



THE GRAPEVINE



There is a very fine line between "hobby" and "mental illness."

Vol. XXX,



No. 7, July 2011



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July Meeting And Program



NOTICE: Our July meeting will take place at 7:30 P.M. on the 7th of July. The meeting will be at the terminal - KLVK.

Calendar:

Month	Date	Speaker	Topic
June	2	Guy Minor - FAA	Aviation Accidents
July	7 th	Timothy Ong	Lancair Aircraft

Our July Program will feature the speaker Timothy Ong from Lancair Aircraft. He will be speaking on The Evolution of Lancair Aircraft. The story of creating the Lancair Evolution

Timothy Ong, former GM and Engineering Manager of Lancair, will be giving a talk on the creative ideas and thought process which came about to create the new Lancair Evolution Turboprop. He will be talking about the marketing research, design process, testing, flight evaluation, and production of this phenomenal aircraft.

Mailbag:

DUES:

Mark Palajac will be accepting checks for renewing membership. Checks should be made out to EAA 663. You can give them to Mark at the meeting or mail them to his home at:
25 Jacaranda Drive, Fremont CA 94539.

Chapter Airplane Survey:

This month I will be sending out another survey for those that have not yet responded, please take a few minutes and send it in and the totals will be updated in a future newsletter. – Jeffrey

Chapter Newsletter change:

Due to feedback I am changing the remaining pages of the newsletter to a single column. Since converting to electronic distribution, the single column should make it easier reading on the screen for those of you that don't have 24" LCD displays showing 1280 x 960 resolution. Please submit feedback about ANYTHING in regards to the newsletter at any time. This is all about each of you and we want to do what is best for the usability to help you enjoy and get the most out of the newsletter.

Don't forget, submit a photo to our "What is it?" contest and if no one guesses correctly, the monthly prize is yours.

Jeffrey.

June 2011 Minutes

GENERAL MEETING, EAA 663,

6/2/2011 Livermore Terminal

Called to order 7:32 PM by President Ralph Cloud.

Other Board Members in attendance were Dave Dent, Vice President, Mark Palajac, Treasurer and Kirk Knight, Secretary.

GUESTS: Larry Sutter soared in figuratively. He's been a pilot since 1965 but most of that time he's been flying gliders in California and Nevada. He's a longtime member of the US Soaring Association, and an instructor. He's looking at motorgliders and is getting back into powered flight at Flying Particles.

Rick Quince came from North Carolina about a year ago where he flew Young Eagles from a 3,000 foot grass strip (NC27). He's an experienced pilot with commercial, instrument and CFI ratings. He has sticker shock over aircraft prices compared to North Carolina – this must mean he hasn't been looking for a home, a promising sign.

Dave (last name?) has been a sport pilot since last December. He's thinking of building a plane and was promptly lobbied with numerous suggestions.

MINUTES: Minutes, with corrections, were moved and accepted. Either members were too busy reading the Craig Catto piece or the Secretary didn't make any errors.

TREASURER'S REPORT: Mark announced the balance prior to start of the meeting was \$4,819.56 with 80 members. Report moved and accepted.

YOUNG EAGLES: Trina noted we had 6 Young Eagles on May 28 at Tracy on a windy day. Next Young Eagle event June 11 at LVK and then July 9 at TCY.

LIVERMORE AIRPORT EVENT: Wednesday June 29 will be a school tour for students in grades 1-5 starting at 11:00 AM. Bruce Cruikshank will speak. This event won't provide any flying but will provide other Young Eagle information. Members are invited to participate.

TOOLS: Bob Farnham is exploring purchase of a borescope as next tool purchase. Prices range from \$200 to \$900, as performance and capability vary widely. The optimal device as glass fiber, LCD display and can record video to an SD card. Typical video resolution is 640x480 pixels.

It was pointed out that the camera resolution is often better than the LCD screen resolution, so connection to an external display or playback of the recorded video is quite useful. SnapOn offers one of the most expensive units near the top of the price range, but it appears to be more capable than most. Some devices offer the ability to see at an angle to the optical shaft, for example, 90 degrees to the side, to see side walls of a cylinder without requiring the optical fibers to flex.

Bob was tasked with obtaining more details and making recommendations at next month's meeting.

WEBSITE: Brad is updating the website regularly. He noted that past issues of this Grapevine newsletter are on the website, so tell your friends to join. If you're a member but don't have access email Brad Olson for username and password to web@eaa663.org. Send pictures to pictures@eaa663.org

NEWSLETTER – Jeffry Larson announced this month's mystery plane first response was Chuck Ray who identified the plane as a Kitfox Model 7. But he was wrong. Barry Weber correctly identified it as an Avid Magnum and is this month's winner of a Spruce Aircraft flashlight.

ANNOUNCEMENTS: June 16th Board Meeting at Ralph's house in Livermore. July 7th is next Chapter meeting.

CHAPTER ANNOUNCEMENTS: Chapter BBQs will be June 18, July 9, August 20, and September 17. Show up at 5 pm to Bob Buchthal's hangar with coals, bring entre for self and side dish to share. Beverages are provided.

JANAUARY CHAPTER DINNER: We are in search of a new location that will permit us to serve beer and wine without requiring a wedding. Date is January 21st or 28th with space for 80-100 people. Budget is \$600 or less for the hall rental.

PLACES TO GO: Carson City fly in June 18th. Golden West from June 9-11. June 18th Columbia airport. July 9 Pine Mountain with Dick Van Grunsven. Craig Catto shop tour July 25th. Email AlanT@familyradio.com

OSHKOSH: Check with Barry Weber about meeting up in Oshkosh.

MEMBERS FORUM:

Platform update. City wants a drawing and a permit. They want drawings for the lattice for shade.

SAFETY CORNER:

Dave Dent has had some questions from members follow last month's discussion of valve sticking.

Bob Buckthal has a second opinion. It's been 15+ years since he flew a Tri-Pacer and stuck a valve in Los Angeles. Bob confessed his sins at the time and there were some who said, "Everyone knows you're supposed to ream your exhaust guides every 500 hours or so." Bob countered, "No, everybody doesn't know that!"

Today we have a lot of airplanes with a lot of hours. Bob hopes he's the only one in the chapter who's had an experience with a stuck valve, but it wasn't enjoyable for him, his wallet nor his motor.

Bob confirms with Dave, run them hard, and they'll work well until overhaul. He's been reviewing articles and books that suggest it's more of a concern with Lycoming than Continental and the way the valves are designed and way they're cooled.

Continental valves are solid and they transfer the heat to the seat when the valve is closed. Then from the seat to the cylinder head, through the fins and out into the atmosphere.

The Lycoming uses a sodium filled valve that transfers the heat up the valve stem, radiates it into the guide and then into the cylinder head and fins. There is more area in the valve guide than the seat, and the principle is this will offer better and more continuous cooling.

Apparently the problem is that the oil that is to lubricate the valve gets too hot and it cooks. It essentially shrinks the inside diameter of the guide and can stick it tight.

How tight? In the Tri-Pacer it was so tight it failed the cam follower, a solid piece of steel.

He shall who remain nameless asked, "What kind of oil were you using at the time?"

LIGHTBULBS WENT OFF above many heads.

Bob thought back and realized he may have been testing Shell and Mobil 1 synthetic oils, but most likely Mobil 1.

Bob went on to explain that in the Lycoming all oil that is sent up into the rocker box is through the hydraulic lifters. The amount of oil is related to the leak-down rate of the hydraulic lifters. The higher the leak-down rate the less power your engine produces. This is because the valves don't open as soon, don't open as far, and don't stay open as long.

Q: Why does running engine hard improve the engine life?

Dave: Not exactly hard, or at full throttle, but run at optimum temperatures where it gets proper cooling and isn't lugging and dissipating the heat inadequately.

The point about Mobil 1 and other oils, if you have a Lycoming engine there is an AD note that requires you to have multigrade or 100+ oils, or use an additive. We're in experimentals but it's still best practice.

From personal history Dave had 3 valves stick on a flight to Oshkosh when he used Mobil 1 because it was not designed for aircraft engines. Never again.

Q: A few people have had stuck valves on their Mooneys. Sport Aviation has info on reaming a guide, there must be a reason.

Dave warns that if you aren't skilled at doing that to either hire someone else or put aside a pile of money to pay somebody to fix what you're about to damage.

Q: What about low time engines? Dave warns about keeping power settings up in first 25-50 hours.

Q: Seems there are several issues: Lead deposits because you're not running the engine hot enough, then burning oil because you're running too hot.

Dave: I don't want to hear people saying, "I only burn 1 quart of oil in my Lycoming engine in 25 hours." It's likely you're doing something wrong because those engines are meant to use more oil than that. It's how they're designed. Refer to the engine manual, don't guess. Don't follow hangar talk, you'll get a longer running engine if you read the manual

Q: Rotax has a detailed manual with specifications for fuel and oil type.

Q: What's a symptom of a future stuck valve?

Dave: Morning Sickness. If you have morning sickness regularly, it may not be a fouled plug. When you start up first thing in the morning you have problems, but it goes away after a minute the engine warms up. You can cruise all day with no problem, shut down to get gas and when you start up it's stuck.

A wobble test is from '80s, service bulletin 833. It's a fixture to mount on the engine with 7/16th valves, typically on helicopters. Don't think about it as it's expensive and requires extensive training.

Break at for cookies at 8:15. Back at 8:30

THIS MONTH'S GUEST:

Guy Minor, the FSDO located in Oakland provided very graphic presentation of the reasons pilots and builders should pay particular attention to safety in design, construction, maintenance and operation of their aircraft.

Runway incursions are an item of discussion. Most common error is reading back the clearance by rote – but the pilot doesn't execute the instructions. This is a human factors issue. Habits are hard to break.

Now there is explicit clearance to cross runway. You no longer get a single clearance from your hangar, across the field, to the fuel pump.

"Line up and wait" was a change by ICAO because of the world "hold" sounds too much like "go" and can be confused, especially in poor audio.

There is “skill-based error” one is long term memory. Other is conscious workspace. If you don’t pay attention to a detail and you’re distracted briefly, you may make an error. “Sterile cockpit” is a best practice in airlines and can be used in general aviation from start up to exit from the pattern.

He appreciates that EAA talks with kids, who are the future of aviation. He recommends we invite students at high schools and colleges – such as A&P mechanic schools – who don’t have a link with an EAA chapter. Invite them to join! They may not look like you – a lot of them have piercing and tattoo – but the common language is airplanes.

FAA looks at accidents per hour flown or per takeoff and landing. In GA it’s hours flown. The statisticians estimate by fuel sold. For amateur-built the accident stat about the same as ag pilots, about 8x certificated aircraft. EAA says hours flown is sketchy. There have been 68 LSA fatalities in 5 years since the rule was instituted, which is still surprisingly low.

His LSA presentation was interesting and frightening for anyone with a bit of engineering. Aerodynamic loading increases with with airspeed. Drag increases as the square of the velocity. Few light sport pilots realize that a high speed pass or aerobatics put extreme stress on the airframe.

Ballistic parachutes may work – but only if you design them properly to not get rolled up around the spinning airframe.

Powered Parachutes seem to be attracted to powerlines, as they land in them much too frequently.

Too often materials aren’t properly specified. He showed an example of a 254 pound airplane with a complete, and very heavy, full IFR panel.

Light sport are designed to ASTM standards, which are less safe and less expensive than FAR 23 airworthiness standards.

LSA pilots seem to be unaware of the possibility of carb icing on Rotax engines. Humidity, temperature, venturi and butterfly suggests icing is possible, so you may want to investigate carb heating system.

An RV-9 that flew off runway at Sea Ranch demonstrated that a 40 hour flight test program should be a Flight Test Program with full documentation for stalls, clean and dirty, and the performance envelop. Follow all the requirements in the Handbook because one day it will make a difference. Otherwise every flight is a test flight.

He showed a “typical” flight manual from an RV-6 accident complete with bloodstains. The engine was different, prop was different, data was hand written and much was illegible. Limitations should be attached (together) with Airworthiness Certificate.

They’re seeing fuel problems with water in mogas resulting in gooey mess discussed in past meetings.

He suggests that personal protective equipment such as full face helmet makes sense in light sport planes to keep your face out of the dashboard.

An ELT is also a good idea if you want to be found in event of accident, even if it is not required.

Much of his presentation focused on recent LSA changes and some of the more egregious examples of improper design, construction and operation that prior generations of experimental designs have solved.

Since Guy was kind enough to provide some valuable knowledge to experimental pilots, we have graciously not remembered much of what else he said.

Guy.D.Minor@faa.gov

MEETING ADJOURNED 9:45 PM

Minutes respectfully submitted by Kirk Knight, Chapter Secretary

MINUTES: BOARD OF DIRECTORS MEETING, EAA CHAPTER 663, 6/16/11, 7:40 PM, RALPH'S PLACE.

Ralph Cloud, Dick Jennings, Bob Farnam, Mark Palajac, John Goldsmith, Bruce Cruikshank, Bob Cowan and Brad Oliver were present.

Treasurer Mark Palajac reported a total of 84 members and \$4790.98 in chapter funds.

Business: The next Young Eagles rally will be Saturday July 9th at Tracy Airport. About ten Young Eagles were given rides on June 11th.

Tools: Tool man Bob Farnam questioned whether the chapter should charge a user fee on the scales and the prop balancer. That idea died; the \$20 fee for using the trailer will continue. There was much discussion on the proposal to purchase a bore scope. There are a couple models of interest with widely varying capabilities and prices. More research on the matter is coming. Bob will start giving a detailed description of "a tool a month" to be presented in the newsletter.

Planning: There was a discussion concerning the annual dinner. Venues were considered, and the consensus all things considered, we'd use the Veteran's Hall. We inadvertently violated the no alcohol rules at church hall last January. There was talk of using a different caterer to maybe have a tastier dinner. Various speakers were also considered. Some of the names were Peter Garrison, Martha Lunken, and Jackie Warda the local airshow pilot. Suggestions are welcome.

Barbeques: The next barbeques are scheduled for 7/9 (also the date for Young Eagles, the Catto Propeller field trip, and the Arlington Fly In), 8/20 and 9/17.

Dave Dent, not present, passed word that he had lined up two possible speakers for the July meeting, an authority on the history of Lancair, and an aerobatic pilot.

Mark Palajac mentioned that he renewed the chapter's membership in the California Pilot's Association. There website is calpilots.org. Our id is eaa663, and password is lvkeaa

After more airplane talk the meeting adjourned for pie.

Respectfully submitted, Bruce Cruikshank for Kirk Knight Secretary.

Feedback/Questions/Suggestions

Any and all feedback is welcome. Please take a few minutes to send suggestions, tips, corrections or any other feedback to: jeffrylite@comcast.net.

Mailbag: - This was sent to me as a letter to the FAA. I'm certainly glad none of you is the author. I got a chuckle out of it and hope you do too. Jeffry

Letter to the FAA
Federal Aviation Agency,
Washington 25, D.C.

Gentlemen:

I was asked to make a written statement concerning certain events that occurred yesterday. First of all, I would like to thank that very nice FAA man who took my student pilot's license and told me I wouldn't need it any more. I guess that means that you're giving me my full-fledged pilot's license. You should watch that fellow though, after I told him all of this he seemed quite nervous and his hand was shaking. Anyway, here is what happened.

The weather had been kind of bad since last week, when I soloed. But on the day in question I was not about to let low ceilings and visibility, and a slight freezing drizzle, deter me from another exciting experience at the controls of an airplane. I was pretty proud of my accomplishment, and I had invited my neighbor to go with me since I planned to fly to a town about two hundred miles away where I knew of an excellent restaurant that served absolutely wonderful charcoaled steaks and the greatest martinis.

On the way to the airport my neighbor was a little concerned about the weather but I assured him once again about the steaks and martinis that we would soon be enjoying and he seemed much happier.

When we arrived at the airport the freezing drizzle had stopped, as I already knew from my ground school meteorology it would. There were only a few snow flakes. I checked the weather and I was assured that it was solid IFR. I was delighted. But when I talked to the local operator I found out that my regular airplane, a Piper J-4 Cub, was down for repairs. You could imagine my disappointment. Just then a friendly, intelligent line boy suggested that I take another airplane, which I immediately saw was very sleek and looked much easier to fly. I think that he called it a Aztec C, also made by Piper. I didn't have a tail wheel, but I didn't say anything because I was in a hurry. Oh yes, it had a spare engine for some reason.

We climbed in and I began looking for an ignition switch. Now, I don't want to get anyone in trouble, but it shouldn't be necessary to get the airplane manual just to find out how to start an airplane. That's ridiculous. I never saw so many dials and needles and knobs, handles and switches. As we both know, confidentially, they have simplified this in the J-4 Cub. I forgot to mention that I did file a flight plan, and those people were so nice. When I told them I was flying an Aztec they said it was all right to go direct via Victor-435, a local superhighway, all the way. These fellows deserve a lot credit. They told me a lot of other things too, but everybody has problems with red tape.

The take-off was one of my best and I carefully left the pattern just the way the book style says it should be done. The tower operator told me to contact Department Control Radar but that seemed kind of silly since I knew where I was going. There must have been some kind of emergency because, all of a sudden, a lot of airline pilots began yelling at the same time and made such a racket that I just turned off the radio.

You'd think that those professionals would be better trained. Anyway, I climbed up into a few little flat clouds, cumulus type, at three hundred feet, but Highway 435 was right under me and, since I knew it was straight east to the town where we were going to have drinks and dinner, I just went on up into the solid overcast. After all, it was snowing so hard by now that it was a waste of time to watch the ground. This was a bad thing to do, I realized. My neighbor undoubtedly wanted to see the scenery, especially the mountains all around us, but everybody has to be disappointed sometime and we pilots have to make the best of it, now don't we?

It was pretty smooth flying and, except for the ice that seemed to be forming here and there, especially on the windshield, there wasn't much to see. I will say that I handled the controls quite easily for a pilot with only six hours. My computer and pencils fell out of my shirt pocket once in a while but these phenomenons sometime occur I am told. I don't expect you to believe this, but my pocket watch was standing straight up on its chain. That was pretty funny and asked my neighbor to look but he just kept staring ahead with sort of a glassy look in his eyes and I figured that he was afraid of height like all non-pilots are. By the way, something was wrong with the altimeter, it kept winding and unwinding all the time.

Finally, I decided we had flown about long enough to be where we were going, since I had worked it out on the computer. I am a whiz at that computer, but something must have gone wrong with it since when I came down to look for the airport there wasn't anything there except mountains. These weather people sure had been wrong, too. It was real marginal conditions with a ceiling of about one hundred feet. You just can't trust anybody in this business except yourself, right? Why, there were even thunderstorms going on with an occasional bolt of lightning. I decided that my neighbor should see how beautiful it was and the way it seemed to turn that fog all yellow, but I guess he was asleep, having gotten over his fear of height, and I didn't want to wake him up. Anyway, just then an emergency occurred because the engine quit. It really didn't worry me since I had just read the manual and I knew right where the other ignition switch was. I just fired up the other engine and we kept right on going. This business of having two engines is really a safety factor. If one quits the other is right there ready to go. Maybe all airplanes should have two engines. You might look into this.

As pilot in command, I take my responsibilities very seriously. It was apparent that I would have to go down lower and keep a sharp eye in such bad weather. I was glad my neighbor was asleep because it was pretty dark under the clouds and if it hadn't been for the lightning flashes it would have been hard to navigate. Also, it was hard to read road signs through the ice on the windshield. Several cars ran off the road when we passed and you can sure see what they mean about flying being a lot safer than driving.

To make a long story short, I finally spotted an airport that I knew right away was pretty close to town and, since we were already late for cocktails and dinner, I decided to land there. It was an Air Force Base so I knew it had plenty of runway and I could already see a lot of colored lights flashing in the control tower so I knew that we were welcome. Somebody had told me that you could always talk to these military people on the international emergency frequency so I tried it but you wouldn't believe the language that I heard. These people ought to be straightened out by somebody and I would like to complain, as a taxpayer.

Evidently there were expecting somebody to come in and land because they kept talking about some damn stupid son-of-a-***** up in that fog. I wanted to be helpful so I landed on the ramp to be out of the way in case that other fellow needed the runway. A lot of people came running out waving at us. It was pretty evident that they had never seen an Aztec C before. One fellow, some General with a pretty nasty temper, was real mad about something. I tried to explain to him in a reasonable manner that I didn't think the tower operator should be swearing at that guy up there, but his face was so red that I think he must have a drinking problem.

Well, that's about all. I caught a bus back home because the weather really got bad, but my neighbor stayed at the hospital there. He can't make a statement yet because he's still not awake. Poor fellow, he must have the flu, or something. Let me know if you need anything else, and please send my new license airmail, special delivery.

Very, truly yours,
LP

Cool video's found on the internet.

[Lamborghini & a squirrel, fast or lucky?](#)

[Just your average takeoff!](#)

[You mean you can't do this?](#)

[Just another taildragger guy!](#)

What is it? From last month Sponsored by:



Last month only one person correctly identified the Avid Magnum. Congratulations to Barry Weber
Thanks to those that called Aircraft Spruce and mentioned this contest in the newsletter as they have agreed to continue their

sponsorship. Prizes are available thanks to them. Please give them a call with your next order and tell them how much you appreciate their generous donation to our monthly newsletter.

Submit your answer to the newsletter editor to be eligible for a prize to be awarded at the regular chapter meeting.

You must be present to win but points are cumulative.

Winning entries will be decided by the email that is received with the earliest time stamp and the correct naming of the make/model of the pictured airplane as discovered. Winners that correctly identified the winning make/model that do NOT attend the meeting will forfeit the prize to the next available submission. Winning entries will be decided by the email that is received with the earliest time stamp and the correct naming of the make/model of the pictured airplane as discovered. Winners that correctly identified the winning make/model that do NOT attend the meeting will forfeit the prize to the next available submission. Chapter Judge's decision on correct identification is final.



He who checks himself out in an airplane, runs the risk of having a fool for an instructor.

What is it?
Sponsored by:





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