

# The C ecco

Experimental Aircraft Association • Chapter 393 • Concord, CA

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

## MARCH 1995

### YOUR 1995 OFFICERS

PRESIDENT	Fred Egli 935-7551
VICE PRESIDENT	Lisle Knight 524-2269
SEC/TREASURER	Louis Goodell 682-4198
EDITORS	Ken & Linda McKenzie 283-3119

### MEMBERSHIP MEETING

March 22, 1995, (the 4th Wednesday of every month) @ 7:30pm, Old Buchanan Terminal Building, Concord Airport. Please wear your badges to help those of us who don't know everyone. Also, please bring chairs — we never seem to have enough.

### MINUTES OF THE CHAPTER MEETING

held February 22, 1995

The meeting was called to order at 1930 hours, Fred Egli presiding. The minutes of the January meeting were approved as submitted in the February 1995 Cleco.

The Treasurer's Report was given by Louis Goodell. The checking account balance was \$1,072.81, and the savings account balance was \$2,312.20. Total expenditures since January 1 total \$303.78.

Lisle Knight received the Young Eagles Award from the National EAA for being the Chapter Young Eagles Chairman.

Introductions were followed by a break; and then the evening program. Dick Rihn gave a very interesting talk about the plane his son designed and is building.

No raffle was held due to Larry Laughlin's absence.

## MARCH PROGRAM

This month's program will have Chris Kenyon and Bruce Sequine presenting their metal working skills and knowledge used to construct their projects. After finishing his blue with orange trim RV-6, Chris is now building an RV-6A for Scott Achelis. Bruce totally rebuilt his mirror-polished aluminum with blue trim Tempco Swift and also installed a Lycoming O-360. Both members will present slides and parts of their individual projects for this evening. We also have a video on uses of the English Wheel, a necessary tool for working metals into the curves and shapes required in forming parts such as engine cowls. Hope you enjoy.

Lisle

## WELCOME NEW MEMBERS

We would like to extend a warm welcome to the three newest members of Chapter 393: Ken Wiley, Jerry Grove, and Daryn Depew. We would also like to extend a belated welcome to Paul & Cari Rodgers, who joined the chapter at the January meeting.

## AIRCRAFT SPRUCE

Aircraft Spruce is offering special discounts to EAA chapters. In order to participate, Chapter 393 must supply Aircraft Spruce with a chapter roster that includes the names and EAA membership # of all current members (no addresses or phone #'s are required). Chapter 393's discount period runs from April 1, 1995 to April 30, 1995.

We will provide copies of the Rules and Exceptions and Discounts at the March chapter meeting. Anyone who cannot attend the March meeting, but wishes to obtain copies can call Ken McKenzie at (510) 283-3119.

## BOARD MEETING

The board meeting is scheduled for 7:30 p.m., Wednesday, March 29 at Fred Egli's house. If you are interested in attending or have a matter you wish to discuss, please call Fred.

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## MINUTES OF THE BOARD MEETINGS

The board met for its monthly meeting on Wednesday, March 1 at Fred Egli's house. In attendance were Fred Egli, Lisle Knight, Louis Goodell, and Ken and Linda McKenzie.

Lisle Knight suggested that the chapter investigate the purchase and installation of a permanent movie screen and VCR for use by both our chapter and the local chapter of the Ninety Nine's. Before researching the costs it was agreed that Fred would contact Tracy Williams to find out if the County would be willing to be responsible for the purchase and installation of the screen. It was also suggested that we acquire a display case for the Chapter Charter.

It was decided that we should purchase an EAA Chapter banner at the price of \$15.00.

It was decided that the March issue of the Cleco would be the last issue received by members who have not paid their dues for 1995. In order to provide ample notice to said members, we will stamp their copies with either "LAST ISSUE" or "PAST DUE."

Louis was asked to provide a complete accounting of all of the chapter revenues and expenses for 1994. This is to be published in the Cleco.

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## CORRECTION:

The Cleco editors apologize for misspelling Eric Schuld's name in the February raffle announcement.

**TIG Welding**  
**Call Eric at 827-0259**

## UNCLASSIFIEDS

FOR SALE 1/3 interest in Varieze: 2 partners looking for a third to provide sweat equity and some cash and to contribute to other completion costs for a very nice Varieze at CCR. Completed to point of taxiing. Call Jim -- days 675-4312 or nights 820-2586, Chris -- days (707) 523-5135 or nights 798-8844 for additional details.

[2/95]

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FOR RENT: Hangar space is available in one of the West Ramp Port-to-Port for building a kit. Contact Barry Burgess, 118 West MacDonald Ave., Richmond, CA 94801. Home (510) 215-2991; Work (510) 532-5242.

[2/95]

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FOR SALE: Q-235 project. Nearly finished. Lycoming o-235 w/327 SMOH. No medical. Call Quentin Durham at (510) 254-7843 for specs and photos.

[3/95]

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FOR SALE: Third interest in Questair Venture, 80% complete. Project currently in Orinda. Asking price for interest \$40 to \$45K. Call Terry Thies at 254-7508.

[3/95]

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From: stamper123@aol.com (Stamper123)  
Subject: Re: Doing Your Own Maintenance After Buying A Homebuilt  
Date: 2 Mar 1995 19:42:32 -0500

*Ralph Freshour (rfresh@ix.netcom.com) wrote:*

*Can you do your own maintenance on a homebuilt you've bought from another party? or does the FAA only permit the original builder of a homebuilt to do all of the maintenance?*

This subject comes up every now and then here, and seems to get the same correct/incorrect info along the way. As it is a favorite of mine, and I hate to see potential homebuilt owners being steered away from buying an airplane due to mis-information, here goes:

First. Read the FAR's. You will find that almost all of the pertinent FAR's refer to "Experimental" aircraft by EXEMPTING them from whatever the subject is that is being addressed. Hence, in the area regulating who may work on an airplane (I don't have my copy handy, so won't attempt to quote the section), you will find that it

says something to the effect that Experimental aircraft are exempted from the requirements that an A&P do the work on it.

These exemptions are found throughout the FAR's, leading us to the very thin section which does apply rules to Experimental aircraft. These rules mostly have to do with the size and placement of the registration numbers and various placards, and prohibition from commercial uses.

However, there is an FAA inspector field hand book which ends up being our real source of rules, and none of us get a copy of that.

From this book, the FAA inspector (or designee) awarding the "Special Airworthiness Certificate" will also assign "Operating Limitations" specific to your aircraft. In these limits you will find the requirement for an annual "Condition Inspection", among other things. Note that the FAR'S actually exempt an experimental aircraft from having an annual airworthiness inspection, so it is the language in the operating limitations that force us to have an annual inspection, which, in this case, is NOT an airworthiness inspection. It is a condition inspection. This is what allows an A&P or the sole holder of a repairman's certificate for THAT aircraft to do the inspection. An "Airworthiness" Inspector is not required, as that is not the inspection being given.

As a side note, everyone should be aware that the FAR which allows an annual inspection once every calendar year does not apply to experimental aircraft. We are exempted from all of that, remember? We are required to have an annual condition inspection once per year, meaning 365 days. I have been reminded of this by several FAA inspectors, although they did so while grinning, suggesting that they would be hesitant to violate me on this should I fail to be in compliance. The rule is the rule, however, in case they start to get mean on us....

Now, for doing any work, which is not the same as doing the annual inspection.

ANYBODY may work on any experimental legally. You can have your plumber come out and hook up the control cables, rebuild the engine, install the landing gear, or overhaul the mags if you want to, or you may do it yourself. The only controlling rule is that once per year, the aircraft must have a condition inspection, and any work that is done in the interim must be logged and signed by the person doing the work.

The FAA has given numerous seminars on this at Oshkosh. They tend to refer to all of this as a "Gentlemen's agreement" between the FAA and the EAA, but it is

actually all a strict interpretation of the FAR's. Furthermore, virtually every FAA inspector I have spoken with is in agreement on these points, and fully support the current owner of a homebuilt (or other experimental) doing his own work. Their view is that since you can't rent the thing out, it is going to be your own butt at risk, and that is motivation enough for you to insure the work is done safely.

Refreshing, isn't it?

The bad news is that the FAA can, and may, reinterpret the rules any time they want. They did a bunch of it in 1994 to those of us in the Experimental Exhibition category. No great damage, but some precedences were set that don't bode well for the long term freedom of Experimental aviation.

So, go ahead and buy the homebuilt. You may work on it all you want. Be safe, and by all means use all the extra eyes you can get to help inspect your work as you do it, and to give it a good going over once per year. I don't care what the rules allow. Doing your own annual is a false economy. I think I'm a pretty good wrench, and the people that I have asked to do my inspections have ALWAYS found something I missed and wished I hadn't. Familiarity breeds.....

See ya upside down!

Don

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From: mdelevie@wam.umd.edu (Mark Y. deLevie)

Subject: lightplane safety

Date: 16 Feb 1995 14:33:25 GMT

*"Ask yourself this, how come the Cessna 152 and 172 have such a good accident record and they are flown by probably the least proficient pilots, as a general group, i.e. students, etc."*

*"Because they are kites, not airplanes. Oh excuse me, I am wrong. Only the 172 is a kite. The 150 is a parachute."*

Sorry guys, I have to jump in on this one. Can anyone give me a reason why this disqualifies the 150 and 172 from being airplanes?

I am a great fan of low wing loading. It is the simplest, cheapest, absolutely the most reliable high-lift device extant. You want to stall slower? Build more wing. Someone once asked me how to build a winglet for his schmedlap-100; specifically, he asked if it should droop down or face up. I told him to run it out spanwise, because the best winglet there is simply increases span: more total area, higher aspect ratio, more lift.

You guys who want to go fast-fast-fast are doing so at your own peril. You want 250 knots from a homebuilt? Fine, but your stall speed is going to be horrific. You want 150 from a Volkswagen engine? Fine, but don't ever have a dead-stick landing, because you'll come in hot-hot-hot.

I have had my fair share of engine failures: two, one on takeoff in the mountains, one in cruise just after crossing the Chesapeake Bay. Either one would have killed me and 3 passengers had I not been in an airplane with excellent glide and a slow stall speed. It's the difference between making the airport (I did so both times in my 172 a.k.a. kite) and landing at 60 mph plus into a field or road.

No, I'm not a fan of obsolete certified aircraft engines. No, I shouldn't have had those engine stoppages. But my comments are about the wing loading and thus the glide and stall performance of the airplane. If you want safety in glider mode, sorry, you need to have a glider. Slats, flaps, winglets, vortex generators, lift cuffs, STOL vanes, and all the rest may bridge the gap some- what, but the more your airplane flies like a glider, the more it will fly when it becomes a glider.

Regards,  
Mark deLevie

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From: tom\_roeder@MENTORG.COM (Tom Roeder)  
Subject: Northwest Fly-In (NorWeFI)  
Date: Sat, 25 Feb 1995 08:01:30 GMT

The suggestion has been made that it is time for a Northwest Fly-in (NorWeFI). After a brief discussion with a couple fellow NW netters, a potential location and date has been pulled out of the air (so-to-speak):

Where: Pearson Air Park (60S), Vancouver, WA, USA  
(home of the Pearson Air Museum)  
When: April 15, 1995 (Saturday)

If you would like to suggest an alternate location or date, e-mail it to me at the address below. I have volunteered to act as a collection point for suggestions. If you post a reply via news, note the follow-ups are directed to rec.aviation.misc.

The goal is to have it at a place where pilots from British Columbia, Washington, and Oregon could get to within 1 to 2 hours of flying time. (Needless to say, everyone is invited, not just those from the northwest.)

After the comments have been processed another message will be posted announcing the final date and location.

Thanks,  
Tom Roeder

From: sidlloyd@aol.com (SidLloyd)  
Subject: GlaStar Update  
Date: 15 Feb 1995 12:35:20 -0500

Just got the package from Stoddard-Hamilton on the GlaStar with a video of the first flights and performance info. This is with the IO-240 engine turning a prop that delivers 2350 RPM at static yielding a calculated 75% of power (or 93hp) on the initial takeoff roll. They will be retesting with a more appropriate prop. Currently the GlaStar is being converted to conventional gear.

<u>Altitude/OAT</u>	<u>Power (HP)</u>	<u>%HP</u>	<u>TAS</u>
7,500 -5C	100	80	153
	87	70	143
	70	56	130
10,000 -9C	88	70	144
	82	66	140
	70	56	130

Rate of Climb at Gross Weight: 1200 fpm sea level  
600 fpm 10,000'  
300 fpm 15,000'

Cruise speeds will should increase on the production units as changes are made from the prototype tufting tests. Also, using the O-320 engine should yield cruise speeds of 160mph+.

Prototype changes included extending the horizontal tail surfaces from 8' to 10'9" to provide more rotation and stall authority and increasing the rudder and horizontal tail height 12 inches and 2 to 4 inches longer at the top and bottom respectively to increase directional stability. This increased total area 26.22% (fin & rudder). It appears the squarish sides on most aircraft fuselages provide a degree of yaw or sideslip resistance that the sleek design of the GlaStar didn't have. Tests confirmed that the larger rudder provided excellent directional stability. The leading edge of the top 12" of rudder extends forward over the top of the vertical fin which further improved directional stability through aerodynamic centering of the rudder.

Landing approaches are made in the low 60 MPH range. The prototype has 30 degrees of Frise flaps with 35 degrees planned on the production kits. Power-off stall is 47 MPH at full GW

The kit will be sold in three sub-kits through 1995.

Kit 1: \$3,595 Tail group (stabilizer, elevators, trim, rudder, quick change mechanism, fiberglass tips)

Kit 2: \$7,660 Wing group (wings, fuel tanks, ailerons, flaps, fiberglass tips)

Kit 3: \$8,695 Fuselage group (steel frame, composite fuselage, landing gear, seats, panel, struts, controls, fairings, etc.)

Crating charge: \$650

Four years of development have gone into this. I know a couple of 4-place homebuilt kits out there went from concept to first flight in a matter of months. It looks like S-H has really done their homework on this one.

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Sid Lloyd  
Cozy IV under construction, GlaStar in the batter's box...

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From: colin.smith@almac.co.uk (COLIN SMITH)

Subject: CAT AND DUCK

Date: Sun, 26 Feb 95 20:38:00 +0100

Following the question and answers about flying with pets, I thought you might like to see this from the archives.

Original From: DAVE COLLETT

To: ALL

Date/Number: 03/29/94 - 0001673

On: ALMAC - 0121 - ILink.aviation

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Hi Guys,

I've been reading bits and pieces of this forum for awhile and it seems there are several folks taking flying lessons. In an effort to make things easier for them, I'd like to pass on one of my personal techniques for flying instruments. I've been using it for years. It's called the "Cat and Duck Method" of instrument flight.

#### The Cat and Duck Method

1. Place a live cat on the cockpit floor. Because a cat always remains upright, it can be used instead of the artificial horizon. Simply watch which way the cat leans to determine if a wing is low, and if so, which one.

2. The duck is used for the instrument approach. Because any sensible duck will refuse to fly under instrument conditions, it is only necessary to hurl your duck out of the plane and follow it to the ground.

#### Limitations to the Cat and Duck Method

1. Get a wide-awake cat. Most cats don't want to stand up at all. It may be necessary to carry a large dog in the cockpit to make the cat pay attention.
2. Make sure your cat is clean. Dirty cats spend all their time washing. Trying to follow a washing cat usually results in a snap roll followed by an inverted spin.
3. Use an old cat. Young cats still have many of their nine lives left, but an old cat has just as much to lose as you do and will be more dependable.
4. Avoid cowardly ducks. If the duck discovers you are using the cat to keep the wings level, it may refuse to leave without the cat. Ducks are no better in IMC than you are.
5. Make sure your duck has good eyesight. Nearsighted ducks may fail to realize they are on the gauges and go flailing off into the nearest mountain. Very nearsighted ducks may not realize they have been thrown from the plane and will descend to the ground in a sitting position. This is very difficult to follow in an airplane.
6. Use land-loving ducks. It is very discouraging to break out and find yourself on final to a rice paddy, especially if there are duck hunters around. Duck hunters suffer from temporary insanity after sitting in freezing blinds and will shoot at anything that flies.
7. Finally, choose your duck carefully. It's easy to confuse ducks with geese because many waterfowl look alike. Geese are competent instrument fliers, but they seldom go where you want them to. If your duck sets off for Canada or Mexico, you can be sure you've been given the goose.

OK, so it's not a new technique. This procedure has been kicking around pilot lounges in one form or another for years and I actually stopped using it a long time ago. I have a blue instrument card now. It's nothing more than a blue card I carry in my wallet and hold up to the sky on occasion. When the sky matches the card, I go flying.

Good luck with the training.

Dave

## ADS FROM THE INTERNET

Note: Ken will gladly make e-mail contact for anyone interested in responding to the following listings.

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From: William Bensinger <wbensing@fhcrc.org>  
Subject: Quickie 2 Project for Sale  
Date: 2 Mar 1995 20:30:14 GMT  
Organization: Fred Hutchinson Cancer Research Center

I've got a Q2 that is 80% completed but I will probably never finish. I got into the project with 2 other people who were Boeing contract engineers. After 2 years they were laid off and had to leave town. I tried to continue on my own but without success. It a shame to let this almost completed airplane go to waste. It has a new Revmaster 65 hp engine to go with it. I've got nearly \$14,000 invested but will let it go for \$6,000. (in Seattle, Wa.)

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From: Julie\_Schneider@smtp.svl.trw.com  
Subject: IO360C1C runout for sale  
Date: 21 Feb 1995 19:22:23 GMT

I have an IO360C1C core for sale. It came out of an Arrow that forgot to put the wheels down, bent crank--sorry: (All accessories except the fuel system (that goes on my Laser project), including a freshly overhauled vacuum pump.

\$3500 obo.

E-mail me or leave message at 408 743-6308. (Northern California)

Julie Benson Schneider

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From: hallmark@netcom.com (Mark Hall)  
Subject: 4-Place Cozy Project: For Sale  
Date: Tue, 28 Feb 1995 15:25:33 GMT

Dear Fellow Netters,

Due to circumstances beyond my control, I am offering my 4-place Cozy project for sale. This plane is based on the prototype Mark-IV using information supplied to me by Nat Puffer before he decided to re-enter the plans market; as such, it is not identical to the current plans version of the Mark-IV (although the changes are slight).

The fuselage is built and on the main gear. Canard is built, wings are better than 80%, winglets are cut and glassed but not installed. All the primary structure is complete except for the canopy which is in the process of being glassed in. The only structure yet to be started are the wing strakes. The main spar and firewall are completely installed.

Obviously more specific questions must be answered by individual correspondence. Those who have inspected the project during construction have commented that the workmanship is superior.

Bottom line is I'm asking \$11,000. This is little more than the cost of the materials (which I have receipts for) and I believe a real bargain overall. If interested please e-mail.

Mark Hall

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From: schwartz@spk.hp.com (Dave J. Schwartz)  
Subject: Stephens Akro for Sale  
Date: Fri, 3 Mar 1995 16:59:55 GMT

For Sale: Stephen's Akro, formerly "The Dude". 200 HP, C/S, smoke, updated cowling and canopy, KY-97 Com. 525 SMOH, TTAF. Built in 1972. Will consider Luscombe or ? as part trade. \$49,500.

Dave Schwartz - Hewlett Packard, Spokane Division  
P.O. Box 2500  
Spokane, WA. 99220-2500  
Phone: (509)921-3648

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From: mctere@aol.com (Mctere)  
Subject: \*KITFOX IV FOR SALE\*  
Date: 3 Mar 1995 01:07:41 -0500

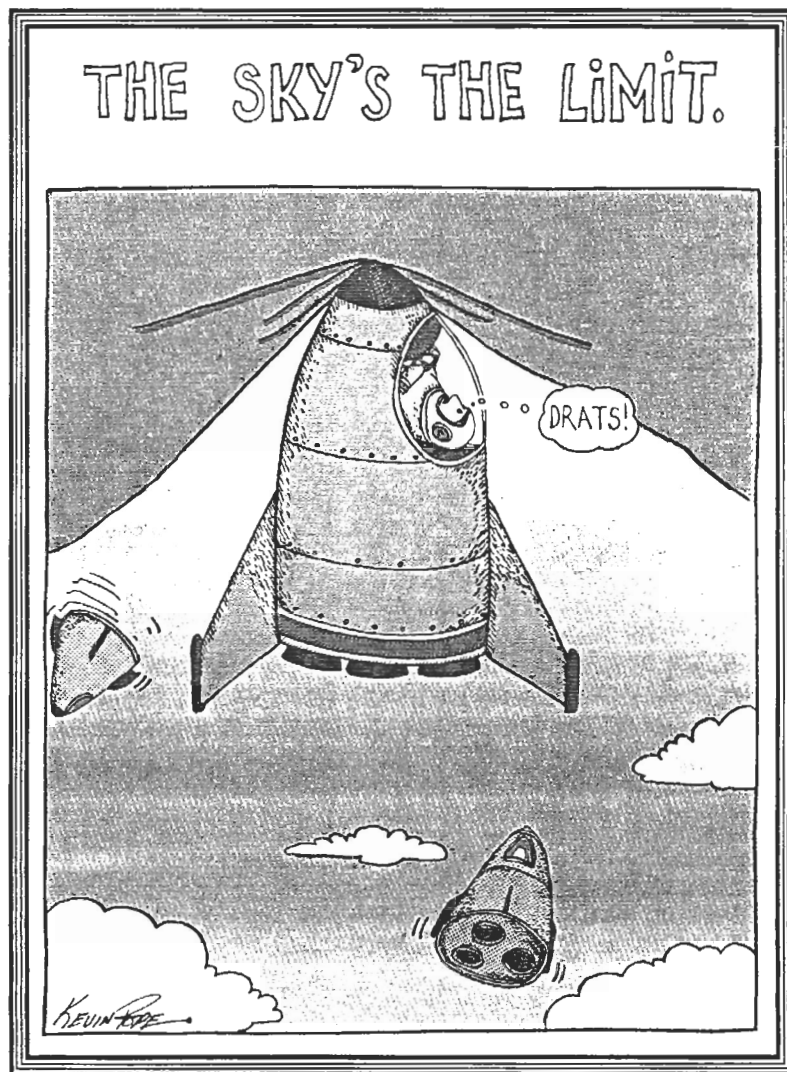
Need to sell my Kitfox IV Project. Unable to finish it due to financial problems.

Great Deal. Over 500 of work on it. Finished only needs engine, and paint—and you can certify it. Cruise speed 105 mph. Stall 29 mph. Best airplane for flying low & slow or cruise. Fold wings and tow or trailer home. Many extras on it. Over \$14,000 invested. Asking \$10.9K OBO.

Please call and leave message at (714) 750-0225.

## CALENDAR OF EVENTS

- March 18** EAA Chapter 52 Metal fabrication seminar at Yolo County Airport Hangar - 9:00am - 4:00pm
- March 25** "Air Fair 95" at Calaveras County Airport - gates open at 9:00am. There will be static displays of Radio Control Aircraft, general aviation aircraft, vintage aircraft and homebuilt aircraft. EAA Chapter 484 will be serving lunch 11:00am to 3:00pm — breakfast will be served by Davids Aviation 8:00am to Noon.  
Contact Karen Davids at (209) 736-4554 for more information.
- March 24 - 26** Phoenix 500 Air Races, Mesa, AZ
- April 9 - 15** Sun 'n Fun, Lakeland, FL
- April 28** Aviation Career Day at Buchanan Field - 10:00am - 1:00pm
- May 20** Fly-in Picnic at Georgetown
- May 20** Antique Fly-in and Airshow at Corning, CA
- May 20** McClellan AFB Guest Day
- May 26 - 28** Watsonville Airshow and Fly-in
- May 26 - 28** Hayward Air Fair
- June 2 - 3** West Coast Antique Fly-in & Airshow, Merced, CA
- June 10** International Young Eagles Day
- June 18** Airport Open House at Buchanan Field - 10:00am to 4:00pm
- July 5 - 9** Northwest EAA Aviation Convention, Arlington, WA
- July 27 - Aug 2** Oshkosh '95





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Reply to Oakland Office

**The C<sub>1</sub>eco**

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(9) Dues Paid, to 2/28/96

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