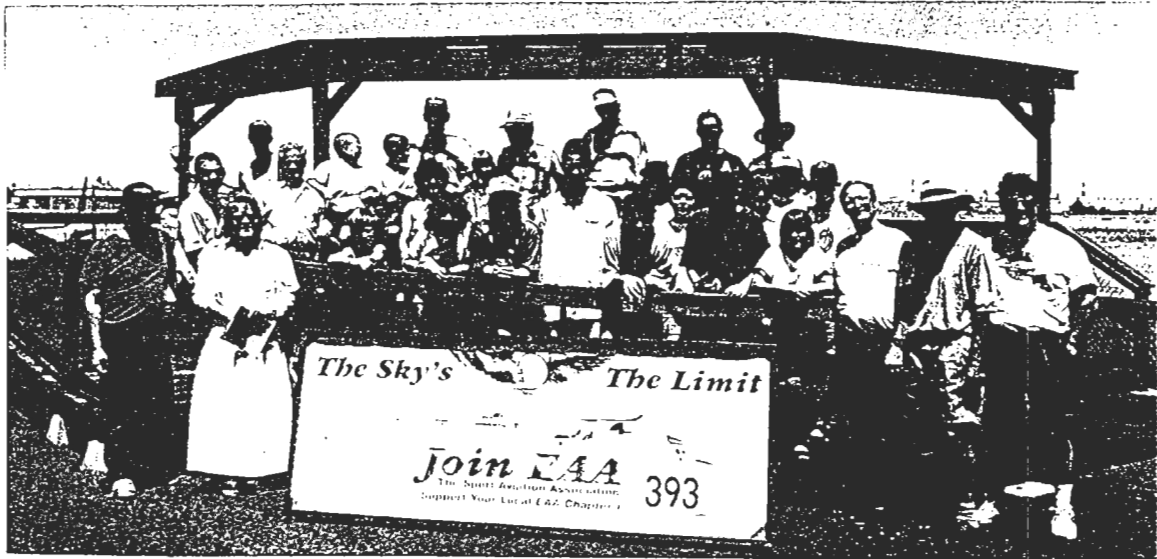
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Items for sale by club members may be placed in this newsletter for **FREE!**

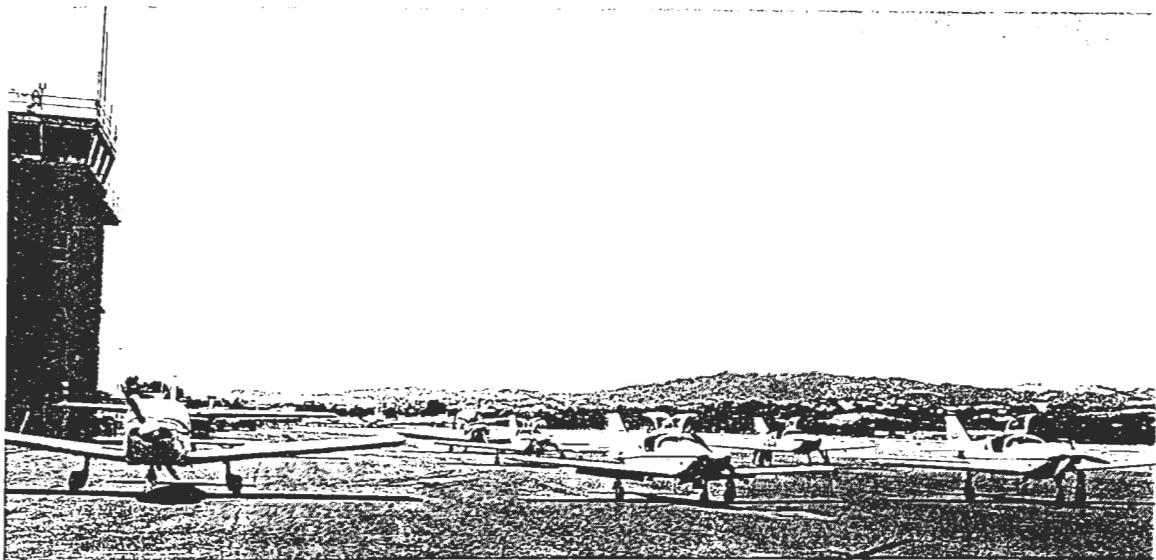
*All I ask is that you submit your **FOR SALE** item to me in writing and no later than the 14<sup>th</sup> of the month. Normally, your ad will run for two issues, unless you request more or tell me that the item is no longer for sale.*

### FOR SALE:

**1969 Cessna 150.** West coast airplane. Full IFR, two navcoms, G/S, ADF, MB, redone panel, upholstery, recent annual and 100 hr. 4000TT, 500SMOH. Nice paint. \$16,950. Great personal plane or trainer. Bruce Milan (510) 254-4780



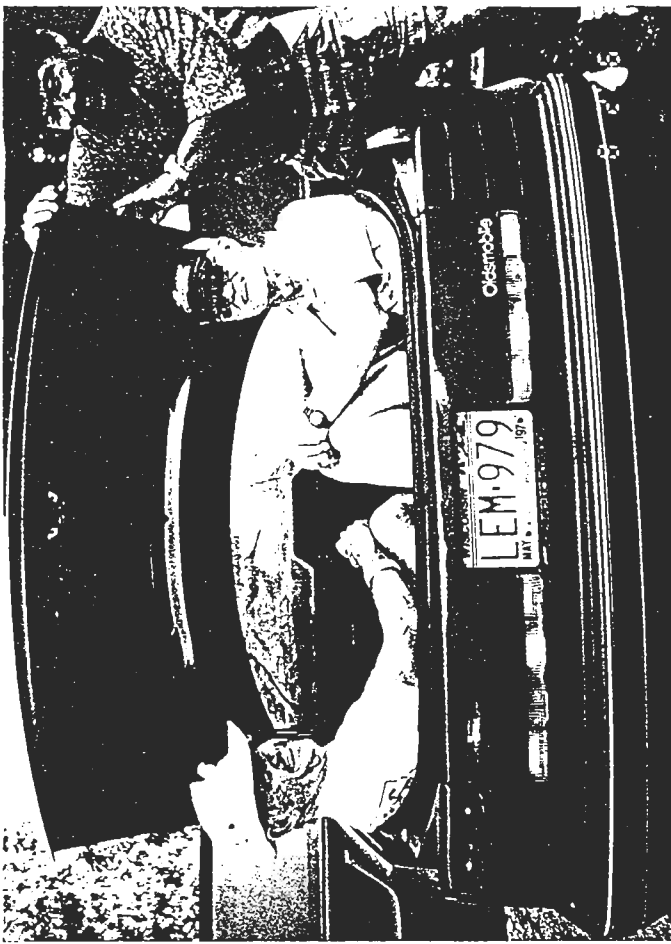
Young Eagles, families, and pilots



Young Eagles Flight Line



The Squadron DeQuad at Oshkosh



Achelis' Mini-bus at Oshkosh

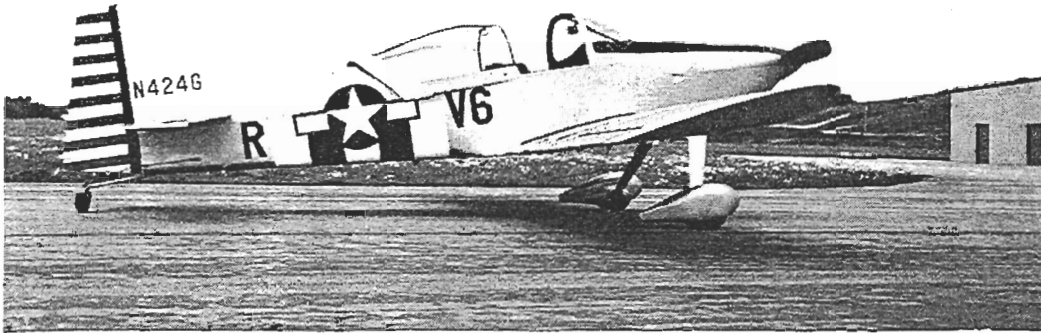


On the way home



Jackson Hole, Wyoming

# FOR SALE

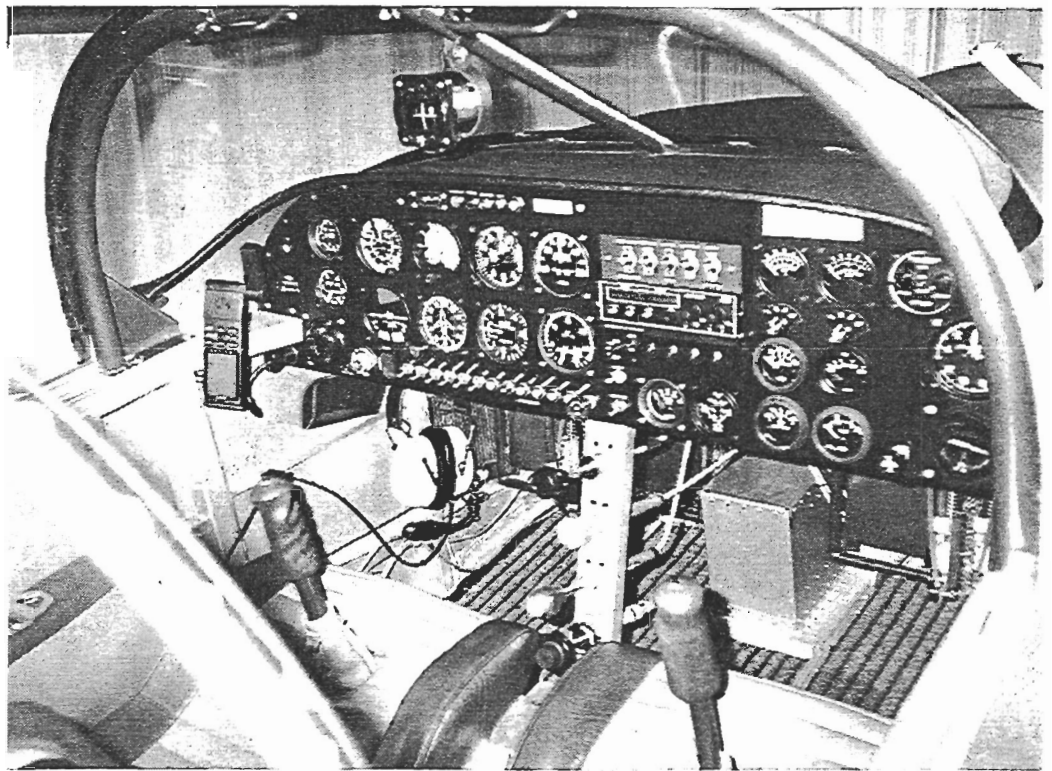


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CHAPTER #393 NEWSLETTER, AUGUST 1996

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