

# Hendricks County EAA Chapter 1311

## Monthly Newsletter — February, 2004

### From the Chapter President

By Tim LeBaron

While reading the February issue of Sport Aviation, I ran across the article about EAA chapter 1279's project. This California chapter found a BD-5 project, restored it and put it on a pedestal at the entrance to the French Valley Airport. After reading this, the gears of my brain began to turn. Indianapolis International is in the beginning stages of building a new terminal building. Yes, I realize that it is on hold for awhile, but eventually it will be built. May I suggest that our chapter take on the challenge of building, restoring or acquiring an airplane of some kind that we would donate, to hang or display in the new terminal building? Is this possible? I don't know the answer to that question but I would like to get a committee together to explore the possibility. It would give our chapter a goal to shoot for and a sense of pride and accomplishment if we could pull this off. If you would be interested in being on a committee let be know. Only positive thinkers need apply.

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### February's meeting

February's meeting was held at Jon Byrum's home in Zionsville IN, starting shortly after 6:30 p.m. and was chaired by Chapter President Tim LeBaron. No formal business was conducted.

**IN ATTENDANCE:** Signed in Dennis Crawley, Steve Cuthbert, Troy Grover, Steve Lathrop, Tim LeBaron, Michael Mossman, Bart Ng, Gary Reynolds and Vern Sullenger. If you were there but didn't sign in, let us know.

**GUESTS:** Signed in were Jon Byrum, Brian Miller, Lou Sullenger and Jack Vandeventer. We welcome all guests and encourage them to attend a meeting, and especially to join the chapter!

**PROGRAM:** The members and guests gathered in Jon Byrum's garage/shop to inspect and discuss the project that he and Bart Ng are building. See feature story at end of newsletter.

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### 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 them, and invite them to sign up. Also consider volunteering for the Membership Committee.

### Dues are Due!

EAA Chapter 1311's dues for 2004 are now due. Send your \$20 to the treasurer, Vern Sullenger, 1763 Ramsey Lane, Plainfield IN 46168 317-839-8728. Thanks!

### Support Our Servicemen

Be sure let the newsletter editor know if any of our members or their families have 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:** 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 undeliv-

erable. 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.

### Support Our Member Businesses

As a gesture of thanks to the members who donate their time, talent and materials to Chapter 1311's various activities, the board asked that members be able to advertise their normal business services on the website. We would like to post a list for your business, which can include business name, your name, phone number, what you do, etc. We won't be able to host a full-blown web site for you but we can link to your site if you already have one. We invite all members to see the business services page and patronize your fellow members' enterprises. Listing is free and limited to those who have been a member in good standing for at least one year. Contact Michael Mossman for more information.

Visit the business services page at <http://www.eaa1311.org/services.html>

### AeroElectric Weekend Seminar Planned

AeroElectric Connection Weekend Seminar is coming to Kalamazoo, MI March 20 and 21, sponsored by EAA Chapter 221. Learn how to fabricate a reliable electrical system for your project using ordinary parts. Bob Nuckolls ('lectric Bob), with 40 years experience and designer of Voyager electrical system, will be teaching the seminar.

The seminar will be at Duncan Aviation, 5605 Portage Rd., Kalamazoo, MI 49002, located at Kalamazoo/Battle Creek International Airport (KAZO) on Saturday March 20, 8:00 am - 5:00 pm and Sunday March 21, 8:00 am - 12:00

The cost of the seminar is \$150 per person and includes a CD-ROM of all downloadable articles and wirebooks from the AeroElectric website. The AeroElectric Connection textbook will be available at the discounted price of \$20.

Register online at [www.aeroelectric.com/seminars/seminars.html](http://www.aeroelectric.com/seminars/seminars.html)  
Registration is limited to 30 participants.

For overnight stay there are three hotels within a half mile of KAZO, Lees Inn 269-382-6100, Country Inn & Suites 269-382-2303 and Hampton Inn 269-344-7774. At least eight more motels are within 3 miles of the airport; most offer shuttle services to the airport.

For further information contact AeroElectric at see [www.aeroelectric.com/seminars](http://www.aeroelectric.com/seminars) or Chapter 221's representative, Jim Butcher, [eea221ye@triton.net](mailto:eea221ye@triton.net), 269-375-5923.

### Indy's Chautauqua Airlines Wins Industry Honor

**Condensed from the Indianapolis Star**

The privately owned Chautauqua Airlines was recently named by Air Transport World magazine as the regional airline of the year.

Bucking industry trends, Chautauqua has done what few other airlines are doing today: generating a profit. Their recent, consistent profitability helped the management team garner the award. Key to Chautauqua's profitability was its cost-containment mea-

sure and refusal to operate with under a prorated fare formula. Chautauqua insists on a fixed fee for every seat filled as a contract carrier. Regardless of the revenues generated from the major carrier, they have insured that their fate isn't tied to the major airlines inability to sell tickets at a profitable rate. Chautauqua flies routes for US Airways, American, Delta and America West, and has its airplanes painted with the schemes of these majors.

Chautauqua's impact on Indianapolis isn't just limited to the fact that they are based here and have 530 Indiana employees; they also buy here, too. Chautauqua recently ordered ten 50-passenger Embraer regional jets to replace their turboprop fleet. Brazilian-built Embraer uses Indianapolis-built Rolls-Royce engines in their aircraft.

Chapter 1311 board member Dirk Melchior is the Manager of Flight Standards for Chautauqua Airlines. Last year Dirk had the opportunity to fly a SAAB 340 turboprop to the "retirement home" in Victorville CA. See Dirk's report in the April 2003 newsletter [http://www.eaa1311.org/newsletters/030401\\_newsletter.pdf](http://www.eaa1311.org/newsletters/030401_newsletter.pdf)

*Source: Chris O'Malley, Indianapolis Star, Tuesday, January 27, 2004, Section C*

## Aircraft Home Offered

In what could be the ultimate get-away cottage for the aviation enthusiast, a company called Airplane Homes has a product that is sure to be a big hit: They are offering refurbished Boeing 727-200 aircraft outfitted as homes. The aircraft would be delivered to your home site and fitted onto a custom-built weathervaning pedestal. When mounted about 4 feet from the ground you the access the aircraft (oops, home) via the airstair door at the rear. When mounted higher they will build an airstairs for access over the wing. Optional railings can be included, free!

Wings are removed for transportation then reinstalled at the site; engines are not included. Most reusable aircraft parts are returned to the flying fleet somewhere. \$295,000 price includes an allowance for kitchen and interior, local architect, crane rental fees and cassion-style pad for the pedestal. Site preparation not included. \$11,000 option includes "functioning" cockpit based on Microsoft Flight Simulator. Now there's a really educational home entertainment system.

Imagine: Now you and your family can share the fun of living your dream 24 hours a day. Sip your morning coffee in the cockpit and watch the constantly changing landscape as your home gently weathervanes into the prevailing breeze. Don't like the view: Turn your home around!

Chapter members who bought lots at Pegasus Farms now have a new choice to make: Go with the dowdy old conventional home or opt for the new Airplane Home! You'll definitely be the talk of the neighborhood. Another benefit: you'll never have to keep up with the Joneses. Until Airplane Homes delivers 747 homes (and there's no mention of it) you'll definitely be living in the largest Airplane Home in town.

The Airplane Home has other possibilities not mentioned by the sellers. An Airplane Home could easily be equipped as the ultimate chapter clubhouse and meeting room. Replete with kitchen, bathrooms, video projectors and comfy seating, meeting attendance would surely "soar."

To secure a meeting with Aircraft Home's site architect a \$2,000 non-refundable deposit is required. Since the home is advertised on eBay, you can charge the deposit to your credit card! For more information on Airplane Homes see their website <http://www.airplanehomes.com/details.html>

## Aircraft Donated to Chapter

Chapter 1311 was recently given a partially built Nesmith Cougar aircraft as a donation. The Cougar, with a steel tube fuselage and wooden wing, looks a lot like a Wittman Tailwind. Now stored in Paul Vogel and Dave Clark's hanger, the project will be sold with the proceeds going to the chapter. Contact any chapter officer if you would like to make an offer on the project, or contact Paul or Dave to see it.

For more information on the Nesmith Cougar I contact Acro Sport, Inc., P.O. Box 462, Hales Corner, WI 53130, 1-414-529-2609

Thanks to Scott Schermerhorn for this generous donation.

## Aircraft Builders Event Planned

Bloomington Chapter 650 is finalizing their plans for the kit and plans builders' March Extravaganza. Not a fly-in, the event will feature many different makes and models of amateur-built aircraft, complete with tables, posters, parts, plans, tools, finished planes, photos and specifications. The individual presenter(s) will be telling the visitors a little bit about their planes and of the known completed aircraft, plus adding stories about factory visits and photo books of their projects while in progress. The March Extravaganza will be held in lounge of the FBO at Bloomington Airport, BMG.

To date the following presenters are scheduled to appear:

Dallas Benham (Harmon Rocket, Tailwind, and Tri-Pacer Ford conversion)  
Mike Combs (Zenair 701, BearHawk, Leagle Eagle)  
Joe Crowe (Zenair 701)  
Tex Frye (Starduster Too)  
John Hamlin (Zenair 701)  
Bob Jacobs (RV-10)  
Michael Mossman (Zenair 601 HDS)  
Benton Pittman (Quicksilver)  
Jerry Reynolds (Bellair SE)  
Lee Root (Starduster Too) and  
Dan Shaffer (Zenair 601XL, Corvair Conversion)  
John Steere & Larry Lux (BD-4)  
Jay Sutphin (Flight Star)  
Mike Wonder (RVs)

Space is still available for more makes and models of homebuilt aircraft. The event organizers would especially like to have a representative composite aircraft, any model.

The chapter will be serving a ham 'n beans 'n cornbread lunch starting at 11 a.m. followed by an introduction of the participating builders. After the introductions the presenters will be manning the tables with whatever materials they have to illustrate their project.

For more information contact coordinator Mike Combs 812-825-5058 (home), 812-854-4730 (work) or email at [combs\\_mike@crane.navy.mil](mailto:combs_mike@crane.navy.mil).

## Project Report

Last summer at the August meeting several members were asked when they thought that their projects would be ready to fly. Most of the anticipated completion dates have since come and gone, and now have been forgotten, but not Mark Rinehart's target: his goal was to be flying by this 50th birthday this year. Mark courageously offers the following update:

"Ah yes, bold predictions. Here is an update on my Kolb Mark III project:

"The structure is 99% complete but not covered. I will definitely get it covered this year. Right now I'm working on installing the windscreen and doors, and rigging the flaps. All the other control surfaces have been rigged. I've been a little bit hampered by the cold weather since I have to pull the aircraft out in the driveway to unfold the wings and rig the flaps. I hope to have just about everything done this year but engine installation. My oldest daughter is getting married in February, and my wallet is going to be a little light so I don't think I'll be able to afford an engine this year. We'll see. The engine I'll probably go with is a Rotax 582 with 3-blade IVO prop. I'm also interested in a Geo Metro Suzuki 3-cylinder conversion, but it might be a little too "experimental" for me.

"By the way, the Chapter is welcome to meet at my house sometime in the spring. I'd welcome the chance for folks to review my work. I live in Danville (in town). Just give me a month or so to recover from the wedding.

"So it's not looking too good to be flying on my 50th birthday unless I find a real deal on an engine."

## Building Tip

When building an airplane you'll spend lots of time in awkward positions trying to see the job at hand. Normally you'll be able to get a good look at your work but sometimes not. Unfortunately, as we get older, our eyes develop a problem called presbyopia. For those of us who are nearsighted (can't see far away) we now can't see up close either! You know the old joke: you can't read anymore because your arms aren't long enough.

Presbyopia is easily corrected with bifocals. Once you get used to bifocals they work great; part of the lens is for distant vision, the other part is for near vision. The big problem is that the near vision part is at the bottom of the lens. This works for 99% of the time, but what about when you need to look up at something close? Airline pilots might have trouble reading the markings above the windshield and might have to have special bifocals or trifocals made for their particular use. These can be expensive for the rest of us, especially if we rarely need them.

If you occasionally need to look up at your work, perhaps while riveting the bottom of your fuselage and can't keep your work in the "sweet spot" of your bifocals, try this: get a cheap pair of reading glasses from a pharmacy and keep them in your tool box. I bought a pair from Wally-World for about \$4 that I only use when I can't get the lower part of my bifocals in position. Not only is it easier to see what I am doing, it saves me from cranking my spine into painful contortions. Ahh, getting older doesn't have to be an undignified pain in the neck.

Some caveats when using a second pair of glasses: One, keep a case handy for your main glasses. If your lenses are made of polycarbonate they are easily scratched. The likelihood of them getting scratched in your shop is magnified (pun intended) with all of the shop dust floating around. Secondly, don't try walking around while wearing your secondary glasses. Your depth perception will change and you may not be used to it. Be careful!

A/Is, technicians, mechanics and generally handy builders: You may have heard of this tip before; no doubt that you have many that are even better. Why not share them with the chapter? Send your suggestions to the newsletter editor.

## Young Eagles

Included in the February 2004 edition of Sport Aviation was the EAA's annual list of Young Eagles pilots who flew 10 or more Young Eagles in 2003. Prominently included in the list are Chapter 1311's own Bill Harrington and Vern Sullenger. Also

mentioned is Jim Snyder, an EAA'r who has flown many Young Eagles with the chapter and on his own. Thanks to Bill, Vern and Jim for their accomplishments, and thanks to all chapter participants to flew Young Eagles, coordinated the events or participated in the ground crews.

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.

**EAA Young Eagles Update:** By newsletter publication date more than 1,031,000 Young Eagles have taken their first airplane ride.

## From the Newsletter Editor

**By Michael Mossman**

A few months ago I wrote a short piece stating that editing a newsletter is a lot like building an airplane: plenty of planning is required for a successful outcome. This month I discovered a new analogy: successfully using a computer is a lot like flying IFR. When flying on instruments a pilot really only needs a few instruments to keep everything right side up and on course. It is actually possible to fly for years with a single-engine airplane and one vacuum pump and just a few gauges. With annual inspections, careful maintenance and diligent monitoring of the equipment in use it's just not likely that anything will go wrong. Or will it? The problem is, if something like the vacuum pump fails, the pilot often finds himself with few options for safely completing the flight. How much better it would have been to have invested the money up front for a backup vacuum pump or maybe an electric attitude indicator.

And so it goes with our trusty computers. We really do take them for granted these days. They aren't nearly as flaky as the equipment we were using just a few years ago. Most components, like hard drives, are so cheap now that we buy huge ones for very low cost and store everything we can on them (we now call these files digital assets). Personally, my entire photo album from the past four years consists of photos taken by my digital camera and residing solely on my computer's hard drive. For the chapter, all of the records that I am required to keep, and all of the newsletters, including this one, consisted merely of tiny magnetic spots spinning around on a shiny, sealed aluminum platter. How comforting.

Just last week I found myself checked in at the blissful Foxtrot Delta Hotel (fat, dumb and happy) and working on a project when my laptop computer "entered IMC" and the lone EFIS system (computer) failed. There was no vacuum pump gauge or low voltage warning light. The computer was working one minute and failed the next, and all of my labors were going down with the hard drive's death spiral. Although it ended without injury or a smoking crater, it could have resulted in the death of my career.

When we are flying we are constantly looking for an "out," a backup plan or at least some options when things go sour. I literally had such a plan: I had backed up all of my data just hours before. I lost a few emails and some of this newsletter, but I still had my handwritten notes from meeting. I was able to "fly" out of this muck with little more than some additional sweat and effort.

We've all read some of the "I Learned About Flying From That" stories, where someone had a true revelation while facing death in the air. I think that I learned something about flying with my feet flat on the ground and not even using a simulator. I learned how dire a situation can be when all of your eggs are in one digital basket and the electrons stop flowing. I'll be thinking about it as I finish my project and plan my flights. I hope that you do so too with your ventures.

## EAA Flight Advisors

People join the EAA and the local chapters for many reasons. Some, to learn how to build or restore an aircraft, some to learn how to fly, for others maybe just the opportunity to hang around with like-minded people. There are hundreds of reasons to join, and each reason is valid. But once you've gotten that aircraft ready for its maiden voyage, now what? Are you going to make the first flight? Are you current, and familiar with the type you've built? Are you at least a little apprehensive about what you are going to do?

Here's where an EAA Flight Advisor can come in. He/she can help you prepare your flight testing program and see that you are current. They can also give an objective go/nogo opinion when the emotions of your creation's first voyage is at hand.

Do you have the right stuff? We need someone to step up and volunteer as a Flight Advisor. Chapter 1311 currently does not have a Flight Advisor listed (at least the EAA web site says we don't have one). If you are already a Flight Advisor, let the newsletter editor know so that we can list your services.

## Gavel Needed

Do you have a gavel that Chapter 1311 can use for the meetings? Even better, do you have some scrap parts we can use to make a unique gavel? How about an old engine valve and rod for the gavel, and a used piston for the striking block? If you can scare up some of these parts or would like to make a gavel out of more "traditional" materials for the chapter please contact Tim LeBaron or Mike Laurenzano.

## 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

## Upcoming Newsletter Features

**Project Reports** — We have many active aircraft construction or restoration projects right now; our members would like to know how your project is progressing. The newsletter editor will be contacting you in the coming month or two to find out about the status of your project.

**Mystery Solo** — A good friend and former member of the Civil Air Patrol suggested a feature that was popular many years ago in several California chapters: Mystery Solo. What they would do is feature a monthly description of a member's first aircraft solo. The identity of the pilot would be kept secret, and the other members would try to guess who they thought it was. They would then reveal the name at the next meeting or newsletter. If you would like to volunteer your first solo just email a short description of the event to the newsletter editor at michaelandkatie@tds.net. We'll keep it confidential until the meeting.

We need members to participate in one or two of the planned features above, and no previous writing experience is necessary. The newsletter editor will help out with spelling and grammar. Feel free to offer as much information as you are comfortable with sharing. Just type out some notes and email them to the newsletter editor. Note: we may contact you by phone or email for more information on your project.

To download a "printer-friendly PDF copy of the Project Report questionnaire see [http://www.eaa1311.org/PDF\\_files/project\\_report.pdf](http://www.eaa1311.org/PDF_files/project_report.pdf)

To download a "printer-friendly" PDF copy of the Oshkosh ques-

tionnaire see [http://www.eaa1311.org/PDF\\_files/Oshkosh\\_questionnaire.pdf](http://www.eaa1311.org/PDF_files/Oshkosh_questionnaire.pdf)

## Calendar of Events

**Feb 28-29** — Fabric Workshop, sponsored by Chapter 650, Bloomington

**March 6** — March Extravaganza for kit builders, Bloomington IN Airport

**April 16** — AOPA Sun 'n Fun, Lakeland FL

**May 14-16** — Mid-Atlantic Fly-In and Sport Aviation Convention — Lumberton NC

**July 7-11** — Northwest Fly-In, Arlington WA

**July 27** through August 2 — AirVenture 2004, Oshkosh

**Mid October** — Copperstate Fly-In, date and location TBA

## Next Meeting

The next meeting will be **Wednesday, March 3, 2004**, starting at 6:30 p.m. Larry Rush's home and will be chaired by chapter President Tim LeBaron. Program: Larry Rush will be showing and discussing his RV-8 project.

Larry Rush  
1803 Charles St.  
Avon IN 46123  
317-272-2153  
k9hxt@msn.com

Get PDF map: [http://www.eaa1311.org/PDF\\_files/Rush\\_map.pdf](http://www.eaa1311.org/PDF_files/Rush_map.pdf)  
(will be posted by 2/20/04)

**Don't forget to INVITE A GUEST!**

## On the Radar:

The March meeting will be on Wednesday, March 3 at Larry Rush's home. April meeting TBA.

## Chapter 1311 Board of Directors for 2004

President: Tim LeBaron  
Vice President: Mike Laurenzano  
Secretary: Michael Mossman  
Treasurer: Vern Sullenger  
Director: Glen Matejcek  
Director: Dirk Melchior  
Director: Paul Vogel

## Classified Ads

**FOR SALE:** Partially completed "Cougar" home-built aircraft. Proceeds to benefit Chapter 1311. Contact any board member to make an offer.

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

**FOR SALE:** Free firewood to any Chapter member, \$10 a cord for non-chapter members. Trees are down, just cut up and haul away. Location is at Pegasus Farms. Contact Mike Laurenzano at 201-5889 mikelaurenzano@yahoo.com

**FOR SALE:** (1) RCA Directional Gyro core. Good condition to send in for rebuild. \$100; (1) RCA Attitude Gyro core. Good condition to send in for rebuild. \$100. Contact Gary Reynolds n98gr@aol.com

**FOR SALE:** Lycoming fuel pump LW154732100. (new) \$215.95 Aircraft Spruce. Sell for \$175. Contact Gary Reynolds n98gr@aol.com

**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 or Tim LeBaron TJLebaron@CS.com. Proceeds benefit Chapter 1311.

**FOR SALE:** Four sets of very nice Koss headphones. Contact Bob Vondersaar bobandteresa78@msn.com or 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 Bob Vondersaar bobandteresa78@msn.com or Michael Mossman michaelandkatie@tds.net for details or to make offer. Proceeds benefit Chapter 1311.

**TIG WELDING:** Need custom welding for your project, or for repairs? Contact Tim LeBaron at TJLebaron@CS.com

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

## 2004 Membership Roster

LAST UPDATED December 14, 2003

NAME	EMAIL ADDRESS	PROJECT(S)
BALDWIN, Fred	bladerunnerx2@netzero.net	2-Place Jet
BEETHAM, John	jabeetham@earthlink.net	Fokker D VII, Piper Dakota
CHAPMAN, Jeff	PoP6756@aol.com	Piper Tri-Pacer
CLARK, David	davecpd@iquest.net	1946 Aeronca Chief
CRAWLEY, Dennis	crawley27@aol.com	Grumman Tiger
CUTHBERT, Steve	stepcuth@msn.com	RV-8
DAVID, Glen	propellerprecision@hotmail.com	Soneria
DUNAWAY, Jeff	jeff@spitfire.net	RANS S-12S
EDWARDS, John	jwayneedwards@aol.com	RV6
GORDON, Ginger	plane crazy13@att.net	RV3
GRIFFIN, Jim	jimg@netcapade.net	Questar Venture
GROVER, Troy	rv6grover@netzero.net	RV10
GUSTAFSON, Dale	DALEFAYE@msn.com	Piper J-4
HARRINGTON, Bill	bh101010@hotmail.com	Cessna 182
HELTON, Dave	dhelton@iquest.net	1950 Piper Pacer
HILL, Ken	khill5@indy.rr.com	RV9
LATHROP, Steve	lathropdad@worldnet.att.net	BearHawk
LAURENZANO, Mike	mikelauranzano@yahoo.com	Bushby Mustang II
LeBARON, Tim	TJLebaron@CS.com	RV8, Breezy, 1946 Ercoupe
LONG, Chuck	charles.long@GM.com	Zenith 601 HDS
MATEJCEK, Glen	aerobubba@earthlink.net	RV8
MATEJCEK, Robin	aerobubba@earthlink.net	RV8
MELCHIOR, Dirk	d-r-melchior@msn.com	F1 Rocket
MOSSMAN, Michael	m_mossman@novationgraphics.com	Zenair 601 HDS
NG, Bart	bng@math.iupui.edu	RV-7A
NUGENT, Chuck	chucknugent@yahoo.com	SE-5A Replica
POULOS, Angelo	ampoulos@inetedirect.net	Cherokee 140
REYNOLDS, Gary	n98gr@aol.com	RV6A
RINEHART, Mark	capt_riney@yahoo.com	Kolb Mark III Classic
ROEVER, Doug	dmroever@iquest.net	RV-7 Tail kit
RUSH, Larry	k9hxt@msn.com	RV6A, RV-8
SHULL, Kenny	PHONE 317-539-5542	Helping Others
SULLENGER, Vern	sullenger@iquest.net	Cherokee 140
TURNER, Arvel	aero451@hotmail.com	RV-9A
VITTETOW, J.C.	j_vittetow@msn.com	PA22
VOGEL, Paul	pvogel@indy.rr.com	Tri-Pacer
VONDERSAAR, Bob	bobandteresa78@msn.com	Steen Skybolt
VONDERSAAR, Teresa	bobandteresa78@hotmail.com	Steen Skybolt
ZELLER, Gary	gzeller@comcast.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

If you have the resources to develop a thematic neighborhood with the AirplaneHome, then we have a proposal for you. How would you like to own your very own aircraft carrier? A company called Auction Arms is offering a 1945 British built 693-foot aircraft carrier, now located in Norway. This flattop has been overhauled several times, with the most recent refitting in 1998. It was decommissioned in November 2001. Asking price is a paltry \$5 million dollars; buyer will need to pay an additional \$3.5 million to remove the weaponry (darn!). Buyer will also need U.S. or U.K. permission to buy it if they aren't already a NATO member.

OK, so it's not actually an airplane. But it could be the ultimate acquisition for naval aviation fans. This is the real thing! Even better than the Airplane Home, if you don't like the view, go somewhere else! Don't like your neighbors? Oops, sorry, you have to remove the weaponry. But there's still lots of fun on the horizon with your very own aircraft carrier. Hold your own fly-ins just a few miles off shore. Imagine the fun you'll have hosting spot landing contests on this baby. You won't need judges; you'll know who the losers are.

There are more advantages: you'll never get noise complaints as you tune the short stacks on your engine. You'll never have to pay hangar rent. You might never have to pay a mortgage (you could live on the thing). You'll never have utility bills (it has generators). You'll never have a twin cut you off with a straight-in landing pattern. You'll never have a crosswind. We are sure that you can find many more practical and entertaining ways to justify owning your own aircraft carrier and the resultant operational expenses.

For more information see <http://www.auctionarms.com/search/displayitem.cfm?itemnum=5311742>

## Quote of the Month

*High Flight*, by James Magee, Royal Canadian Air Force

Oh, I have slipped the surly bonds of earth  
 And danced the skies on laughter-silvered wings  
 Sunward I've climbed, and joined the tumbling mirth  
 Of sun-split clouds — and done a hundred things  
 You have not dreamed of — wheeled and soared and swung  
 High in the sunlit silence. Hov'ring there,  
 I've chased the shouting wind along, and flung  
 My eager craft through footless falls of air.  
 Up, up the long, delirious, burning blue  
 I've topped the windswept heights with easy grace  
 Where never lark, or even eagle flew  
 And, while with silent, lifting mind I've trod  
 The high untrespassed sanctity of space,  
 Put out my hand, and touched the face of God.

## February's Program

Jon Byrum and Bart Ng are building a Van's Aircraft RV-7A in Jon's garage in Zionsville IN. After driving through the classy neighborhood in the rolling hills to the northeast of the village, you will notice one very unusual feature of his shop. There is a very large window in the garage that faces the street. Rather than covering the window with curtains and hiding the project as if it were in their own private "skunk works," the window is open for all to see. Yes, you can see them building the airplane from the street or the sidewalk. These two are proud of their project and have every reason for their pride.

Jon Byrum is an architect who is originally from Tyler, in east Texas, about halfway between Dallas and Louisiana. He has his own small architectural firm that used to build some of the Marsh supermarkets; now he designs mostly churches. He is an IFR-rated pilot and wanted something for fast, long-distance cruising so he can comfortably go back to his hometown.

Jon's project started as a Glasair III. He bought the kit and began building it in his three-car garage. He says that when working on the one-piece wing it used to stretch diagonally across the entire garage! The Glasair was going to be a long-term project, as he had to build it by himself: no partner to assist in building; no partner to spread out the financial load. After he discovered that the insurance was going to be very expensive, about \$7,000 per year, he sold the project and looked for something that was also fast, but more appropriate for his needs and resources.

Jon recovered most of his Glasair investment and only needed about \$500 more to make a switch. He took the proceeds from his Glasair sale and plunked the money down on an RV-7 kit, starting in June of 2002. This time, hoping to distribute the financial burden, he formed a small LLC that will own the airplane and began looking for a partner.

Jon located someone who started helping him to build the aircraft. His first partner's preference was to build and fly a taildragger so they started building the airplane as a conventional-gear RV-7. But the partnership soon ran into a problem. Building an aircraft can be a slow and arduous process, especially when the builders take pride in their craftsmanship. Jon's partner was itching to get into the air so he opted out of the deal and bought a Cessna 150 Aerobat.

Jon began looking for a new partner. He had known Bart Ng for several years, as the two had flown together and had partnered on planes before. The basic project seemed to meet Bart's needs. He liked what he saw and bought in as a partner in June of 2003.

Bart is a gregarious yet fairly modest man, and is more likely to be talking about his project than about himself. When asked about his life he summed it up with "born in China, raised in Hong Kong, educated in U.S.A." Hmm, there's already a lifetime of stories in just those few words; what else would he reveal? Bart says that he came to the United States for the college educational opportunities. He says that he never had to pay for college; his education was entirely financed by scholarships and fellowships.

When pressed a bit further Bart admits that he teaches math at IUPUI. He concentrates on courses like Calculus and up, so many of his students are future engineers. It turns out that he is a full professor and has a Ph.D., but as he requests, "don't call me doctor."

Bart began flying in 1987 by training in an Aeronca Champ, then progressed to a Cessna 172. After that he flew a Piper Lance. He is IFR rated, and now has about 150 hours flying a Piper Saratoga. Bart joined Chapter 1311 this past fall.

Together, Jon and Bart preferred a tricycle-gear aircraft to a taildragger, so they began converting the RV-7 to an RV-7A. Very few modifications were required. At the tail there is a small opening where the tailwheel gear was attached. It will be closed up with only a small bit of evidence remaining that there was ever a tailgear.

The main gear attachment points were moved forward and the castering nose wheel was added. Jon says that there are several

advantages to a tri-gear, at least with the RV-7 series. "There's a difference in insurance rates," he says. The tri-gear can also take off and land quicker because it can rotate more. Both builders seem to be pretty happy with their decision to make the conversion.

Jon began the project with the tail and then moved to quick-build wings, which are completed and stored in racks in the garage. The fuselage was built from what he calls "the slow-build" kit, as they had to locate then drill many of the holes.

The wing and fuselage riveting looked to be of excellent quality. After careful inspection of the fuselage your eyes are quickly drawn to a slightly miss-set rivet or two. That's because they've gone over the airframe and have already highlighted some rivets with a Sharpie pen; they probably intend to replace them.

The pair has not modified the aircraft, staying fairly faithful to VanGrundsven's plans. But that doesn't mean that it's an off-the-shelf project, either. This airplane is replete with many features and refinements that suit the builders' needs and personalities.

Jon was proud to demonstrate the custom floor installation. What? Custom floor? He explained that he was dissatisfied with the way that the wires and control cables were routed under the floor. He wanted more spacing between the power-carrying wires and those carrying data, and it just wasn't possible with a permanently riveted floor. As an architect Jon probably foresaw the potential problems so he invested in a bag of nutplates and installed them so that the floor is removable — and everything underneath is serviceable. Now that makes sense.

Jon also wanted "idiot lights" on the instrument panel. He and Bart did some research into LEDs then designed a custom sub-panel with several colored LEDs mounted directly in front of the pilot on the main instrument panel. These LEDs will illuminate, informing them of several potential engine problems.

The pair had to modify the outer portion of the instrument panel and build new panel supports, as originally designed there wasn't enough room behind the panel to add the instruments and avionics that they would eventually install. They planned on a full IFR-certified platform with Apollo avionics. Currently, a full-scale photograph of their instrument package occupies the center of the instrument panel.

Their craftsmanship and zeal for detail is evident in some of the smallest refinements. Bart was proud to point out their flap actuation switch. Unable to find something that he liked, he bought a simple momentary toggle switch to operate the flaps. But to make the switch look like something from type-certificated airplane, he fabricated a flap-shaped lever from a chunk of heavy scrap aluminum and carefully fitted it to the previously "generic" switch. Now, when operating the flaps, the pilot can positively identify the flap switch by feel alone.

Jon has transferred his architect's background into some more instrument panel details. Not content with the stick-on plastic label-maker placards, he custom-labeled the entire panel by using tiny rub-off lettering, normally sold in art supply and graphics arts stores. Once the hundreds of letters were individually positioned and burnished into place, Jon repainted the panel with a clear coat. The panel really looks nice!

Jon and Bart have meticulously applied epoxy primer to every surface of every part before assembling them. The resultant parts are nicely finished and should resist corrosion for many years.

Because they intend for the aircraft to be a swift cross-country

cruiser, they are increasing the fuel capacity by adding wing tip fuel tanks made from fiberglass. They estimate that with the main and tip tanks the aircraft will have about 5.5 hours of range (no reserves).

Currently, the aircraft isn't yet upholstered. Jon says that he has the ability to do it all himself, but is investigating the costs of having someone else make the interior. It all depends on the time they have as they finish the project. They think that they may test fly the airplane before the upholstery is completed; Bart will test fly it on cheap seat cushions.

Bart's emphasis on the project has been to research the engine that they would eventually install. After much planning they bought a rebuilt Lycoming O-360 engine from Penn Yann Aero. Using certified parts, both claim that the engine is not a certified engine, at least as installed. It's a bit higher compression than normal, about 9.5-to-1, and uses Cerminated cylinders, putting out about 190 h.p. With its higher compression it will be limited to using 100 LL fuel only, but if necessary, they only need change the four pistons to reduce compression and convert to auto fuel.

The engine uses a carburetor instead of fuel injection, as Jon prefers the simplicity of the installation. They are running a combination of one electronic ignition system and one magneto. They have installed a fixed-pitch propeller, but since the engine has a hollow crank they can upgrade to a constant speed prop at a later date.

They ordered their prop pitched two inches more than normal, as their intended missions are more concerned with speed than climb. But with 190 h.p. up front, their climbout should be plenty swift.

As of the meeting time (February 4, 2004) Jon and Bart, along with the previous partner) have dedicated about 1600 carefully chronicled "shop" hours into the project. Jon's plan was to spend about 10 hours per week per person to build the airplane. That's about 1000 shop hours per year, which he thinks is reasonable for his work and family commitments. Jon can claim an additional 500 or more hours of involvement through his design, layout, planning and shopping for parts.

About \$66,000 has been invested in getting the aircraft into the air; they estimate that another \$14-26,000 may be required to complete the avionics package. At that time they plan on bringing in a third partner to raise the required cash. Planning for this eventual moment, Jon formed an LLC for the partnership, making it easy for someone to buy into or sell out of the airplane. Instead of owning a share of the airplane, the owners actually own a share of the corporation; the corporation owns the airplane. A side benefit of LLC ownership is that when someone buys a share no sales tax is charged by the state of Indiana.

The partners are working on a tight schedule to complete the airplane. Their current plans are to have the entire airframe completed by the end of March so that they can dedicate the month of April to painting, which they will do in Jon's garage. Once they are finished with the plane they plan on moving it to Eagle Creek Airport in May, do the final assembly and fitting, then fly it. So far they have built everything in Jon's garage, and his wife can still park her car in there with room to spare. The three-car garage is neat, clean and well laid out for building, parts storage and convenient access to the car and house.

Although nearly every builder encounters problems now and then, and errors need to be corrected, Jon and Bart have not been plagued with too many remakes. In fact, Jon says that he needed to order replacement parts only twice, and both of these

were small ones. One of the replacement parts was the top track for the canopy rails; Jon wasn't happy with the way that the canopy seated.

Their current plans are to base the airplane at Eagle Creek; they are on a waiting list for a hangar at the north end.

Jon's wife will fly with him when she has to but she doesn't really like it. However, his two kids enjoy flying and look forward to the opportunities to go. Jon has promised his 14-year-old son that when the aircraft is finished and the Phase I test hours are flown off that they will take a cross-country trip to an RV fly-in in New Mexico this fall.

Bart has family in Canada and a brother in Pennsylvania, and likes to fly to visit them.

All in all, this RV-7A is a great looking project with well-thought out features and built with excellent workmanship. When completed it will be a classy looking, long-legged cross-country machine. Congratulations to Jon and Bart. We look forward to seeing it fly, hopefully at the first chapter fly-ins this year.