

The Cleco

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

APRIL 1997

CHAPTER MEETING:

Meetings normally begin at 7:30 PM on the 4TH Wednesday of the month in the terminal building at the end of John Glenn Drive. Latecomers who expect to sit should bring their own chairs. The next meeting will be on April 23, 1997.

The speaker will be Rod Clement from West Coast Powder Coating. He will bring some samples.

CHAPTER MEETING MINUTES :

March 26, 1996, the meeting was called to order at 7:30 PM by Vice President Bruce Hobbs. It was moved and seconded to accept the February minutes as per the Cleco.

Our speaker was Karl Copeland from Propulsion Technologies in Stockton. He gave a good talk about the work they do on constant-speed propellers for warbirds, airlines, as well as for "ordinary" aircraft. They are also now a distributor for LOM aircraft engines. He told an interesting story about the time Sean Tucker lost a propeller in a Pitts S2B with a lady reporter on board.

Ken McKenzie gave a report on the progress of the West Coast Fly-In organization. He and Linda are doing a great job representing Chapter 383 for this event. It has not been decided yet whether the organization will have EAA chapters as voting members, or will be run by an autonomous board of directors. Major fly-ins around the country have both types of organization.

Ken also reported that planning for the Golden West Fly-In at Tracy is just beginning. They have \$2700 left over from last year's event. This year the public will be admitted to the flight line. Airplanes will be roped off, similar to the way it's done at Watsonville.

BOARD MEETING

Board meetings are normally held in Bruce Seguine's hangar at 6:30PM on the Wednesday after the chapter meeting. This month's board meeting was held April 2.

Present were Bruce Seguine, Bruce Hobbs, Louie Goodell, Fred Egli, and Linda and Ken McKenzie. Subjects discussed were the Golden West Fly-In, future meetings, flyouts. Slow membership renewals.

TREASURER'S REPORT:

Bank Balance	Checking	1233.02
	Savings	<u>2749.49</u>
		3982.51

At this time just 66 members have paid their 1997 dues. Please bring your \$20 dues to next meeting or send a check to Louis Goodell. If you see "LAST ISSUE" on the front of your Cleco, believe it. Each copy of the Cleco costs around \$.60, so we can't keep sending it to non-members.

Petars Restaurant has been reserved for our annual Christmas party on December 14th, mark your calendar.

MEMBER NEWS:

Fred Egli has his Belanca flying again, and is starting to wire avionics in the Lancair IV. He also has some Oshkosh reservations he won't be using if anyone is interested.

Ron Robinson has 450 hrs on his Glasair I-RG.

Bob Belshe has ordered a LyCon O-320 engine for his Lancair 235.

Roger Raley has moved his RV6 project to his new hangar in Lincoln.

Scott Achelis now has 120 hrs on his RV6, told how he got stuck at Harris Ranch when weather moved in.

Rick Young invited all of us to his birthday party July 21 at his new house in Payson, AZ. He will be leaving CCR at the end of April. His plan is to buy a pickup truck and build two more Harmon Rockets.

Lyle Powell has 850 hrs on his Glasair III. He told about a Cafe 400 Foundation conference on the application of large V8 engines to aircraft. Many well-known aircraft and engine designers were there. A report on the V8-powered Legend will appear in Sport Aviation soon.

Jerry Greth has a hangar for rent.

Harry Heckman is getting closer to starting the engine on his Lancair 235.

Lisle Knight still working on the empennage of his Osprey II. **Pete Weibens'** Glasair III is getting closer to flying, with resurfaced wings and new landing lights.

Bill Wilson's Glastar project is coming along. Most metal parts finished.

Stu Bowers has nearly finished putting a O-200 in his Cessna 140.

Dwain Duis is flying his Luscomb almost daily.

FLY-OUT SCHEDULE

The next fly-out will be on Saturday following the meeting (Apr 26). Come to Bruce and Nancy's hangar on the west ramp around 10:30 a.m. Phone (510) 825-0766

PLACES TO FLY

When was the last time you planned a cross-country flight down to the exact second, and your fuel burn down to the tenth of a gallon? And navigated that flight without the benefit of modern onboard equipment?

The 33rd annual Hayward-Bakersfield-Las Vegas Proficiency Air Race will be held on May 16, 1997. The "Las Vegas" name this year could be misleading, because for the first time in the race's history the destination is Laughlin, Nevada. The two race leg starts from Hayward Air Terminal, and the first required stop is at Shafter's Minter Field (MIT) near Bakersfield. After timing, refueling, and lunch, the second leg heads southeast across the Edwards AFB complexes and Mojave Desert into Nevada, then terminates at the Bullhead City, Arizona/Laughlin Airport (IFP).

The object of the race is to plan your exact enroute time and fuel burn on each leg, then fly the route to see how close you come to your estimate. Scoring is on a "penalty point" system, so every type of aircraft has an equal chance. Cessna 150's have just as good an opportunity to win as faster, more complex aircraft.

The pre-race planning starts on Thursday, May 15, when race aircraft arrive at Hayward for impound by race officials. You will refuel your aircraft and the race officials will certify the amount of fuel in the aircraft tanks prior to the start of the race. DME's, LORAN's, GPS', and digital fuel flow meters will be covered. Biennials, medicals, and aircraft paperwork will also be checked. While the documents for the pilot are obviously required, your copilot/navigator does not need to be either a rated pilot nor medically current if rated. Student pilots are welcome to participate, but they must be accompanied by an appropriately-rated CFI if the student is registering as the pilot of the race entry; otherwise there are no restrictions on student pilots.

The checkpoints of this year's race course are revealed when attending one of the required safety briefings (3 P.M. and 6 P.M.). Participants can then start to plan their intended race course and can initially decide on ETE's and fuel burn. The participants are to fly their planned course past designated check points which keep all aircraft in an orderly line going the same direction for smooth traffic flow and ease of visibility to other racers. To determine the aircraft's passage over or near the required checkpoints, simple questions are asked about something on the ground at each checkpoint. The questions are answered in a multiple-choice format, and are turned in at the end of the race at the Bullhead City airport.

On Friday morning, May 16, the air race committee will have another briefing where you can gather the latest weather updates and safety notices about the course. After the briefing, you will hand in your estimates to the race starter.

Weather permitting, aircraft are released from Hayward at one minute intervals starting at 9 A.M., with the fastest aircraft taking off first to help prevent aircraft overtaking others in the air.

The first test is how precise your estimated time enroute is to your actual time enroute, measured when you cross the mandatory timing line northwest of Bakersfield. After leg timing, you continue on to Shafter for the required refueling.

After refueling and a lunch stop, you will start the second leg, which is a good challenge to your navigational skills. Usable VOR's are poorly spaced when flying across the Mojave Desert at low altitudes, and the landmarks change with the seasons (what the sectional chart shows and what you see are two different matters). After locating several more checkpoints, you will head for the final timing line near Laughlin. After second leg timing, you will proceed to Bullhead City and the final test...refueling your aircraft again. Your fuel tanks will be filled and you will learn how well you did on estimating your fuel burn.

The race may be over, but the fun is just beginning. Race vans will transport you to the Gold River Hotel and Casino. After express check-in, the Hospitality Suite will be the location of a large gathering and pretty tall lie-swapping. If you have experience fishing, you'll fit right in!

On Saturday afternoon, May 17, trophies and prize money are presented at the awards banquet. The rest of the weekend is free for you explore the sights and sounds of Laughlin or to explain in the Hospitality Suite how you miscalculated something along the race route.

On Sunday morning, May 18, you will be shuttled back to the Bullhead City airport for your flight home...be careful with the weight and balance calculations, for you will need to include the huge trophy that you won. The cash prizes are large, too, but weigh less than the trophies so no need to include to worry about those calculations.

With the help of anticipated sponsors race fees remain the same as last year. Fees cover your room (double occupancy) for two nights in Laughlin at the Gold River Hotel; local transportation to and from the airports in Hayward and Bullhead City; the all-weekend Hospitality Suite (beverages included); Awards Party and Ceremony; trophies and miscellaneous gifts. Fees do not include hotel room at Hayward (if desired for Thursday night) or any personal expenses.

Fees: Pilot/Co-pilot (with room) \$350
Pilot/Co-pilot (without room) \$230
Passengers (sharing room) \$300
Passengers (without room) \$180
One passenger (with room) \$210
One passenger (without room) \$90

Optional fees: If a hotel room is desired at Hayward on the night prior to the race (convenient for pre-race mission planning), the race committee has a block of rooms reserved at the Vagabond Inn at HWD. It is walking distance from the race staging area at the airport. Room rates are \$54 to \$60. There are several other optional activities planned; Colorado River boat tour, golf outing, poker run, etc. Details will be in your race sign-up kit. During the first stop at MIT, lunch is

provided by the Bakersfield 99's for a small cost (usually about \$4).

The Hayward-Bakersfield-Las Vegas Air Race is truly one of the best flying events of the year for Bay Area pilots. It is a learning experience for new pilots, a good refresher for seasoned pilots, and a fun time for all. The race will definitely challenge you, the friendly competition will motivate you, and the experience is certain to teach you something that will make you a better, safer pilot.

For more information, please contact:
Carolyn Harshbarger (Race Registrar)
h (510)782-0515
b (415)591-7611

Bob Hecoeks (Race Committee - Publicity)
h (408)867-1154
b (408)735-2633

Chris Verbil
chris_verbil@trimble.com (or) cverbil@aol.com
h (415)967-4843
b (408)481-7865

EAA NEWS

From: jim@rst-engr.com (Jim Weir)
Subject: EAA Responds Favorably -- Many Thanks
Date: Tue, 15 Apr 1997 16:40:55 GMT
Organization: RST Engineering

The EAA has responded to your email format for my petition for nomination for the Board of Directors. I got a letter from Tom P. yesterday saying that all the emails you sent me with your typed "signature" and EAA number were accepted and that I was in the running. You'll see my ugly mug shot in the EAA magazine in June.

I would like to thank each and every one of you that sent me your nomination and would like to thank the EAA for being on the cutting edge of this form of electronic "town hall meeting" democracy.

Wish me luck at the election on August 5th. I'll post the results here just as soon as I get home.

Jim Weir

TECH TOPIC

Submitted by Ken McKenzie

by Ron Wanttaja

Rule #1 of Homebuilding: Don't sweat the small stuff.

Rule #2 of Homebuilding: There is no small stuff.

The builder told this story at an EAA meeting tonight. Almost twenty years ago, he started building a large, complex, plans-built aircraft. The plane is all-aluminum, four seats, retractable gear, constant-speed prop, a 300-HP engine, and has a "different" (but not unique) layout. Consider it about the equivalent of a homebuilt Bonanza. The designer (a very respected name in the homebuilt world) originally intended the aircraft to be manufactured, but released the plans for a short period of time. The production aircraft flew, and one other plans-built model is supposedly flying.

Anyway, for eighteen years, the builder and a friend have been building two of these airplanes side-by-side. It's been a tough road. Both started out as experienced builders (the partner, in fact, designed and flew his own homebuilt jet) but the complex project taxed their abilities to the max.

The two builders had chipped together for a single hangar for final assembly. About a year ago, the first aircraft was moved to the hangar. The wings were attached, and the engine was installed. As the plane neared completion, the builders invited local experts to help inspect. Two A&Ps were brought in. The FAA came by and signed off the airplane. An EAA Tech Counselor did a final check, and all parties agreed the airplane was ready to fly.

Came the big day. The wives were there, as were a number of friends and other builders. One last check, then the engine was started and the builder taxied out for takeoff.

One last CIGAR check, and he'd be ready to go. "C...Controls free and correct..." Watching the ailerons, the pilot moved the stick through its range. They moved cleanly, with no sign of binding. But something...SOMETHING wasn't right.

He checked the movement again. No binding. Stick right, right aileron down. Stick left, left aileron down... hey, WAIT a second.

The ailerons were reversed.

He taxied back and opened canopy. His fellow builder stuck his head in.

"What's wrong?"

"The AILERONS are backward!"

"Nahhhhh...." Five seconds later, he turned white as a sheet.

Why did all the experts miss the problem? The builder figures the very complexity of the aircraft worked against them. An inspector would come in, see this Bonanza-class homebuilt, and instantly start worrying about stuff like hydraulic lines and prop linkages. The stick would be worked to make sure the surfaces moved and nothing was binding, but the inspectors were probably sweating balance more than the fundamental "does the surface move in the right direction".

The post-event investigation was even scarier. They looked at the aileron linkages. There was no way to hook it up

backwards. They drove the the workshop holding the other airplane. Its ailerons were backward, too.

The plans were wrong.

The builder had designed the production aircraft with a yoke...and had switched to a stick for the homebuilt version. He'd gotten the linkages mixed up, and since he never built one himself, never discovered his problem. It took the builders a couple of additional pulleys and some additional cable to get things working right. The plane made its very successful first flight last Sunday.

No one's perfect. Not homebuilt builders, homebuilt inspectors, or homebuilt designers. Trust No One. Including yourself. Double check, triple check, and look at it again, with the freshest eyes you can.

DO CHICKENS REALLY FLY?

In a recent issue of "Meat & Poultry" magazine, editors quoted from "Feathers," the publication of the California Poultry Industry Federation, telling the following story: It seems the US Federal Aviation Administration has a unique device for testing the strength of windshields on airplanes. The device is a gun that launches a dead chicken at a plane's windshield at approximately the speed the plane flies. The theory is that if the windshield doesn't crack from the carcass impact, it'll survive a real collision with a bird during flight.

The British were very interested in this and wanted to test a windshield on a brand new, speedy locomotive they're developing. They borrowed the FAA's chicken launcher, loaded the chicken and fired. The ballistic chicken shattered the windshield, went through the engineer's chair, broke an instrument panel and embedded itself in the back wall of the engine cab. The British were stunned and asked the FAA to recheck the test to see if everything was done correctly.

The FAA reviewed the test thoroughly and had one recommendation: "Use a thawed chicken."

SHORT FINAL

April Fool fever seems to be running rampant this week. Our spies in the field turned up this (unverified) memo:

"There appears to be some confusion over the new pilot role titles. This notice will hopefully clear up any misunderstandings.

"The titles P1, P2 and Co-Pilot will now cease to have any meaning, within the BA operations manuals. They are to be replaced by Handling Pilot, Non-Handling Pilot, Handling Landing Pilot, Non-Handling Landing Pilot, Handling Non-Landing Pilot, and Non-Handling Non-Landing Pilot.

"The Landing Pilot is initially the Handling Pilot and will handle the take-off and landing, except in role reversal when he is the Non-Handling Pilot for taxi, until the Handling Non-Landing Pilot hands the Handling to the Landing Pilot at eighty knots.

"The Non-Landing (Non-Handling, since the Landing Pilot is handling) Pilot reads the checklist to the Handling Pilot until after the Before Descent Checklist completion, when the Handling Landing Pilot hands the handling to the Non-

Handling Non-Landing Pilot who then becomes the Handling Non-Landing Pilot.

"The Landing Pilot is the Non-Handling Pilot until the "decision altitude" call, when the Handling Non-Landing Pilot hands the handling to the Non-Handling Landing Pilot, unless the latter calls "go-around", in which case the Handling Non-Landing Pilot, continues handling and the Non-Handling Landing Pilot continues non-handling until the next call of "land" or "go-around", as appropriate.

"In view of the recent confusion over these rules, it was deemed necessary to restate them clearly."

A new student pilot was having trouble getting a handle on landings. He asked the old flight instructor, "Why are takeoffs fairly easy to learn and landings so difficult?"

The instructor cocked an eyebrow and said, "Take-off is like the farmer who is standing on a fence post and then jumps off. Landing is like that same farmer trying to jump back up on the fence post. It's just that simple, the runway is your fence post."

GREAT VALLEY FLY-IN

Watts-Woodland Airport May 3&4

We want this Fly-In to be the friendliest, most enjoyable one in the West. To help do this, all pilots and their passengers are invited to be our guests. Members of the Woodland Sunrise Rotary Club offer the following to make your stay in Woodland a memorable one:

Homestay- You are invited to stay with a family on Friday and/or Saturday. Just let us know and we will pair you with a family who will meet you at the airfield and take you home for the night.

Motel Transportation- There will be vehicles and drivers ready to take you to and from local motels if you prefer to stay in one of our many nice motels. A list of motels is available with approximate prices and telephone numbers for reservations.

No fees for registration, parking, or overnight camping for pilots and their passengers. With the return of your registration form, you reserve your pass to the secured parking and display are automatic entry into the aircraft judging (unless you don't wish to be judged), provision for camping space, etc. Judging of aircraft will be in a minimum of three categories: Antique, Classic, and homebuilt.

Free Dinner- All pilots and their preregistered passengers will be our guests at the soon-to-be-famous Great Valley Fly-In Turkey Steaks Barbecue held at the home of a member Of the Woodland Sunrise Rotary Club. This is a direct chance to sample the great food, fine fellowship, and friendly attitude of the people of Woodland who put on this fly-in.

For registration form or more information, call Tom Vail at 916-666-6007 or leave message at 916-666-1751.

EVENT CALENDAR

- Apr 20 & May 18 & June 22 **PANCAKE BREAKFAST** 8:30 a.m. to Noon
Everyone is Welcome!! Fly-In or Drive Over! Sponsored by the Mt. Diablo Pilot's Association MDPA Club House, Buchanan Field Airport (CCR), West Side, 200 Sally Ride Drive (510) 685-7073
Pancakes, Sausage, Juice, and Coffee \$3.50 (members and non-members) Bring your family and friends!! Fly-in and park right in front of the Club House in our spacious, paved tie-down area. Just ask the tower to taxi to MDPA for breakfast!
- April 26 EAA Chapter 512 Anniversary Breakfast, Placerville Airport, CA
- April 26-27 Warbirds in Action Airshow, Minter Field, Shafter, CA
- April 27 Pacific Coast Dream Machines, Half Moon Bay Airport, CA
- May 2,3,4 Paso Robles Fly-In and Meet. Ultralight and Experimental aircraft only. Information: Bill Cartwright 707-745-8747.
- May 3-4 Great Valley Fly-in, 9am to 5pm, Watts-Woodland Airport, CA
- May 16-17 Northern California EAA Fly-In, Corning, CA
- May 17 Corning Antique Airshow and Fly-In, Corning, CA
- May 17-18 West Coast Pilots Expo, Fairplex and Brackett Field, Pomona, CA
- May 23-25 West Coast Antique Fly-In & Airshow, Watsonville, CA
- May 30-Jun 1 48th Annual Moonlight Fly-In, Porterville, CA
- Jun 1 Paso Robles Airshow, Paso Robles, CA
- Jun 6-7 West Coast Antique Fly-In, Merced, CA
- Jun 15 Annual Father's Day Airshow, Concord, CA Display Aircraft wanted.
- Jul 9-13 Northwest EAA Fly-In, Arlington, WA
- Jul 12 20th Annual Grass Valley Air Fest, Nevada County Airport, CA
- July 19th Chapter 393 Picnic, Prior to Oshkosh.
- July 31-Aug 6 45th Annual EAA Fly-In Convention, Oshkosh, WI.
- Dec 14 Chapter 393 Annual Christmas party at Petar's.

THIRD PARTNER NEEDED FOR QUESTAIR VENTURE

Scheduled to fly in 1997. Looking for experienced pilot with retract time.

Current partners are ex-navy pilot and United Airlines captain.

Contact: Terry Theis 510-254-9023
Bruce Milan 510 254-4780

CHAPTER 393 VIDEO LIBRARY

The Video Library has again been expanded with some items donated by Mike Parker. New titles include:

Flying Aces of WW II
All About Aviation Oil, from Shell
Flying Saucers are Real, Volumes I and II

The complete list of titles is listed on the box which is brought to each of our meetings. Check out the offerings, and, if something interests you, CHECK IT OUT.

The rules of use for the library are very simple. It is run on the honor system. You sign out for the tapes you borrow; and you return them at the next meeting so they are available for others.

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. Submissions should be done in writing and mailed directly to the newsletter editor. Submissions may be e-mailed, hand written, typed, or on any IBM diskette (in ASCII or MS Word). The deadline for submissions to the editor is the 14th of every month (newsletter is produced and mailed by the 17th). The editor's e-mail address is: rab@netcom.com.

CLASSIFIED ADVERTISING

Items for sale by club members may be placed in this newsletter for **FREE!** Please submit your **FOR SALE** items to me in writing no later than the 14th 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: COMANCHE-1959 PA24-180

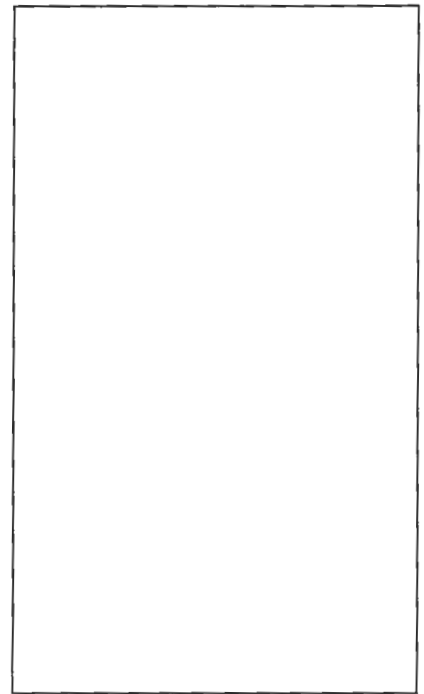
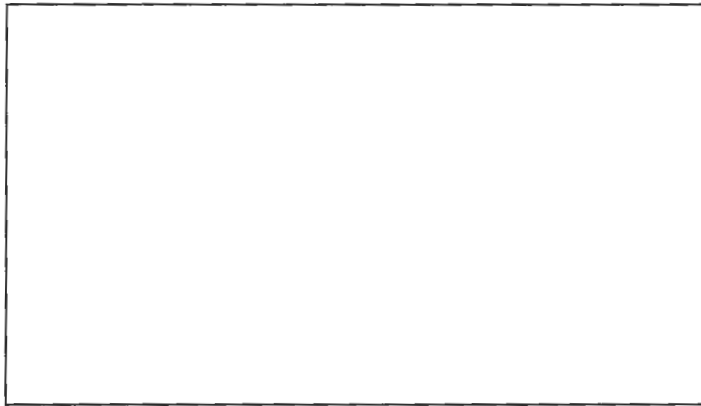
4 Place Intercom, full IFR, Alternator system, 4043TT, 1124 SMOH, 689 SPOH, 3 Light Marker Beacon, Lycoming Engine, Painted 1990, New one-piece Windshield, Dual Nav Com. Annual new 1/97, \$32,000.
Call: Richard O'Connor (510) 798-0743

HANGAR WANTED:

Need partial hangar for Questair Venture project. Willing to share space. Prefer East ramp, but West OK.
Call: Bruce Milan 254-4780

THE EXPERIMENTAL AIRCRAFT ASSOCIATION
CHAPTER #393 NEWSLETTER, APRIL 1997

President:	Bruce Seguine	671-4943
Vice President	Bruce Hobbs	757-0618
Secretary/Treasurer	Louis Goodell	682-4198
Newsletter Editor	Bob Belshe	376-7677



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Next Meeting April 23, 1997