February 27

Max Trescott, a Gold Seal Master CFI and FAA Aviation Safety Counselor, will address our next meeting on an important aspect of aviation safety: "Night Flying". He notes in his web site http://pilotsafetynews.com/ that the Bay Area has substantially higher rates of night flying accidents than other areas. Max has also written books on how to get the most out of your WAAS GPS, and a book specifically on the Garmin G1000.

Dues are due!

Pay now before any possible dues increase – see the Presidential Perspective. And don't forget your national dues, too! Having our members be members of EAA national is an essential component of our insurance.



The Chapter extends its condolences to Don Baldwin, whose wife Carol suffered a massive stroke Saturday the 9th, and passed away Monday morning the 18th.

Presidential perspective:

The next 2 years - update:

Last month I talked about the possibility of changing our meeting place. I have since toured the Old terminal building (previously home to Budget-Rent-a-Car) that Sterling Aviation is going to lease. They will in turn sublease the main room with office and kitchen facilities to the MDPA. The MDPA in turn is interested in having us contribute \$50/month in exchange for use of the main room for monthly meetings, Young Eagle staging, picnic etc. They might even provide a secure area where we could have a lockable cabinet to keep meeting equipment and the chapter loan tools.

I would like to get the club's consensus on this concept. It might necessitate a \$5/\$10 increase in the annual dues for 2009 and beyond to cover the increased obligation. We discussed this (the MDPA room, not the dues increase) at the last board meeting and were mostly in favor of the idea but we agreed to discuss the matter at the general meeting. It is my intention to have a roundtable discussion of the matter after break at this month's meeting. So, stick around and let us know your ideas for the club's future.

As a side note, this potential arrangement with MDPA will allow us a better facility for my hypothetical premeeting potluck meal that I proposed in last month's column. I'm also looking for feedback on this topic as well, and maybe a few volunteers to help pull it off.

Another project that I've set myself is a rewrite of the bylaws. Our current bylaws consist of 4 pages of very few specifics. While I was perusing the EAA web site I happened across a chapter handbook. One of the chapters in this very helpful resource included sample bylaws. In looking over this document I was struck just how lacking our current bylaws are. I feel that by rewriting our bylaws along the lines of this example we could have a much more solid basis for our club operation. The suggested bylaws are available online at:

http://www.eaa.org/chapters/admin/bylaw_guidelines.pdf

I don't expect to have the time to pursue this until after the Golden West Fly-In is over as well as trips to Arlington and Oshkosh. But once I get started I will be looking for any and all help in this task.

Speaking of Golden West, we have opportunities for people who have too much time on their hands and are looking for a challenge. There are jobs that are looking for motivated volunteers. Maybe you don't have a project currently but would love to be more involved in aviation and hang out with a great group of volunteers. Well, Golden West is currently looking for coordinators to take on several of the tasks that make up the Fly-In. In many cases we have volunteers who are willing to help but just need someone to step up and take the lead. This is a chance to feel the sense of accomplishment that comes with running an operation the way you think it should be run.

We, at Golden West, are just beginning the planning process for the '08 Fly-In so now is the perfect time to get involved. Chapter 393 has a long tradition of leading at Golden West. We currently have seen a few senior members step back after many years of service and are looking for their replacements. Now we can go to other chapters and seek new volunteers but I would like to begin the process with Chapter 393. I can personally recommend that it is hugely satisfying and a whole lot of fun.

Anyone interested is invited to give me a call or grab me at the next meeting for more details.

Not familiar with Golden West? Go to our web site: http://www.goldenwestflyin.org/

The Chapter's scales and multipliers for weighing aircraft have been found! Harvard Holmes now has them in his hangar on the NW side of the field. Contact him if you want to use them.

Fly Outs Revitalized by Scott Achelis

Fly-outs are usually scheduled on the Saturday following our regular monthly meeting. If the weather's not conducive for flying, the event is often postponed to the following Saturday. Watch for information regarding the Fly-outs that is sent via email from EAA.393.Flyouts@Gmail.com; and be sure to contact that web address and give us your email if you haven't been receiving Fly-out information.

EAA 393 General Meeting Report January 23, 2008

President Ken McKenzie opened the meeting with a welcome for members and guests.

Announcements:

- 1. Guy Jones noted that Roland Williams got an RV-9.
- 2. We were reminded to support AOPA's Flight Watch program.
- 3. Bill McCoy is scheduling a recruiting BBQ for March or April. Watch this space.
- 4. We have received final approval for the B-17 visit from the airport management. It will arrive Apr 28, give rides 29 & 30 and depart May 1.
- 5. Our visitors includeed Jon Reining, Bill's son, and Jon's flight instructor, Drew

Kemp. Other visitors included Greg Young from Livermore, Frank Jackson who retired from AA, and Bob Smith who will become a member shortly.

Presentation:

Bill Reining introduced Marc Ausman, who talked about the Vertical Power system for experimental aircraft.

http://www.verticalpower.com/

Marc Ausman is a former Naval Flight
Officer who then got his MBA and eventually
worked for Eclipse Aviation for a while.
Subsequently, he and some friends had the
idea for Vertical Power and now he works
full time on that product.

Marc finished his RV-7 about 300 hours ago and has been flying with the Vertical Power system installed for about 2 years and 200 hours.

The Vertical Power unit is a microprocessor controlled power distribution system for experimental aircraft. It takes advantage of the shift from mechanical to solid state electronics. Everyone has an EFIS system in their aircraft now, even the commercial folks. But, until now, power distribution and switching systems were not available.

Newer aircraft have much more electrical equipment and more dependence on electrical instruments. The electrical system has become much more important.

The "state-of-the-art" in power distribution today for boats, trucking, high-end autos and large aircraft is to have a small switching panel control power over a network. Vertical Power brings this concept to our experimental aircraft.

Marc's RV-7 has almost no electrical power switches. Even the starter button is connected to the power control unit to electronically actuate the starter contactor.

The Vertical Power control unit weighs only 2.5 lbs., it can mount almost anywhere, and it has power connectors for larger loads and D-sub connectors for smaller loads. Two control units can be used for complicated aircraft, such as a Lancair IV-P or maybe an RV-10. For smaller aircraft, certainly the RV series through the RV-9, one unit is plenty. The remote power controller gets the power off the panel.

Since the power controller combines the functions of switching, circuit protection, and current monitoring, it greatly simplifies wiring your aircraft. The system does not switch the highest loads, the battery contactor and the starter, but it controls the traditional contactors.

The microprocessor allows great flexibility and simplification in wiring installation. You can configure the system to assign most any function to any wire, so you just hook it up and then configure it. The system understands things like trim systems and other common aviation needs. The configuration settings can be stored on a USB thumb drive.

The microprocessor makes it possible to recognize what flight phase the aircraft is in and switch modes accordingly. The system will recognize phases such as PreFlight (test the lights via remote control), Before Start (avionics off, engine instruments on), Start (run the starter, monitor oil pressure), After Start (alternator on, avionics on), Taxi, Run Up, Takeoff, and so forth. For each phase of flight, you decide what equipment should be on. Then during operation, indicators confirm operation of the equipment. The system also uses its display to show engine parameters. This display is also configured for each phase of flight.

The system can also display checklists corresponding to one or more flight phases.

The system also allows you to turn devices on and off independently of the flight phase

settings. This is done through menus on the display panel. A few external switches are also provided – these can be configured to quickly turn on or off selected circuits.

When the system detects a fault, it displays the appropriate checklist with suggested actions, allowing the pilot to determine what action to take. Some of these checklist procedures are automated, such as attempting to recycle a failed alternator. There are voice warnings for alarms.

The solid state switches come from a company in Germany. They do the switching, the short circuit protection, and the current monitoring. This allows the unit to detect burned out bulbs and similar failures. The unit also provides over voltage protection for the alternator.

Other features include a landing light wigwag, soft start and dimming for lights, configurable flap positions, and flap disable above the flap limit speed. There can be rules such as if A is on, then turn B on. There is a master switch auto-shutoff at the end of the flight after a certain length of time.

A remote key fob functions to turn on the system and provide some remote control, such as turning lights on and off from outside the aircraft for preflight checks.

The display portion uses a modified Linux O.S. with a 20 second reboot time. The control box portion uses a real-time O.S. with a reboot time of ½ second.

The Mag switch is not controlled by the computer, but it is monitored to be sure it's correct and to select phases of flight.

The system supports dual switches on critical components, such as trim, flaps and starter. Trim circuits are regulated to 12 volts (on 24 volt systems) and slow speed trim is also provided. Runaway trim protection is provided.

An "emergency" button is provided. It brings up 4 choices: Engine failure, Engine Fire, Alternator Failure, and Electrical Fumes; when you select one, the emergency checklist appears immediately. The system may also do some preconfigured activities. You may also "restore" back to the previous configuration. None of the activities will stop the airplane from flying.

Current prices are approximately \$10,000 for a VP-200 two controller unit; \$6500 for a VP-200 single controller unit; and \$3500 for a VP-100 (with smaller display screen).

A big benefit of the system is the time saved in wiring and configuring the airplane.

After the presentation, the audience had several questions:

Q: Will it detect a run-on starter?

A: It's in the hardware, not yet in the software.

Q: Is confirmation required for emergency action?

A: No, use the "restore" button if needed to cancel the action.

Q: How much RFI testing has been done?

A: Little, but no problems found.

Q: How is the display visibility in bright sunlight?

A: It works well in the RV-7 with sun on the display.

Q: How many units are flying?

A: 6 are flying; 30 to 40 have been sold.

Q: Will you offer a version for certified aircraft?

A: Maybe, but not likely, as it would require an entirely different business model.

Q: What about installation assistance?

A: Yes, the factory will help you.

Q: What's your projected volume?

A: Experimental completions are 1000+ per year.

Q: Is there a "key" in the FAA security sense?

A: Yes, the key fob or panel key code.

The meeting took a break and Marc demonstrated the operation and functionality of the unit on a demonstrator.

Then we adjourned for the evening.

EAA 393 Board Meeting Report

February 5, 2008

Attending: Ken McKenzie, Bill Reining, Harvard Holmes, Guy Jones, Louis Goodell, Bill McCoy

- 1. The Treasurer reported \$1537.18 in checking and \$2648.29 in savings.
- 2. Bill Reining reported that Sarah Ratzenburger was unable to make the February meeting. Future speaker ideas were discussed. He has several possibilities that he will try in order.
- 3. There was some discussion of whether the Chapter should buy items (e.g. "good" crimpers) for common use. This goes along with other discussions in having a "space" for the Chapter, both for meeting and for storage of such items.
- 4. Bill McCoy noted that he is still focusing on a recruitment BBQ, to be held hopefully in April along with our regular meeting (e.g. at 6 PM). This BBQ would be similar to our July picnic, but at 6 PM. A "gee whiz" program would be desirable.

He asked if the Board would endorse putting membership applications out in public. This would include local and national forms.

Charlie Day from the Pleasant Hill Chamber of Commerce will have a plaque for us at the coming meeting of the C of C to recognize our membership. We can advertise out of the C of C at Pleasant Hill and Concord. The Chapter is sponsoring the monthly C of C "mixer" on September 13. The Concord C of C will also attend and possibly the Martinez C of C as well.

Our association with the MTZ race car will continue this year and we will have our web site noted on the race car.

5. Ken has been talking to Keith Freitas in the Airport Office and has the concurrence of the Airport on the B-17 visit. They have stanchions for us to use.

Sterling Aviation is very enthusiastic about the B-17 and there is some possibility of a fuel subsidy.

Dick Sperling will help to contact veterans who might like to see the B-17. Bill McCoy can also help in this regard.

Bill Reining has a Memphis Bell DVD that has a good section on the B-17.

Guy Jones notes that there is a P-51 at Vacaville that would also make a good static display with the B-17.

- 6. Ken McKenzie is keeping in touch with MDPA on possible clubhouse opportunities. The latest news is that Sterling Aviation (Mike Bruno) has leased the Old terminal building (formerly Budget) from the Airport until Sterling Aviation's new building gets started (on that site). He wants to sublease it to MDPA, who will, in turn, sublease it to Chapter 393 for our monthly meetings for a nominal fee. See the President's Perspective and attend February's meeting to discuss this.
- 7. EAA's new web calendar of events was noted. Harvard Holmes was tasked to add our notable events to the calendar.
- 8. The desire for a dinner meeting before our regular meetings continues. For example, at the CAF (Commemorative Air Force) members must bring food for 4 people when they come. This results in a lot of home made food. For our meetings, it was suggested that we need to find several "angels" to bring food to get a similar process started. There would be a donation jar for those who were not able to bring food.

Bill McCoy asked about alcohol. It appears there is no airport prohibition, but EAA wants nothing to do with it. So any alcohol funds or arrangements must not go through the Chapter.

Informal Fly Out to Lampson

January 16, 2008

The gang at the NW hangars has apparently determined that the weather is better on Wednesdays than Saturdays, so they often go somewhere for lunch.



Bob Sinclair parks his Lancair 320.



Fred Egli, Ron Robinson, Bob Sinclair, Phil Jenkins, Bob Belshe, Mike Maxwell.



Mike Maxwell, Fred Egli and Bob Belshe discuss Mike's new larger engine.

Informal Fly Out to Auburn

February 6, 2008

The NW gang is at it again.



Bucky's friend, Bucky (from Truckee), Bob Belshe, Phil Jenkins and Ron Robinson check out Bucky's Lancair 360.



Bob Belshe flies around the clouds near the "Mothball Fleet."



Bob Sinclair's Lancair 320

Lancair Fly Out to Hollister

February 10, 2008

About 10 Lancairs showed up.







Advertisement CCR hangar space (west side) available for a project/small a/c \$210/mo. Pete Wiebens, day 510-632-7676x1174, eve 925-933-7517

Thanks to our Donors and Sponsors



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Thanks to our Donors and Sponsors!



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Concord, CA 94527-2725



Fly Out (Sat.)

Mar 1

Board (Tue.)

Mar 4

Meeting Schedule (2008)

General (Wed.)

Feb 27

Our meetings are open to the public. Everyone should consider themselves invited. EAAers might make someone else happy by introducing them to our Chapter, getting them involved in projects, fly outs and just plain good old camaraderie. Our normal meeting time is 7:30PM on the 4th Wednesday of the month (except July, November

Wednesday of the month (except July, November and December) at the old terminal building on John Glenn Drive just south of the tower.

Chapter 393 Fly-Outs are open to chapter members

chapter 393 Fly-Outs are open to chapter members and their guests. Email <u>EAA.393.flyouts@gmail.com</u> (preferred) or meet at the Buchanan Field terminal building at 10am, and we'll try to match people and airplane seats to take as many as possible. If the weather is bad, the fly out will be postponed to the next Saturday, possibly with a change in destination.



We are on the Web! http://www.eaa393.org
Email: nle@eaa393.org

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