

Hendricks County EAA Chapter 1311

Monthly Newsletter — January, 2005

From the Chapter President

By Dale Gustafson

I was very pleased at the turn out for the January meeting. I was able to give my thoughts and ideas for the year ahead of us. We have the permission of the Airport Authority (BAA, too) to use Gordon Graham Field as the chapter's home base for the year. The meetings will be held on the first Wednesday of the month. The months when the sun is up late, the chapter may consider doing additional or other things. I am finding there is a lot going on in general aviation on the west side of town and plan to take advantage of it.

I have had an "idea brainstorm" about things to discuss during the meetings, and plan to call it "Pet Peeves in Aviation." We all have them and maybe this will be a time to get one or two of them off your chest. This will become a monthly feature at every meeting.

My plans are to be at my Florida place when the February meeting is held, so Dennis Crawley will chair it. My schedule for March has me back in Indianapolis again; i.e. doctor's appointments. I will have an interesting subject for discussion.

Have a good month!

January's meeting

January's meeting was held on Wednesday January 4, 2004, 2005 at Hendricks County Airport. President Dale Gustafson opened the meeting with the Pledge of Allegiance.

IN ATTENDANCE: Noted as in were Dave Clark, Dennis Crawley, Troy Grover, Dale Gustafson, Ken Hill, Steve Lathrop, Glen Matejcek, Michael Mossman, Gary Reynolds, Kim Shumaker, Vern Sullenger and Paul Vogel. If you were there but we didn't record it, let us know.

GUESTS: Skip Budny and Tim Sparks

TREASURER'S REPORT: Vern Sullenger reported that the chapter has more than \$2,000 in the bank with only annual EAA expenses and state tax filings due. With the reduced annual expenses the chapter board voted to reduce dues to \$10 per year.

NEW BUSINESS: New president Dale "Gus" Gustafson introduced himself and took a few moments to talk about his flying experience and long-time commitment to the EAA in several chapters.

Dale Gustafson wants to use the Operations Building at Hendricks County Airport as the "permanent" meeting place, with regular date (first Wednesday of the month) and time (6:30 p.m.).

Chapter 1311 has a few EAA2005 calendars for sale for \$12 each. See Michael Mossman for a calendar.

Dennis Crawley will be getting some embroidered Chapter 1311 hats. Price and available TBA.

50/50: No 50/50 was conducted.

PROGRAM: After the meeting those in attendance viewed Glen Matejcek's RV-8 project at his Avon home. See feature story at end of newsletter.

Welcome New Members

We have had many guests over the past few months and many people have expressed an interest in our organization. Look around and see if you have any friends, family members or acquaintance that are interested in aviation. Take the time to invite them as a guest to the next meeting. If you see somebody new, introduce yourself, welcome him or her, and invite them to

sign up. Also current members, please consider volunteering for the Membership Committee.

To get a downloadable PDF membership application see http://www.eaa1311.org/PDF_files/membership_application.pdf

Dues are Due!

EAA Chapter 1311's dues for 2004 are now due. Send your \$10 to the treasurer, Vern Sullenger, 1763 Ramsey Lane, Plainfield IN 46168 317-839-8728. Thanks!

Chapter Survey Coming Soon

In order to better serve the members and improve attendance and participation, Chapter 1311 Vice President Dennis Crawley will be conducting a survey of its members within the next couple of weeks. He'll be asking questions about your interests, needs and expectations. We'll also try to find out what you like and don't like about the chapter.

This is your chance to help make the chapter into something that fits you. Please participate in the survey by completing the form and returning it promptly.

Road Trip to WPAFB Planned

Bloomington EAA Chapter 650 is planning a road trip to visit Wright Patterson Air Force Base museum in January and have offered to partner up with Chapter 1311. If you are interested in visiting the museum with our chapters please contact Michael Mossman at michaelandkatie@tds.net or 1-765-483-9533.

Building Tip

Most of Chapter 1311's builders have been busy constructing sheet metal aircraft from kits. Because of the completeness of today's kits they generally don't have a lot of scratch fabrication to do. Nonetheless, nearly every project has its occasional custom part that just isn't available from the kit manufacturer. For fabricating some sheet metal parts there is a tool found in nearly every shop that's perfect for sheetmetal working, and that's the Black & Decker WorkMate. For the rare handyman (or handywoman) who hasn't seen one, they look like a little folding workbench with a wooden top. The top is split in half and works like a clamp with two long hand-cranked screws. Tabletop or free standing, they both are super handy. Available for about \$60 as the name brand tool, you can also find the generic equivalent at Harbor Freight Tools and other stores for less than half that amount (Big Lots had them for \$10). I've been using a cheapie for several years and find it indispensable.

First off, sheet metal parts should have the edges filed and ideally polished. No matter how good your shear or snips will cut you'll still need to clean up that edge. It's pretty tough to hold a flimsy piece of sheet metal on the side of a workbench and file its edge. Try holding it down with a clamp and you'll only get frustrated getting it positioned with the clamps constantly in the way. Even worse, what if you or hand slips? Sheet metal can leave some nasty and painful cuts in your skin. Try clamping your part in the WorkMate with about 1/2 to 3/4-inch sticking up. From here it's pretty easy to dress that rough edge with your file. Next, take a little sandpaper and polish the edge; you'll look like a pro.

But what if your part is too long to fit in the WorkMate? Easy: Just clamp a few scrap boards in the WorkMate's jaws and slip the part in between them. If your part is about three to four feet long, try squeezing the ends of the boards with a couple of short bar clamps. Long, awkward parts are now easy to handle and dress down to meet your exacting standards.

If a WorkMate is a useful and versatile tool, think of what you

could do with two of them. When you need to work a part that's about six to eight feet long, clamp the part between a couple of boards about that long and hold it all in two WorkMates strategically spaced several feet apart.

You'll occasionally need to bend some sheet metal but you might not have a brake that's wide enough. You can use your WorkMate as part of a low-tech bending brake. Put a 1/8th-inch radiusing bit in your router and round the edge of one of the WorkMate's wooden jaws. This will usually be a generous-enough radius for most any gauge metal that you might successfully bend in a WorkMate. Clamp the piece in the jaws and gently tap the part over with a plastic-tipped hammer.

If you need a better bend without the inherent warp that accompanies a hand-hammered bend, try making a bending die from hardwood using your router and positioning it in the WorkMate. Turn the cranks on both sides of the clamp for an even bend. Yes, it really works.

There's more that you can do with a WorkMate. Have you had trouble assembling split-rim wheels once you added the tires and tubes? Try squeezing the assembly together in a WorkMate. It makes it easy to slip the wheel bolts into position without fighting the tire and tube.

My generic WorkMate had a couple of notches cut into one edge of one side of the clamp. I used those notches to securely hold a Bernz-o-Matic torch so I could heat and stretch the flange of a metal fairing that I was making. You can also use it to hold wooden blocks, broom handles, pipes or chunks of metal - whatever you need - when you need a quick shaping buck or pounding block for forming metal parts.

When it comes time to make a large forming block from plywood, nothing beats a WorkMate when it comes time to run a router along the edge or a belt sander to clean it up.

Need to sand your composite cowling? Clamp a long two-by-four in your WorkMate then slip your cowling part over the two-by-four. Instant sanding rig. Heck, when you're finished sanding paint it right there.

Finally, at the end of the work session, lean back and rest on the WorkMate (yes, it's the right height!) and admire your craftsmanship. Building airplanes is fun and easy with the right tools.

Completed RVs Top 4,000

From AOPA ePilot, January 14, 2005

Van's Aircraft Inc. rang in the New Year with the number 4,000 in mind. That's because the number of confirmed, completed kits that have made first flights reached the milestone figure on December 27. Two more were reported the next day. Van's new RV-10 kits soon will add to the number of RVs flying. More than 300 RV-10 kits have been shipped, and the first ones are expected to be completed during the first half of 2005. An average of nearly three Van's Aircraft kits take to the air for the first time each day, according to the company.

Van's RV DVD Program Available

Van's Aircraft is sending the EAA a "Chapter Program in a Can" (Well, in a DVD sleeve anyway).

Van's Aircraft is sending their 35-minute DVD "The RV Story" to all EAA Chapters at no cost. The presentation is not just sales material; it gives an accurate idea of what goes into building one of the world's most popular kit aircraft. Model choices, building techniques and costs are all covered.

Chapter President Gus Gustafson has requested a copy for Chapter 1311. They'll also be sending a new Van's accessories catalog, full of stuff that can be used on any homebuilt airplane, too.

Gus will have the DVD in a few weeks. We'll be able to use it as a backup program and also as loaner material for any chapter member who is contemplating an aircraft project, or just wants to sit back and enjoy the show. For more details contact Gus at DALEFAYE@msn.com.

FAA Issued AD for Bombardier-Rotax Engines

From AOPA ePilot, January 14, 2005

The FAA has issued an airworthiness directive for Bombardier-Rotax GmbH type 912 F, 912 S, and 914 F series reciprocating engines. This AD supersedes a previous AD and requires removing the existing part number oil dipstick from service and installing a new oil dipstick. It also requires similar actions to the previous directive. The AD becomes effective February 15. For more information, visit the Web site <http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/05-486.htm>



NOTAMs are Important

Here's what happens when you don't properly "NOTAM" (notice to airmen) an airfield under construction. A lack of communication over in Iraq caused a near disaster.

Last week, one C-23 Sherpa flew into a U.S.-operated airfield in Iraq during the day and saw there was construction equipment on the runway. Yet there was no NOTAM. A trench was being dug in the runway, and it was not marked. It's a long runway and they just landed beyond the construction. They filed a safety hazard report that was immediately forwarded to our higher headquarters and to the Air Force wing based here.

Well, it seems the construction continued and the runway was still not marked or NOTAM'd or anything. A C-130 landed on the runway the night of the 29th and didn't see the construction. It wound up going through what is now a large pit on the runway. A few pictures are attached. The C-130 was totaled.

There were several injuries to the crew and the few passengers that were on board but luckily nobody was killed. Quite the set of failures somewhere in the system regarding this improper construction and no notifications about it.

A C-17 would have stopped just in time using those reversers!
Contributed by Tim LeBaron



Pilots Required to Report Laser Incidents

EAA e-hotline, January 12, 2005

In the wake of recent incidents involving laser devices pointed at aircraft, Transportation Secretary Norman Mineta announced Wednesday that beginning January 19, all pilots will be required to immediately report any laser sightings to air traffic control. Sec. Mineta, speaking at FAA's Oklahoma City office, said that ATC would then advise pilots operating in the area of the incident via Automatic Terminal Information Service (ATIS) as well as inform law enforcement officials.

Mineta said that nothing suggests these incidents are related to terrorist activity. Rather, he called incidents the work of pranksters and copycats.

"Shining these lasers at an airplane is not a harmless prank, it is stupid and it is dangerous," he said. "We will work with police to identify the source of the lasers. We will do everything we can to make sure each case is aggressively prosecuted." Pilot reporting procedures and other information is spelled out in Advisory Circular No. 70.2 issued Wednesday.

FAA and other government studies indicate that exposure of air crews to laser illumination may cause hazardous effects, such as distraction, glare, afterimage flash blindness, and, in extreme circumstances, persistent or permanent visual impairment. About 400 laser-aircraft incidents involving aircraft have been reported since 1990, 31 since New Years Eve alone.

Racer and JPG MOA Comment Period Extended

From AOPA ePilot

Due to the great controversy of the proposed expanded special-use military airspace in Southern Indiana, the FAA has extended the comment period to January 31, 2005.

The proposal would create two military operations areas, the JPG and Racer MOAs, for the U.S. Air Force. The AOPA has recommended that the floor of the proposed JPG A MOA be raised from 500 feet above ground level (AGL) to 3,500 feet mean sea level (MSL) to allow traffic to fly below the special-use airspace. If the floor of the MOA is not raised, one of the main Victor airways, V51, connecting Indianapolis, Indiana, and Louisville, Kentucky, would be essentially off limits to general aviation pilots. The airway would be restricted below Flight Level 180. The other Victor airway that connects the two cities, V53, has a minimum en route altitude of 10,000 feet MSL, which is near the operational ceiling limit of many general aviation aircraft.

The Racer MOA would abut the western and southern boundaries of R-3401A/B (Camp Atterbury) and extend west for 4 nm and south/southwest for 23 nm. The JPG MOA would be added to the north and west boundaries of R-3403A/B and extend north for 9 nm and southwest for 36 nm. IFR operations at some of the public-use airports inside the JPG MOA would be limited.

Comments on the proposal should be sent to:

J. Mark Reeves

Federal Aviation Administration

Central Terminal Operations

Attn: Manager, Airspace Branch (AGL-520)

2300 East Devon Avenue, Room 247

Des Plaines, IL 60018

For a PDF reprint of an article with sectional chart of the proposed MOAs and an excellent article appearing in the Columbus (IN) Republic, see

http://www.eaa1311.org/PDF_files/RACER_MOA.pdf. This is a 184 KB file.

Dedicated to All Who Flew Behind Round Engines

We gotta get rid of those turbines, they're ruining aviation and

our hearing

A turbine is too simple minded, it has no mystery. The air travels through it in a straight line and doesn't pick up any of the pungent fragrance of engine oil or pilot sweat.

Anybody can start a turbine. You just need to move a switch from "OFF" to "START" and then remember to move it back to "ON" after a while. My PC is harder to start.

Cranking a round engine requires skill, finesse and style. You have to seduce it into starting. It's like waking up a horny mistress. On some planes, the pilots aren't even allowed to do it...

Turbines start by whining for a while, then give a lady-like poof and start whining a little louder.

Round engines give a satisfying rattle-rattle, click-click, BANG, more rattles, another BANG, a big macho FART or two, more clicks, a lot more smoke and finally a serious low-pitched roar. We like that. It's a GUY thing

When you start a round engine, your mind is engaged and you can concentrate on the flight ahead.

Starting a turbine is like flicking on a ceiling fan: Useful, but, hardly exciting.

When you have started his round engine successfully your crew chief looks up at you like he'd let you kiss his girl too!

Turbines don't break or catch fire often enough, leading to air-crew boredom, complacency and inattention.

A round engine at speed looks and sounds like it's going to blow any minute. This helps concentrate the mind !

Turbines don't have enough control levers or gauges to keep a pilot's attention. There's nothing to fiddle with during long flights.

Turbines smell like a Boy Scout camp full of Coleman Lamps. Round engines smell like God intended machines to smell.

Pass this on to an old WWII pilot (or his son who flew them in Vietnam) in remembrance of that "Greatest Generation"

Author unknown (thanks to Jeff Chapman for this contribution)

Boone County Airport Works Toward an STC

An unusual cross-continental association of owner pilots with a common interest has been formed with a mission in mind: keep some older aircraft with expensive propeller ADs flying affordably.

As Wayne Deckard, local owner of a late 1950's vintage Twin Aero Commander found out, operating an aircraft equipped with Hartzell propellers using the HC clamps can be hideously expensive. The clamps for the propellers must be replaced at engine TBO. Deckard's Commander has two three-bladed props; at \$1,700 apiece for the clamps, that figures out to about ten grand for a few chunks of metal. Adding insult to injury, the North American Navion that he and his uncle, Don Deckard, are restoring uses the same clamps on its two-bladed Hartzell propeller.

Looking for a lower-cost way of getting these propellers air-worthy, Wayne came in contact with Joe Anderson, a bush plane pilot based in Anchorage, Alaska. Anderson, who plies his trade around central Alaska, was experiencing the same problems as the Deckards were: how do you keep these older aircraft in the air for a reasonable amount of money? The communities in Alaska are extremely dependant upon aircraft for transportation and supplies. If an aircraft is removed from active service some of the smaller towns have no way of traveling or trading with their neighbors.

Anderson often flies to areas that are so remote that aircraft mechanics might not visit the field for three or more years at a time. If an aircraft "times out" at one of these remote fields it may be grounded there for many years.

Because of the great many aircraft in his area needing more affordable propeller clamps, Anderson has researched the requirements for earning an STC for third-party replacement clamps for these Hartzell propellers. Hiring a metallurgist, Anderson has an alloy and design that "copies" the Hartzell clamp but greatly increases its strength. Anderson's intention is to remove the AD on the clamp.

Wanting to bring the clamps to market, Anderson next learned of the expensive testing process required: the props and clamps must be installed on actual "zero time" engines and ground operated at cruise power. At 100 hours into the testing process the clamps must be removed and tested with dye penetrant. If they pass without cracks they are re-installed and operated to the engine's TBO. Once TBO is reached, the clamps are removed and tested again. If they pass then the parts and paperwork are submitted to the FAA for an STC.

Because the clamps are specifically for propellers, no test clubs can be used.

Interested more in keeping his bush planes in the air than in earning a profit on the STC, Anderson thinks that a price of about \$500 or less per clamp will help pay the costs of certification and manufacturing. Anderson currently plans on testing the propellers and clamps on Lycoming O-435 and Continental E225, 185 and 165 engines.

Once the clamps are tested and STC'd for these four engines, Anderson has a plan for adding more engines using the same propeller clamp. According to Anderson, the process includes calculating and measuring the harmonic resonances of the engines and propellers then operating them for 100 hours in that RPM range. If they pass, then the FAA should add those engines to the STC.

Because of the remoteness of the area and sparseness of the population, Alaska doesn't really have enough mechanics available to work on such a project. Basically, the four engines are started and run continuously until they reach TBO, shutting down only to run tests and do oil changes (plus other light maintenance). That's where Wayne Deckard came into the project.

Deckard noted that Indiana has a huge amount of qualified aircraft mechanics, many unemployed or underemployed, who may want to participate in the project. Deckard is looking for volunteers to monitor the engines through the operation process. Some of the geared Continental engines will TBO at only 1,200 hours, but a few of the others will need to run the entire 2,000 hours. That's running non-stop for almost 12 weeks!

Obviously, these are going to be an expensive project. Some of these engines will consume up to 13 gallons of fuel per hour. Multiplying that fuel consumption times the projected number of hours, the fuel bill alone will tally to about a quarter million dollars. Add in the cost of stands, safety shrouds, engines (the engines will be completely "used up" in the process), clamps and freight, Anderson and his investors will need to pony up a considerable sum of money.

Deckard will be conducting Anderson's tests at Boone County Airport in Lebanon. He is looking for volunteers to "babysit" the engines, assist with the oil changes and do some light maintenance while the engines are down. Anyone with minimal mechanical skills would be considered. If you would like to participate in this unique project contact Deckard via his cell phone at 1-317-370-7930.

Something to Think About

By Kyle Fergus

When we were flying the Adcock range (listening to a series of buried tones) in DC3s at night an article was presented by an expert in Mesmerisation (hypnosis) that mentioned the five conditions especially required for success:

- (a) a small enclosed room insulated against outside activity;
- (b) a tone of high frequency, with
- (c) a low frequency tone;
- (d) darkness with bright points of light; and
- (e) a condition of concentration of the mind.

What better site for all five than a cockpit (a), the Adcock range tones (b), the growl of the radials (c), the lighted instruments of ultraviolet excitement in a darkened panel (d) and trying to stay on course on the right side of the aural beam (e).

So what did six months of lobbying with givvermint and com-

pany produce? Extra small panel floodlights and an uplifting tract imploring us to watch each other carefully.

Contributed by Glen Matejcek

KitFox Sweepstakes Going Strong

EAA Chapter 517's KitFox Sweepstakes ticket sales are going well and the traditional aviation press should be publishing their press release in their January and February issues. They expect ticket sales to get very lively after that.

Members from a number of chapters are joining together to make one purchase of 10 tickets, thus saving \$5.00 per ticket. The normal ticket price is \$25.00, but ten tickets per order are only \$200.00. Full details on the sweepstakes can be found on our web site at: <http://www.eaa517.org>

KitFox Sweepstakes: EAA Chapter 517 in Missoula, Montana is conducting a fund raising sweepstakes and the Grand prize is a beautiful 1997 KitFox Model V (appraised value \$48,500). The normal ticket price is \$25, or ten tickets for \$200 (a maximum of only 4,000 tickets will be sold). Want to save \$5.00 per ticket? Join some friends and buy 10 tickets at a time. Full details about the sweepstakes can be found on the chapter web site at <http://www.eaa517.org> You can download the entry form from the web site or request an entry form by mail at, EAA Chapter 517, Inc., PO Box 16446, Missoula, Montana, 59808 or by e-mail at: EAACChapter517@aol.com. Good luck!

Members With the 'Right Stuff'

Recently, Chapter 1311 has had several new members join who have expressed an interest in learning to fly, building an aircraft, partnering in an existing aircraft, or were looking for a Tech Counselor or other aviation-related service or skill. While the newsletter editor knows most of you he doesn't know all about you. We'd like to offer to our members to opportunity for more of you to network with the new members and make your skills known.

Support Our Servicemen

Be sure let the newsletter editor know if any of our members or their families has someone in the service, especially if they have been called up for active duty. We'd like to recognize them and thank them for representing us so honorably.

SERVICEMAN UPDATE NEEDED: In December of 2002 Jim Griffin joined Chapter 1311. Shortly before the war with Iraq started Jim signed back up as a Major with the Marines and has been serving in Iraq. He had been receiving the newsletter via email but this past couple of months the emails to him have come back as undeliverable. If anyone knows how to contact Jim, or knows of his whereabouts or of any way to track him down, please contact the newsletter editor at michaelandkatie@tds.net.

Boone County Airport News

Membership in the recently formed Boone County Airport Association has stabilized with a core group of members who are staying a permanent tenants. A few new members have joined in order to base their aircraft at the hard-surface field during the winter months.

There are still a few hangar vacancies available. Anyone desiring to base an aircraft at the airport or use the maintenance hangar will be required to join the association. For more information contact Michael Mossman, association secretary, or see the website <http://www.mossmansite.com/bcaaa/index.html>

The association is also looking for volunteers for basic airport maintenance and upkeep work. During the winter months the planned projects are runway snow removal (as necessary) wiring the hangars and installing a drop ceiling in the operations building. Do you want to pitch in? Come out any weekend and check the bulletin board for a list of chores that need some assistance!

The association will be hosting an "Affordable Flying" party on June 18, with the goal of attracting the non-flying public to the

airport. Free rides will be offered, along with Young Eagles rides if Chapter 1311 is able to participate. Fuel will be provided to participating pilots! For more information contact Wayne Deckard at 1-317-370-7930 (cell phone) or Michael Mossman at 1-765-483-9533 (home).

Young Eagles

Let's continue to introduce kids to the experience of flight and share our passion for aviation. Hopefully we'll inspire more kids to seek careers in aviation or maybe to just study hard, get good jobs and follow in our footsteps. Chuck Long has agreed to continue as the Young Eagles Coordinator for 2005. When the good weather returns and Chuck has some Young Eagles events scheduled, let's get behind him and get some kids in the air!

EAA Young Eagles Update: By newsletter publication date more than 1,114,138 Young Eagles have taken their first airplane ride.

Editorial Comments Sought

If you have an opinion on any story that appears in the newsletter, or any other aviation-related issue, we want to read about it. We will make editorial space available for your responsible comment. Please contact the newsletter editor at michaelandkatie@tds.net

Calendar of Events

January 20-22 — Great Lakes International Aviation Conference, Lansing, MI. Joe Norris, EAA Senior Aviation Information Specialist, will be doing 3 presentations: "Inspection of Amateur Built Experimental Aircraft for A&P Mechanics", "Flight Instruction and FBO Opportunities" and "General Sport Pilot Presentation for Pilots and Perspective Pilots". For more information see: <https://secure.nsgroupplc.com/greatlakesaviation-conference.com/index.php>

May 12-15 — Mid-Atlantic Fly-In & Sport Aviation Convention, <http://www.midatlanticflyin.com>

June 18 — Boone County Airport "Affordable Flying" community event

July 25-31 — EAA AirVenture, Oshkosh

Next Meeting

The next meeting will be **Wednesday, February 2**, 6:30 p.m. at Hendricks County Airport (2R2) operations building. **Program:** Troy Grover will be showing his RV-10 project and his Van's Builder's Assistance operation.

Directions from Indianapolis:

Take U.S. 36 (Rockville Road) west past Avon.

Turn left (south) on CR 300 E (84 Lumber is on the SW) corner of the intersection.

At about 1/2 mile turn right (west) into the airport.

The operations building is straight back from the road.

On the Radar:

February 2 — Hendricks County Airport

March — TBA

April — TBA

May — TBA

June — TBA

Chapter 1311 Board of Directors for 2005

President: Dale "Gus" Gustafson

Vice President: Dennis Crawley

Secretary: Michael Mossman

Treasurer: Vern Sullenger

Director: Glen Matejcek

Director: Dirk Melchior

Director: Larry Rush

Newsletter editor: Michael Mossman

Classified Ads

BUILDER NEEDED: If you are interested in pursuing the ownership and building of a Bushby Mustang II project that I have, please call me at 201-5889 for details. Mike Laurenzano

FOR SALE: Custom composite panel flush-mount for Garmin GPS 196 \$75
Contact Larry Rush k9hxt@msn.

FOR SALE: O-470 engine. Contact Bob Vondersaar
bobandteresa78@msn.com for details.

FOR SALE: Inflatable life jackets for over-water flight, only \$5 each! Contact Bob Vondersaar bobandteresa78@msn.com. Proceeds benefit Chapter 1311.

FOR SALE: Four sets of very nice Koss headphones. Contact Michael Mossman michaelandkatie@tds.net for details or to make offer. Proceeds benefit Chapter 1311.

FOR SALE: Three lighted and adjustable "flight desks" for aircraft installation. Contact Michael Mossman michaelandkatie@tds.net for details or to make offer. Proceeds benefit Chapter 1311.

FOR SALE: Stinson L-5 Landing gear Struts. Contact Kenny Shull 317-539-5542.

2005 Membership Roster

Current as of January 14, 2005

NAME	EMAIL ADDRESS	PROJECT(S)
GUSTAFSON, Dale	DALEFAYE@msn.com	Piper J-4
LeBARON, Tim	TJLebaron@CS.com	RV8, Breezy, 1946 Ercoupe
MOSSMAN, Michael	m_mossman@novationgraphics.com	Zenair 601 HDS
SULLENGER, Vern	sullenger@iquest.net	Cherokee 140, RV-7A
VONDERSAAR, Bob	btvondersaar@sbcglobal.net	Steen Skybolt
VONDERSAAR, Teresa	btvondersaar@sbcglobal.net	Steen Skybolt

2004 Members

NAME	EMAIL ADDRESS	PROJECT(S)
BEETHAM, John	jabeetham@earthlink.net	Fokker D VII, Piper Dakota
BYRUM, Jon	jbyrum@byrumarchitects.com	RV-7A
CHAPMAN, Jeff	PoP6756@aol.com	Piper Tri-Pacer
CLARK, David	davecpd@iquest.net	1946 Aeronca Chief
CRAWLEY, Dennis	Crawley27@comcast.net	Grumman Tiger
CUTHBERT, Steve	stepcuth@msn.com	RV-8
DAVID, Glen	propellerprecision@hotmail.com	Sonerai
DAVIDSON, Ginger	plane crazy13@att.net	RV3
GRIFFIN, Jim	jimg@netcapade.net	Questar Venture
GROVER, Troy	rv6grover@netzero.net	RV10
HARRINGTON, Bill	bhis60@yahoo	Cessna 182
HELMINGER, Mark	mchelminger@hotmail.com	helping others
HELTON, Dave	dhelton@iquest.net	Piper Tri-Pacer
LATHROP, Steve	lathropdad@worldnet.att.net	BearHawk
LAURENZANO, Mike	mikelaurenzано@yahoo.com	Bushby Mustang II
LONG, Chuck	charles.long@GM.com	Zenair 601 HDS
MATEJCEK, Glen	aerobubba@earthlink.net	RV8
MATEJCEK, Robin	aerobubba@earthlink.net	RV8
MELCHIOR, Dirk	d-r-melchior@msn.com	F1 Rocket
NG, Bart	bng@math.iupui.edu	RV-7A
REYNOLDS, Gary	n98gr@aol.com	RV6A
RINEHART, Mark	capt_riney@yahoo.com	Kolb Mark III Classic
ROBBINS, Will	werobbins@flightline.com	-
ROEVER, Doug	dmroever@iquest.net	RV-7 Tail kit
RUSH, Larry	k9hxt@msn.com	RV6A, RV-8
SHUMAKER, Kim	kshumaker@iquest.net	
SHULL, Kenny	PHONE 317-539-5542	Helping Others
SULLENGER, Vern	sullenger@iquest.net	Cherokee 140, RV-7A
TURNER, Arvel	aero451@hotmail.com	RV-9A
VITTETOW, J.C.	j_vittetow@msn.com	PA22
VOGEL, Paul	pvogel@indy.rr.com	Helping others
ZELLER, Gary	garyzeller@sbcglobal.net	Brantly helicopter

See our chapter roster online at <http://www.eaa1311.org/member-roster.html>

Did we miss anybody? Please let us know; we'll get it updated right away.

Airplane Spotter

FOR SALE: RV-9A: QB fuselage, 95% complete wings, 70%

complete empennage, fully primed, dual lights, brakes and steps, AOA installed in wing. Cost around \$22,000 to buy equivalent new now, cost around \$16,500 for all the parts to me. Will look for around \$15,000. Curt Hoffman, Cincinnati area contact at choffman9@cinci.rr.com

Quote of the Month

"Every change to the basic design adds at least three months to the completion time of the project." Anonymous

January's Meeting Program

Chapter 1311 first viewed Glen and Robin Matejcek's RV-8 project during the spring of 2002. Looking for a project that would meet his needs at the time, Glen considered the RV-4 and RV-6 kits and many other airframes but they didn't exactly fit his 6-foot, 5-inch frame. With some aircraft the seats can be relocated a bit for extra leg room but he needed headroom, too. Besides, moving the seat back would cut into Robin's room, too, and she's not short. So Glen opted for the RV-8 and has been making progress through job changes and other setbacks.

With Robin's assistance setting rivets, Glen's been doing an exemplary job in building his RV-8. Typical of the level of workmanship now expected from RV builders, his fit and finish is very good. In the May 2002 newsletter, Bob Vondersaar wrote: "I started poking around looking at rivets and fit and he starts threatening me ... too bad I couldn't find anything that wasn't pretty." If you know Bob you know that if something was wrong he was going to find it, at least as long as Glen was going to let him critique it!

Glen's wings are completed and stored in a utility room off the floor they call the basement; the fuselage and workshop are one level lower. The fuselage is essentially complete, needing just a few details and parts installed. Apparently, Glen is waiting to be sure that everything else works and is installed before closing up the last few skins. He says that he'll need to remove the horizontal stabilizer then recruit a few hearty friends to heft it out the double doors at the end of the workshop.

Glen's original plans for the airplane were for something large enough for him to fly around and have fun in, and maybe do a couple loops and rolls, as he used to be an aerobatics instructor for a while. As Glen says, "A funny thing happened on the way to the project." He considered how much time he would spend building the airplane and how much money would be dedicated to the project, he then thought of how much more use he could get from it. Glen and Robin intended to do a lot of long-distance traveling in their airplane. He started thinking about what excuses he would have to make when confronted by his airline's chief pilot the first time he had to call in as absent when he wasn't able to make it home due to weather. No, a VFR-only airplane wasn't going to cut it. He was going to need something able to navigate and negotiate some serious IMC weather conditions.

Glen hooked up with the folks at Blue Mountain Avionics and decided to invest in their EFIS/One package. Complete with GPS, compass, and solid state "gyros," it is a complete glass cockpit in one instrument. The 10.4-inch display, with its allied computer, is a true all-in-one instrument panel. Theoretically, all that is needed to install one is to cut a hole in the panel, bolt it in, connect the power and the pitot-static system.

Of course, there's more to a glass cockpit than that. Because the EFIS/One has the ability to monitor most (or all) of the engine parameters, quite a few probes and leads need to be snaked through the firewall. Even so, if the builder has installed a FADEC then only one cable needs to be connected to monitor the engine.

Being ATP rating and currently flying behind glass screens in 737s for American Trans Air, Glen has gotten pretty used to system redundancy, and believes strongly in the security that redundancy provides. Because the RV-8's instrument panel isn't big enough for two EFIS/Ones, Glen added one of Blue Mountain's



EFIS/Lite units. Covering practically everything that the EFIS/One will do except monitor the engine, the EFIS/Lite has a much smaller screen and fits into a standard 3.125-inch instrument hole. Glen's Blue Mountain units will be driving their autopilot, which flies a ground course, not a heading course.

The EFIS will be used to drive the autopilot. Glen says that their autopilot is a learning type. Once you fly it "George" learns how the aircraft behaves with the given inputs and learns how to smooth out the automatic control.

Glen says that the Blue Mountain equipment is for experimental aircraft only. Because it's not TSO'd, it's about half the price of comparable equipment like Chelton.

With so much of the small instrument panel real estate allocated to the glass displays, Glen didn't have a lot of room left for a conventional radio rack. He opted for the Becker line of communication radios and transponder, as their equipment installs into a standard 2.25-inch panel hole. He's patched a pair of their radios into a PS Engineering PMA 4000 audio panel and intercom combination. He's also shoehorned in a VAL INS 422 "all in one" Nav unit with VOR/LOC, glideslope and marker beacon.

Glen has a Lycoming IO-360 on a stand in the garage that is nearly ready for installation. Although the core engine is stock, most all of the accessories are different. To power his glass panel he has added a Van's 60-amp alternator, and has a B&C SD-8 vacuum pad-mounted standby alternator. He'll also be using dual electronic ignition and has matched fuel injection nozzles by Progressive Aero, and a Skytech lightweight starter.

Glen has a Hartzell 2-bladed propeller, which is the same basic model as recommended by Van's but will be the full 76-inch diameter instead of the usual 72 inches. The engine has a Jihostroj prop governor. Although the engine and propeller combination was used on some Piper Senecas, his extensive accessories package means that the engine won't conform to the type data sheet, so he'll have the usual 40-hour Phase One test flight regime.

Because of his interest and experience with aerobatics he's also bought an Acro Specialties inverted oil system. Time will tell if he eventually installs a smoke system.

Glen says that the engine should crank out 200 horsepower, and hopefully a smidgen more. To cool this engine he thinks that he is likely to add an aluminum plenum under the cowl.

Glen started the project on August 5, 2000. With 1,676 building hours to date, the project is about 90 percent completed, leaving only "50 percent" to go. All that's left to do is finish the wiring, firewall forward, fiberglass, canopy and paint. Currently, he projects that he will be finished with it by Oshkosh.

Glen has been using a spreadsheet as a building log, keeping track of date, time, items and who did what (or where it came from). He also has more than 200 photos to document his work.

With all of the equipment and parts at home Glen has nothing left to buy except the electronic ignition and paint, although no paint scheme has been chosen yet. He hasn't decided if he will paint it himself or hire it done. When asked how much he has spent to date he strongly advises "don't ask."

Since he an airline pilot and finds himself out "on the road" quite a bit, the hardest part of the project has been consistently finding time to work on the project. Once he's found the time, he said that the most difficult chore has been doing the research and figuring out all of the bits and arcanum surrounding the hardware, systems and other details that are not covered in the plans.

This aircraft is not intended to be a trophy winner; he says that there are way too many builders who are more talented than him. Other than a bunch of the previously mentioned aerobatics, Glen plans on some serious long distance traveling with their RV-8. Ultimately, he'd like to visit some friends in Suriname, a small country on the northeast coast of South America. That trip would involve crossing the Caribbean, even if only flown one island at a time. To accommodate their long distance needs he's built an additional baggage compartment behind the "stock" aft baggage compartment. With his heavily-equipped engine he doesn't think it will affect his balance too much, though. Of course, for long distance traveling comfort he's added some more front seat room.

When it's finished the Matejceks will have one super nice aircraft. We're already marking our calendars to see it when it's completed and ready to fly. Good luck, Glen and Robin. This is a project that anyone would be proud to own and fly.



EAA Chapter 1311

Membership Application

Send this application and your \$10 dues to the Treasurer:

Vern Sullenger
EAA Chapter 1311
1763 Ramsey Lane
Plainfield IN 46168
sullenger@iquest.net

Please complete with the following required information:

Name

Address

City..... State..... Zip.....

Phone number.....

Email address

EAA number..... Expiration date.....

We would also like to have the following information, although it is not mandatory:

Spouse name

Place of employment

Alternate phone number..

Alternate email address...

Aircraft or project

Young Eagles Pilot number (if applicable).....

If you have any interests or skills in the following areas and would like to volunteer at some time, please check as many as you'd like:

- Leadership (chapter officer) Financial (treasurer) Secretarial Newsletter Web design Fund raising Public speaking
- Pilot (Young Eagles) Young Eagles ground support Meeting programs Flight or ground school instruction EAA Tech Counselor
- EAA Flight Advisor Industry insider (FAA, airlines, engineering, etc.) Other.....

We would like to introduce you in a newsletter story. Please provide any information on yourself, your family, career or aviation interests that you would like to share:

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Welcome to EAA Chapter 1311!