

Hendricks County EAA Chapter 1311

Monthly Newsletter — June, 2004

That First Flight

From the Chapter Vice President

By Mike Laurenzano

When it came time to write this article for the newsletter, I solicited ideas from Mike Mossman. Mike did not let me down. He made some great suggestions, several of which I hope to write about in the future. However, the one I selected is one that Mike and I have discussed for months now, that "first flight." Yep, the time when one becomes a test pilot.

Now I know that many of you will be scratching your heads as to what qualifies me for writing about this subject. Most of you are aware that I have never built an airplane and spend more time talking about it, or fixing one that someone else built, and you are correct. However, I base my prerogative to speak on this subject on two points: (1) while I did not make that first flight in my M-II, I did feel like a test pilot when I flew N64JA for the first flight after having it apart for over two years and with an new engine overhaul (and you know how that turned out). During the acceleration down the runway it occurred to me that I was dealing with some unknowns and could only imagine the satisfaction of making a successful "first flight," (2) I have had a dream for over 50 years of building my own airplane and then putting it into the air. Maybe one of these days I will.

Many of you in Chapter 1311 have built or are building an airplane. For those who have you have had the satisfaction of watching the metal or composites, the hardware, avionics, paint and instruments all come together. Of course during this process you made your share of mistakes, blurted expletives for which you were later sorry, overcome some engineering problems, etc. However, for those who have completed the process to include that "first flight," only you know the total joy and satisfaction of building your airplane. You experienced the apprehension of wondering if it would stay together and make it back unscathed and the exhilaration when you did.

I have talked to several builders who have gone all the way through the building process, only to give the satisfaction and joy, and uncertainty of the outcome of that "first flight" to someone else. Now that is a concept I do not understand. After all, if you decided what you wanted to build, it must be something you researched and found to meet your needs and capabilities. Second, if you built it then you must have confidence in your craftsmanship and building skills. Now that leaves only one issue, that being, what is your level of proficiency to make this airplane get into the air and then back on the ground, all in one piece. Like the other two considerations that you approached methodically and with detail, this consideration is well within your control.

So how does one make that "first flight" successful? The answer is simple, **PLANNING AND PREPARATION**. First, read all you can about your airplanes performance and handling characteristics. Seek out others who have built and flown your model and learn from their experiences. Certainly, having the opportunity of flying your airplane design is extremely helpful. Second, have a test flight profile planned and prepared. Consider the weather you will need, what maneuvers should be performed and in what sequence, how and where should the test area is to be set up, how long the flight is to last, what emergency procedures and checklist should be developed, what emergency considerations should be planned for and practiced, what airspeeds should be used for rotation, liftoff, climb out, cruise and approach, what stall

characteristics should be expected, how the stall maneuver be should entered and recovered, how the approach and landing should be set up and executed. Obviously, there is much to do in the planning stage. So do not minimize the importance of this step. Third, do not confuse your apprehension about flying your untried machine with your lack of you flying proficiency and currency. If you have not flown for a while, then get some time and instruction to get you comfortable in the air.

So what all this boils down to is: Do not cheat yourself of the satisfaction of accomplishment, and the joy of knowing you made the machine and you flew it for the first time. After all, the jewel in the crown of building an airplane is that "first flight."

June's meeting

June's meeting was held at Troy Grover's home in Avon on Tuesday, June 1, 2004, and was chaired by Chapter Vice President Mike Laurenzano. Shortly after 6:30 p.m. Laurenzano brought the meeting to order.

IN ATTENDANCE: Signed in were Troy Grover, Gus Gustafson, Mike Laurenzano, Michael Mossman, Gary Reynolds, Mark Rinehart, Vern Sullenger and Arvel Turner. If you were there but didn't sign in, let us know.

GUESTS: Signed in were Andrea Grover, Mark Helminger, Peter Cozzolino and Brian Hoyer. We welcome all guests and encourage them to attend a meeting, and especially to join the chapter!

TREASURER'S REPORT: Vern Sullenger reports no changes to the chapter coffers since the last meeting.

PROJECT UPDATES: Michael Mossman reports that he has 20-30 hours of work remaining to get this Zenair ready to fly. He reports that he made his application for registration about six weeks ago but hasn't heard anything back from the FAA yet.

OLD BUSINESS: No fly-ins are planned for this year as the chapter's focus is on building or restoring airplanes.

Mike Laurenzano reports that although it has been nearly three years since 9/11 it is still important to get a full briefing before every flight. Being a presidential election year, many mobile TFRs are in effect. Laurenzano reports that even certain bus trips can create a TFR. He hoped that the local FBO would not have the responsibility of investigating a TFR violation by a chapter member.

NEW BUSINESS: Mike Laurenzano reports that chapter president Tim LeBaron is in Seattle for the summer, working as an accident investigator for the NTSB.

Vern and Lou Sullenger have offered to host the chapter Christmas Party and December meeting at their home in Plainfield. The final date will be set later, but current plans are to hold the party/meeting earlier in the month so that it will not conflict with other seasonal activities and events.

The chapter has nominated Michael Mossman for the EAA's Newsletter Editor Awards. Judging, based on Content, Appearance, Layout and Consistency, will be conducted during June and July; announcements of the first five place winners will be made before Oshkosh. The application requirements included

a printed copy of the March, April and May newsletters plus an application form ("nomination") to be completed by the chapter president or vice president.

The July meeting was scheduled to be held at Jim Winings' airstrip west of Danville. Because Jim's RV project might be in the paint shop there might be nothing to see. As an alternative, Pete Cozzolino has offered to host the meeting at his racing fabrication business on the west side of Indianapolis. Mike Laurenzano will make an official announcement of the meeting location and date when Wining's plans are known. Chapter members will receive email notifications; those without email will receive a telephone call. The chapter website will also be updated when the meeting is officially set.

50/50: Arvel Turner's winning 50/50 ticket was pulled from the hat by Jenna Grover. Arvel won \$6.

PROGRAM: Troy and Andrea Grover showed their RV-10 project and spoke about their RV-series Builder's Assistance service. 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.

Dues are (over) 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 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.

Sport Pilot Rule Returned to OMB

From EAA e-HOT line, June 4, 2004

The sport pilot/light-sport aircraft rulemaking package has been returned to the Office of Management and Budget (OMB) for final approval. OMB's website acknowledges receipt of the rule on June 1, 2004. No deadline for final action is listed on the website. However, when EAA Vice President of Government and Industry Affairs Earl Lawrence visited OMB, along with fellow ASTM Committee chairmen Phillip Lockwood and Eric Tucker, they stressed the need for swift approval of the rule.

The rule, which had been withdrawn from the Office of Management and Budget by FAA in late March, is now back at OMB for what is hoped to be the final review before publication. FAA had withdrawn the rule to answer questions presented by OMB, in a procedural move that would keep the rule on-track instead of creating a major setback if it was completely rejected

by OMB. This advancement is another major step forward for the rule. Once OMB approves the rulemaking package, it will be returned to FAA for publication in the Federal Register. This year's AirVenture event will include a major focus on sport pilot as it provides an exciting opportunity for growth in many areas of the aviation community.

EAA will continue to monitor the rule's progress and report any news as soon as it's available.

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>

BULLETIN

On Thursday, June 17, the city of Indianapolis announced that AAR, an Illinois company, will occupy the United Air Lines maintenance building. They project to hire 200 people in November, and potentially could expand to 800 workers within five years. We will publish more information as it becomes available.

Tours Mark 75th Anniversary of Ford Tri-Motor

From EAA eHotline

The EAA is celebrating the 75th anniversary of its 1929 Ford Tri-Motor with two mini-tours, the first launching on June 25 at Oakland County International Airport in Pontiac, Michigan. The first tour runs through July 18, making stops at Port Clinton and Columbus, Ohio; Kalamazoo, Michigan; and Aurora, Illinois. Arrangements are being made for the tour's second leg, which will take place in the fall. To book passage on the Ford, visit <http://www.flytheford.org>. If book your flight on line you'll save \$10. Learn more about the tour.

The Tri-Motor Summers

By Michael Mossman, Newsletter Editor

During the mid 1960s my family and some close friends of my parents spent two summer vacations at Put-In-Bay OH, which was located on South Bass Island in Lake Erie. In those days Lake Erie was very polluted so there wasn't much fishing or swimming. In fact, there wasn't much of anything for a kid to do on the island. Once you hit the shops in town and did the tour of the Perry Monument, the rest of the week was spent waiting for the time to go home. But there was a symbol, a ray of hope, something to daydream about. Several times a day an old, lumbering Ford Tri-Motor would make the trip across the lake from Port Clinton or Sandusky to the little grass airport at Put-In-Bay, exchange some passengers and baggage then return. I'd often lay in the grass surrounding the lake house and wait for that magnificent bird to fly over. I would daydream about the adventures that could be flown in that mighty and capable aircraft and thought that someday I would fly in it, too.

Returning to "the mainland" at the end of the first vacation I continued to fantasize about the old Ford. One winter I bought a

plastic model kit of the Tri-Motor and carefully glued it together. What an unusual model it was. It had this funny, rippled texture to the skin; I had no idea what that really represented. Since I didn't have any idea of the proportions I imagined that the Tri-Motor was a lot like a modern airliner inside. I could see a nice, wide aisle and seats four abreast. Yeah, that probably came out to about 12 to 16 rows. Three engines? Hmm, that was enough power for 48 to 64 passengers. Lots of baggage? No problem; through them in the hold towards the back. "We" didn't do weight-and-balance in those days.

The next year I looked forward to the trip back to the island. I just had to see the real Tri-Motor again to really get an idea of what it could do. I'd conjured up visions of earning a pilot's license, running away from home and getting a job flying a Tri-Motor somewhere. Maybe I'd pick up refugees or ferry freight to South America. While fantasizing about it I schemed up the idea that I should buy my own Tri-Motor. I could refurbish the interior like a camper and fly my own adventures whenever, wherever I wanted. I would lay in the grass and visualize that airplane until it became almost real. Closing my eyes, imagining the roar of those mighty engines, I could just hear it. It was real! There it was, flying overhead. Like the swallows of San Juan Capistrano, it returned right on time to its ancestral home, navigating strictly by habit or instinct, no instruments or pilot intervention required. And as it was drawn to Put-In-Bay, I was drawn to it, too.

Finally, either boredom drove me or wanderlust overtook me. One day, while on my own, I hiked across the island to see the mighty bird up close. I thought that I might buy a ticket and try a ride in it; that would have been my first airplane ride. Unfortunately, I would have had only two or three dollars saved for the entire vacation's "expenses" and that wouldn't have been enough. But at least if I got close enough to look at it and touch it maybe I would become fulfilled. I fantasized about sneaking on board, stowing away, and being transported to distant isles and adventures beyond.

I got to the airport but was a bit intimidated and disappointed by what I saw; I was completely unprepared for the up close and personal sight of the Tin Goose. Expecting a modern transport with gleaming, shiny silver paint, I saw an old, corrugated beater with three nasty, belching engines hanging on the front of the aircraft, fully uncowed. They were smoking more than the hustlers at a billiards parlor. Although equipped with a huge, wide wing, the Tri-Motor looked too small and feeble to carry more than a few people and too rickety to go island hopping across the Caribbean (it only crossed about ten miles of water while overflying Lake Erie). Even nearly 40 years ago, to my young, unsophisticated eyes, it looked old and dumpy up close. Try to imagine seeing the Rolling Stones these days but with no limousines, no fanfare, no entourage, no new songs, no spark, just slugging away at some tunes that lost their sparkle years ago. Yeah, I think it was just like that. Years — decades — beyond its prime, tired, faded, dented, jaded.

I slunk back to the cottage like the goat on a losing baseball team. Mighty Casey had not only struck out but the Red Baron was shot down, too. There would be no more vicarious trips to the Bahamas, no Atlantic crossings, no campouts on wilderness runways, no more adventure that summer. I played catch during the day with my brothers and listened to the adults drink gin and play pinochle at night. Once vacation was over I pulled the model Tri-Motor off of the shelf and flew it one last time ... towards the trashcan.

As disappointed as I was in the actual Tri-Motor I couldn't have appreciated its age. It was built in 1929, the same year that my father was born. Aviation had advanced so rapidly and so far

since the Tri-Motor was designed that nearly everything flying eclipsed it in some way, many in every way. It was nearly 40 years old and worn well beyond its years. It was slow, loud, smoky and ugly. There was no style to it; it looked the engineers just stuck on any parts that were convenient. And it just had to be too expensive to maintain. How could it be safe? What kind of fool would continue to operate this hulk? Sell it to the smelters and buy a shiny new jet!

There was no way I could have imagined in the mid 1960s that the Ford Tri-Motor, as old as it was already, was only half-way through its life. No way I could have known that there were folks who were willing to put countless dollars and hours into keeping it in the air. As a historic relic, it could have been prettied up and hung in some dimly-lit museum, winched to the floor every few months for a curator or volunteer to dust it off and air up the tires. That sounded like the proper destiny for an aircraft like that. Well, maybe not that airplane. Preserve the best; junk the rest.

But somehow a few of the old Tri-Motors escaped both fates. Neither junked nor perched in an over-sized birdcage, they are free birds, still flying passengers for hire. Scheduled service was dropped years ago, and the flights don't actually transport you anywhere, at least not to a different location. Yet they do transport their fares back in time, back when air service was in its infancy, back when the designers didn't even know if pilots could control a plane from inside a cabin. Aluminum was a rarely used aircraft construction material (except for the airships); no one knew how long the airplanes would last, nor did they expect them to. They could have worn out, rusted, faded away.

I'd heard rumors that the Tri-Motor making the EAA's tour this summer was the very Tri-Motor that used to fill my summer hours many years ago. Checking its history on their website put this rumor to rest. No, it sure appears to be a different airplane. No account of the ferry flights from Port Clinton out to the island was given. Surely if it had seen a couple years of service there at least a passing mention would have been made. But does it matter? It's the same make and model, probably the same year, too. What if "my" Tri-Motor had been cannibalized to keep the remaining good ones in the air? It is possible that some of "my" Tri-Motor parts are flying on that tour?

I remember when I got a bit older how I quit listening to the Rolling Stones. They were too old to do what they did and their music didn't seem to progress. Yet here they are, still one of the biggest bands in the world. Grizzled, arthritic, probably hard of hearing, some of them were already dead, but the band is still doing what they've always done. And now it's OK to like them and cheer them on; they've survived every trend and phase and now are timelessly cool. And so it is with the old Tri-Motor. It could never have been modernized, made faster, prettier, or changed its style. For 75 years it remained true to itself and soldiered on with its non-glory routes and low-revenue fares. Once again it flies very short hops with about a dozen people at a few bucks a pop. It's not history until it's over, and it's not over yet. There's still time to dust off this old album and play this fond memory. No, I won't be gun-running to Cuba or doing aerial surveys of Alaska, but I won't have to. I won't be living vicariously or flying only in my mind. This time it will be real. The Tri-Motor will have redeemed itself, not with a hit record or home run, but doing what it was designed to do: fly a few dreamers around the patch at a few bucks a piece.

Midwest Air Shows Highlight Summer Activities

Condensed from the Chicago Tribune, May 16, 2004

Here in central Indiana, aviation fans have grown accustomed to marking their calendars for the annual Indianapolis (Mount

Comfort) Air Show. Currently a major fundraiser for the Riley Children's Hospital, Mount Comfort draws more than 40,000 visitors each year to see the static exhibits, WW-II fighters and bombers, antiques and classics, modern military aircraft, commercial transports, contemporary GA aircraft and the fantastic aerobatic maneuvers and fly-overs. Located just a half-hour due east of Indianapolis at Mount Comfort Airport, the Indianapolis Air Show is easily accessed by westsiders and is always a great value for fun, entertainment, inspiration and enlightenment.

A couple states further away but easily driveable, and especially flyable, is the EAA AirVenture at Oshkosh. Probably the most anticipated aviation gathering in the world — certainly the most rabidly attended — AirVenture has darn-near anything anyone interested in aviation could ever want. Too much to do and see in a day or two, many people plan their summer vacation around attending "Oshkosh;" others might schedule a day trip or two and maybe an overnight stay.

But let's say that you "did" Mount Comfort and Oshkosh and still didn't get enough of aviation. Our maybe you couldn't attend Farnborough or the other major European air shows. Not to worry, we have plenty of excitement for you. This year there are several excellent aviation events located right here in the friendly Midwest. Although some are already over by newsletter publication date, there are still plenty on tap to choose from. Here is a sampling within a day's drive:

June 18-20: Great Galena Balloon Race, Galena IL. More than 25 hot air balloon launches, kite-flying contests and lessons, candy drops, fireworks at dusk Saturday. For more information call 800-916-3330.

June 25-27: Balloons in June, Clinton IA. Mass balloon ascents, evening glows, car show and other activities at Clinton Airport. For more information call 563-242-9174.

June 29-30: Hot Air Balloons, Prairie du Chien WI. Balloons will fly over Feriole Island, Tuesday evening band concert, encampment recreation, vintage boat parade and strolling musicians. For more information call 800-732-1673.

June 30-July 4: Field of Flight, Battle Creek MI. W.K. Kellogg Airport hosts hot-air balloons, military and civilian aircraft, carnival rides, main stage entertainment and fireworks. For more information call 800-397-2240.

July 10-11: Air Fair, Terre Haute IN. Military jet demonstration teams, civilian performers, warbird displays and children's activities at the Terre Haute International Airport-Hulman Field. For more information call 812-877-4100 or see <http://www.terre-hauteairfair.com>.

July 15-18: National Aviation Heritage Invitational (Eastern Regional), Dayton OH. Twice-yearly vintage aircraft competition. For more information call 800-274-JETS or see <http://www.heritage-trophy.org>.

July 23-25: Great Balloon Race, Galesburg IL. 30 or more colorful hot-air balloons will soar over Lake Storey and beyond. Professional balloon aviators will compete for prizes. For more information call 800-916-3330.

July 27-August 2: EAA AirVenture, Oshkosh WI. Forums and seminars, exhibits, most vendors and manufacturers, Fly Market, static displays, historic aircraft rides, internationally known air show performers daily at Wittman Regional Airport and the EAA Aviation Center. For more information call 800-732-1673 or see <http://www.airventure.org>.

July 31-August 1: Indianapolis Air Show, Greenfield IN. This year the air show at Mount Comfort features the U.S. Air Force Thunderbirds, plus other aerobatic performers and fly-overs, static displays, a car show and more. For more information call 317-335-7252 or see <http://www.indyairshow.com>.

August 7-8: Wings & Wheels, Bloomington IL. At Central Illinois Regional Airport there will be military fly-overs, aerial exhibitions by the Hooligans and the Stearman Big Tree Squadron, antique tractors, vintage autos and motorcycles. Saturday pancake breakfast 6-8 a.m., parade at 10 a.m., and a concert at 7:30 p.m. For more information call 877-206-1501.

August 20-22: Balloon Fest, Centralia IL. Dawn and dusk hot-air balloon races at Foundation Park and a Saturday night Balloon Glow. Car and crafts show, kids activities, main stage music. For more information call 888-533-2600.

August 27-29: Art and Balloon Festival, Lincoln IL. Hot-air balloon launches over Logan County Fairgrounds, plus family activities, art show, flea market, carnival and kids adventure zone. For more information call 217-735-2385.

September 6-12: Stearman National Fly-In Days, Galesburg IL. World's largest gathering of Stearmans at the Municipal Airport, with precision aerobatics, aviation antics and tram rides to see biplanes being assembled or restored. For more information call 800-916-3330 or see <http://www.stearmanflyin.com>.

August 6-8: Air Show, Elkhart IN. Aerobatics featuring some of the nation's best pilots, flight simulations and ground displays and activities at the Elkhart Municipal Airport. For more information call 800-860-5957 or see <http://www.elkhartairshow.com>.

August 13-15: Summer Heat Air Festival, Muncie IN. Tenth anniversary event at Delaware County Airport features hot-air balloon race, civilian and military air shows, kites, music, carnival, arts and crafts, Harley Hog Run and Saturday night fireworks. For more information call 765-284-2700.

Can't make any of these events but still want to hit the air show circuit across the globe? For information on these and many other aviation events see <http://www.flyvintage.com/events/> for a comprehensive listing of many aviation activities.

Will you be attending any of these events? Please let the newsletter editor know so that we might publish your review or experiences.

Two Months to AirVenture

Memorial Day weekend has come and gone; for many aviation-minded folks that means that AirVenture is less than two months away! Chapter 1311 has several members with significant links to Mother Oshkosh, with members that are aircraft judges, volunteers for getting the facilities ready (or cleaning up afterwards!) and even on the EAA's board of directors. For the rest of us, AirVenture is where we go to congregate, see some exhibition flying, shop and haggle, get ideas and do a little hangar flying at the same time

There are so many things to see and do at Oshkosh that the editor can't begin to cover them in a short newsletter story. But you can! Last year we started our "Oshkosh Chronicles," which were personal reports of our members' experiences at AirVenture. At about a half dozen members took the time to write a bit about what they did and saw at AirVenture or Sun-n-Fun, or wherever they went. We'd like to build on last year's Oshkosh Chronicles with more insights into what our members' travels. Are you going (or did you go) to Oshkosh, Sun-n-Fun, Arlington, or any of the

other major or minor air shows or aviation conventions this year? Help us to report on these events.

Last year we provided a printed form for filling in some information on Oshkosh. We're making the same form available this year, but now there is a completely electronic version available. You can download the PDF document, fill it out from your computer then email it to the newsletter editor; no paper or printer required. If you prefer, you can print it then complete the form by hand then mail it to the editor.

POP Volunteers Needed

People from around the world come to EAA AirVenture Oshkosh for primarily one purpose: to look at thousands of aircraft that converge on Wittman Regional Airport. To protect these airplanes - and spectators - the POP (Protect Our Planes) Team monitors flight line activities to make sure visitors abide by the time-tested Oshkosh rules: no smoking except in designated areas, and no food or drink within 10 feet of any airplane.

POP now seeks volunteers to join its team from Monday, July 26th (the day before the convention) through Sunday, August 1st. POP patrollers must be at least 14 (ages 14-17 need a parent/guardian with them) and enthusiastic. No experience is necessary - all you need is a smile - and there's a place for people of all fitness levels. It's a great way for families and/or groups to enjoy EAA AirVenture "from the inside." If you're interested in volunteering, e-mail ProtectOurPlanes@yahoo.com or visit <http://groups.yahoo.com/group/ProtectOurPlanes>.

Building Tip

If you live on the west side of Indianapolis and have built an airplane or have messed around with auto racing or hot rods then you may want to skip to the next story. But if you are new to building and don't know how to fit together the various plumbing parts or know where to source them, here is the tip: Go to Earl's Indy Service Shop.

I'd been having trouble figuring out how to plumb the fuel and oil lines for my Rotax installation. The firewall forward kit had the parts for the most generic installation, but there wasn't enough hose for the fuel or oil lines. Most of the engine parts are metric but they needed to connect to "American" parts, too. Besides that, the local airport regulars were strongly recommending that I use firesleeve over the fuel lines, which I didn't have. Throw in a few more parts that I had never heard of and it was starting to get complicated. I wanted a simple "plug in" engine installation; I didn't want to re-engineer the wheel. Things just weren't going my way.

The guys told me to go to Earl's and pick up whatever doo-hickey or thingamajig they had in mind. I don't know much about plumbing and was a bit embarrassed to show my ignorance in front of the pros, but I went in anyway. I had a part in one hand and another part in the other. I told the guy at the counter that I needed to connect them and had no idea how to do it. He asked me to wait a minute then came back with a much neater and elegant solution, and it probably cost less than what I had in mind. They had the patience to explain what I needed and weren't the least bit condescending. Oh, did I mention that I went in there the Thursday before the 500? I think that used to be the traditional Carburetion Day, so I am sure that they had bigger customers to tend to.

The next week I went back for more goodies. When asked what I was building, I told them about the airplane. They mentioned that they stocked many aircraft hardware components, as it seems that the racing industry lives on AN and MIL-spec fasteners and fittings. They gave me a bunch of catalogs and spec charts for

components that they thought I might need; I think that they value our business.

Next time you need some fittings or hardware and don't know how to spec them from the catalogs, or can't wait for Spruce or Wick's to ship them, give Earl's a try. They are located at 302 Gasoline Alley, Indianapolis, phone 317-241-0318.

Congressman Comes to Aid of Warbird Restorer

From AOPA ePilot

Lex Cralley, 49, of Princeton, Minnesota, vowed to fight to his last dollar when the Navy came after his partially restored 60-year-old Brewster F3A-1 Corsair that he recovered from a North Carolina swamp in 1991. Rep. Walter Jones (R-N.C.) has introduced a private amendment to the nation's defense spending bill that would give title of the aircraft to Cralley. Cralley's attorney said the Navy agreed to the language in the amendment, and the congressman's office said it would be passed by the end of the year

The Department of Justice says its lawsuit, initiated in mid March by the Office of the Underwater Archeologist, has not been dropped, despite reports to the contrary. Department of Justice spokesman Charles Miller said Cralley has until July 6 to respond to the filing in federal court. The lawsuit seeks the return of the plane, the cost of return and compensation for "any damage to or alteration of" the aircraft since Cralley excavated it.

"As owner of this aircraft, I will vigorously defend my position," Cralley said. "I'm just a little guy," said Cralley, 49. "I have no wealth, work for a living, have four kids."

Recommended Change Would Ease Kit Registration

From EAA website

The EAA recently submitted a request to change a Federal Aviation Regulation (FAR) to ease administrative burdens on for homebuilders when they register their kit-built aircraft. FAR 47.33 currently requires the owner of an aircraft built from a kit to submit a bill of sale with the application. Although most manufacturers do not provide a bill of sale with the delivery of a kit, they do provide an invoice.

EAA has recommended adding the words "or invoice" to FAR 47.33(c) as follows: "If he built the aircraft from a kit, the applicant must also submit a bill of sale or invoice from the manufacturer of the kit."

In February this year, FAA requested public comments for amending, removing and simplifying any FAR. EAA's Aviation Services department routinely helps EAA members sort out problems encountered while registering their aircraft. The lack of a bill of sale is by far the biggest cause for delays in the process.

EAA members should note that it could take the FAA up to one year to implement the requested change. EAA will continue to monitor the progress of this change request as it works its way through the FAA/DOT rulemaking system.

More FAR 'Revisions' Anticipated

By Dirk Melchior

Part of my job is to make sense of Federal Aviation Regulations and translate them into normal pilot language. Recently I ran across the following proposed FAR. I thought it might be very helpful to our chapter members to be aware that there is an initiative out there with the aim to prevent them from getting confused by FARs.

PROPOSED FEDERAL AVIATION REGULATION ACT:

1000.A No pilot or pilots, or person or persons acting on the direction or suggestion or supervision of the pilot or pilots may try, or attempt to try or make or make attempt to try to comprehend or understand any or all, in whole or in part of the herein mentioned Federal Aviation Regulations, except as authorized by the Administrator or an agent appointed by, or inspected by the Administrator.

1000.B If the pilot, or group of associated pilots becomes aware of, or realizes, or detects, or discovers or finds that he, or she, or they, are or have been beginning to understand the Federal Aviation Regulations, they must immediately, within three (3) days notify, in writing, the Administrator.

1000.C Upon receipt of the above mentioned notice of impending comprehension, the Administrator will immediately rewrite the Federal Aviation Regulations in such a manner as to eliminate any further comprehension hazards.

1000.D The Administrator may, at his or her option, require the offending pilot, or pilots, to attend remedial instruction in Federal Aviation Regulations until such time that the pilot is too confused to be capable of understanding anything.

Boone County Airport News

After three and a half years as the FBO, Roger Farris has left Boone County Airport to become the director of maintenance at JetDirect in eastern Pennsylvania. Currently, there are no known plans for a new FBO to come to the airport.

The airport property has been for sale for many years now, with an asking price that is several times over the market value of the acreage. The low-lying land is prone to flooding and no city utilities are available. The newsletter editor knows of no interested buyers at this time.

Rumors have been circulating for the past several months about the future of the airport and any potential operation. Currently, several members have proposed forming a club to operate the airport for the owners and maintain the property, providing that the airport remains open.

Current co-owner, Andy Henderson, concerned about the constantly circulating rumors, has scheduled a meeting with the tenants on Saturday, June 19, at 10 a.m. at Pickering Farm Management in Lebanon, to state their intentions and discuss the issues with the tenants.

Auction Features Aviation Items

An estate auction in the Columbus IN area this weekend contains, among other things, a collection of more than 1,000 books, many of WW-I and WW-II, plus hundreds of aviation-related books. Also on the block are more than 300 model aircraft and collectible guns. The Keller-Newson auction will be held Saturday, June 19, 2004 at 10 a.m. at 3995 Norris Lane, Armuth Acres, Columbus IN, which is reported to be a bit northeast of the Columbus Airport.

European Aviation Tour Planned

The department of Aviation Technology at Purdue University is offering a special aviation-oriented trip to Europe for the summer of 2004 and is inviting everyone with an interest in aviation to join. The 10-day trip will start in late July 2004 and will visit Airbus in Germany, aviation and historic sites in Germany, Denmark and England, and terminate at the Farnborough Airshow in London, England. The trip price, less airfare, is less than \$2000. For more information on the European Aviation Tour check out their website at <http://www.tech.purdue.edu/at/courses/at452/> or contact Mike

Nolan at Purdue: mnolan@purdue.edu
phone: 765-494-9962 or fax: 765-494-2305.

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.

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.

EAA Young Eagles Update: By newsletter publication date more than 1,044,800 Young Eagles have taken their first airplane ride.

July Meeting Correspondent Needed

The newsletter editor is likely to be unable to attend the July meeting due to business concerns. We would like to continue to publish timely and valuable information about the meeting and about program. We need one person to take notes about the meeting and the program, and potentially write stories on each one. If you would like to help please contact Michael Mossman at 1-765-483-9533 or email at michaelandkatie@tds.net. He will provide some forms for taking notes. If you don't feel comfortable taking notes but would still like to help you might bring a small tape recorder to the meeting. If you forward the tape to Michael he could write a story.

Legal Defense Funds Sought

From EAA e-Hot line

A group of citizen-pilots in Massachusetts are banding together, and asking for financial support, to thwart legal action aimed at curtailing the freedom to utilize legal airspace over the state. The General Aviation Legal Defense Fund (GALDF) was established to raise the one hundred thousand dollars (or more) necessary to fight this effort, which could jeopardize the training and safety of general aviation pilots and passengers in New England. The case also threatens to impact other pilots who fly for business and recreation throughout the country, if this action becomes a precedent.

The legal action, filed by landowners in exclusive residential areas in Massachusetts, claims that general aviation flights over their properties, towns, and neighboring towns are a "nuisance." The lawsuit also contends that these homeowners should be compensated for their alleged inability to use their property. The group behind the lawsuit demands that general aviation pilots purchase tracts of land large enough to pursue their activity.

GALDF needs private contributions. To donate on-line or obtain additional information, visit <http://www.gadefensefund.org> or send contributions to:

General Aviation Legal Defense Fund
Suite 6, Box 368, 290 Turnpike Road, Westborough, MA 01581

Donations are not tax deductible, and GALDF is not associated with any other established organization.

Editor's note: The inclusion of the article above in no way is an endorsement, recommendation or solicitation from the chapter or its newsletter. Although it arrived in time for inclusion in the newsletter we have not had the opportunity to investigate this organization. Please use your best judgement.

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.

Building on a Budget — Although some of us are able to build our projects with every conceivable or desired piece of equipment or feature, many of us are far more limited resources. We'd like to investigate the opportunities of building on a budget with on-going ideas and guest stories.

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

To download a "printer-friendly" PDF copy of the Oshkosh questionnaire see http://www.eaa1311.org/PDF_files/Oshkosh_questionnaire.pdf

Calendar of Events

June 19, 20 — First Annual Midwest Taildragger Rendezvous, Chapter 900 Fly-In, Indianapolis Post Air 7L8. Lunch 10-2. For more information call Tom Lloyd 317-997-2408 or tomlloyd@sbcglobal.net.

June 25, 26 — EAA Chapter 582 Fly-In, Bowling Green OH. B-25 bomber rides, hot air balloons, pancake breakfast, lunch, dinner Friday evening, FAA Wings weekend and more. For more information see <http://www.eaa582.org/> or email Randall Reihing at rreihing@eng.utoledo.edu

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

July 15-18 — National Aviation Heritage Invitational (Eastern

Regional), Dayton OH, vintage aircraft competition. For more information call 1-800-274-JETS or visit <http://www.heritagetrophy.org>

July 27 through August 2 — AirVenture 2004, Oshkosh
July 31, August 1 — Indianapolis Air Show featuring the U.S. Air Force Thunderbirds

September 4 — Fly-In/Cruise-In, Marion IN. See <http://www.FlyInCruiseIn.com>

September 16-19 — National Aviation Heritage Invitational (Western Regional), Reno NV, vintage aircraft competition. For more information call 1-800-274-JETS or visit <http://www.heritagetrophy.org>

September 25 — Wood, Fabric & Tailwheels Fly-In, Lee Bottom Flying Field, Hanover IN. For more information contact Ginger (Gordon) Davidson at 812-866-3211

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

November 13-14 — Las Vegas Air Show, Nellis AFB. USAF Thunderbirds, Las Vegas air racing. For more information see <http://www.nellisairshow.com>

Next Meeting

Due to the uncertainty of whether or not Jim Winings' airplane will be available for viewing, the July meeting is tentatively scheduled for Wednesday, July 7, 2004, starting at 6:30 p.m. the operations building at Hendricks County Airport. From there we will carpool to Winings' airstrip a few miles west of Danville. An alternative meeting location is Pete Cozzolino's auto racing fabrication shop on the west side of Indianapolis. Please check your email for official late notice of the meeting date and location. We will also keep the meetings page of the website updated.

Directions:

Hendricks County Airport (from Indianapolis area):
Go west on Rockville Road (U.S. 36) all the way through Avon towards Danville. Turn left (due south) on county road 300 E The airport is about a half-mile south of Rockville Road on the right (west side) of the road. Go to the main parking lot. The operations building is adjacent to the parking lot.

Don't forget to INVITE A GUEST!

On the Radar:

July 7 — Winnings

August 4 — State Police

September 1 — Fly-In or Chautauqua Airlines

October — Fall fly-in (date TBA)

November 3 — Chapter elections; program: NTSB summer 2004 by Tim LeBaron

December - Annual Christmas party (date 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

Newsletter editor: Michael Mossman

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: 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 May 10, 2004

NAME	EMAIL ADDRESS	PROJECT(S)
BALDWIN, Fred	bladerunnerxz2@netzero.net	2-Place Jet
BEETHAM, John	jabeetham@earthlink.net	Fokker D VI, 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	planecrazy13@att.net	RV3
DUNAWAY, Jeff	jeff@spitfire.net	RANS S-12S
EDWARDS, John	jwayneedwards@aol.com	RV6
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	Piper Tri-Pacer
HILL, Ken	khill5@indy.rr.com	RV9
LATHROP, Steve	lathropdad@worldnet.att.net	BearHawk
LAURENZANO, Mike	mikel Laurenzano@yahoo.com	Bushby Mustang II
LeBARON, Tim	TJLebaron@CS.com	RV8, Breezy, 1946 Ercoupe
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
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@inetdirect.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, 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
VONDERSAAR, Bob	btvondersaar@sbcglobal.net	Steen Skybolt
VONDERSAAR, Teresa	btvondersaar@sbcglobal.net	Steen Skybolt
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

This month's airplane spotter is about the homebuilt Cassutt racer, lashed to a trailer in the parking lot behind the Denny's restaurant in Lebanon. The Cassutt was built with an impossibly-narrow spring aluminum landing gear, no doubt to squeeze out every possible bit of drag for highest speed. Also noteworthy was

the rudder, which appeared to be not a lot bigger than a legal-size piece of paper. The panel had a minimum instrumentation; the wings were stored under the airframe. Also on the trailer was a single seat helicopter without an engine. The engine and tail boom had been removed from the mini chopper, and the blades were packed with the Cassutt's wings.

Quote of the Month

"Life is not a journey to the grave with the intention of arriving safely in a pretty and well-preserved body, but rather to skid in broadside, thoroughly used up, totally worn out, and loudly proclaiming 'WOW, what a ride!!!"

Author unknown, but attributed to many people.

June's Program

To say that Troy Grover lives and breathes airplanes you would be telling the truth but not the whole truth. Sure, Troy has built an airplane and holds a handful of ratings, but the passion for aviation extends beyond him. His whole family is fully emersed in flying, from his wife and children through his extended family.

We met at Troy's home in Avon on June 1. The newsletter editor published some erroneous directions to the home but no one had trouble finding the place. Troy's two daughters, Tessa, 8, and Jenna, 4, were standing at the street corner with signs guiding in the visitors. They were proud of their father's work and wanted to be sure that no one missed it.

Once the members and guests congregated in the shop/garage, Troy began the introductions. He introduced his wife, Andrea, as "Rosie the Riveter" to a few shocked members. No exaggeration here, Andrea bucked a substantial number of rivets on Troy's RV projects. Troy says that she was an integral part of his RV-6.

Troy's passion for aviation was probably nurtured by his father, Ronald Grover, an American Airlines captain. Ron flies Boeing 757 and 767 aircraft on various domestic routes. He lives in the Dallas/Fort Worth area.

Andrea's father, Larry Foster, owns a Taylorcraft (probably a 1976 model). Larry lives in Fairbanks, Alaska, flying people, cargo, food and more in a Piper Lance to the villages in the surrounding mountains. Larry wasn't a life-long aviator; Troy claims that he "inspired" Larry to pursue flying. In 1990 and 1991 Larry earned his A/P and pilot's certificate with the single goal of moving to Alaska and being a bush pilot. Last summer Andrea and the girls flew with him on some of his routes; she says, "it was beautiful and amazing!"

Building Airplanes

Troy started building airplanes with an RV-4 project in 1990. A tandem two-seat taildragger, it bore little resemblance to the more "modern" RVs other than it looked like an RV, was built from sheet metal and flew well. Troy says that the RV-4 kit was basically a bunch of sheets of aluminum. There were no predrilled matched holes. Making matters worse, the formed parts, like ribs and bulkheads, had to be straightened with a lot of fluting. The project wasn't scratch-built, but not far from it.

Troy's next project was an RV-8 that he helped his dad build. The RV-8 had some pre-punched parts, resembling the more "modern" RV kits but it still wasn't a quick build. Troy's dad still has the -8, appropriately dubbed "Hotstuff."

Next, Troy built an RV-6 with a tilt-forward canopy. Like the RV-8, the -6 wasn't offered as a quick build. Faced with a growing family, Troy had a decision to make: keep the two-seat aerial hotrods and leave someone at home, or move on to something bigger

and heavier. Shortly after completing the -6 a year ago Troy sold it to a fellow in Texas.

About this time Van's Aircraft had recently unveiled their newest design, the highly anticipated four-seat RV-10. Now here was a kit aircraft that could carry his entire family.

Troy says the -10's flight controls are designed to be less "responsive" than the previous RVs because the airplane is heavier. And it is heavier because it is much larger. The stabilizer, for example, is 12 feet wide. That's more than half the wingspan of some of the other RVs!

Even though it is larger, heavier and somewhat less responsive, it should still fly like an RV. Troy says that Jim Winings flew the demonstrator RV-10 at Van's homecoming and gave it the "thumbs up." Equipped with a Lycoming 540, the lightly-equipped prototype cruises at 201 mph.

So far Troy has the tail section completed, along with the rear fuselage. He built the vertical stabilizer in about 10 hours. The horizontal stabilizer was the most painstaking to build because it is very cramped and there are lots of parts inside it, including three spars.

The work is going quickly, though. Experience plays a major part, but so does the quick build feature. All parts are prepunched with matched holes. Right out of the box the parts are ready to fit together. The pilot holes need to be opened up to accept their rivets, then the holes need to be dimpled or countersunk. After that, cleco together then start riveting. As an example of the completeness and accuracy of the kit, right before the meeting Troy took the elevator out of the box and cleco'd the skeleton together on the workbench. It appeared to fit perfectly; the RV-10 quick build kit has all matched holes.

Troy keeps a detailed building log of his project and documents each stage with a digital camera.

Being almost finished with the aft section of the plane, Andrea has ordered the forward fuselage kit, which is the portion from the firewall to just behind the seats. As a departure from the normal Van's all-aluminum structure, the upper deck over the cabin area is fiberglass instead of a bubble canopy. The upper deck isn't included in the forward fuselage kit.

Building from subkits is a handy way for many people to afford a kit aircraft; you simply pay as you go. If you happen to be building an RV-10, it is literally the only way to go; the rest of the kits aren't even available yet. The finishing kit isn't expected to be available until next year. Because of that, there aren't any customer-built RV-10s flying yet.

When the -10s are flying, they will join a vast array of aircraft humorously known as Van's Air Force. Currently, there are nearly 3,700 RVs completed and flown. Troy claims that a large part of the RV success story is that Van has a marketing staff and an excellent support network. The biggest part of the support network is the RV guys, the men and women who have already built one. There are hundreds of them across the country and many of them are willing and able to assist fellow builders with answers to their many questions or lend a hand with construction.

For this project Troy is foregoing zinc chromate in favor of Dinotrol AV3 for corrosion protection. Priced higher than zinc chromate, it is still cost effective because less is needed. He says that he doesn't anodize parts because the process makes them brittle, although some factory parts, like the wing spars, are anodized. Andrea adds that the RVs are overbuilt in design

strength so just about anybody can build them and still have a structurally safe aircraft.

With the cost of the RV-10 kits, plus an engine, standard instrumentation, and average paint job an RV-10 will cost about \$120,000, plus the builder's substantial investment in time. Troy is quick to point out that with this investment in time and money the builder ends up with a brand-new aircraft that performs far better than a factory plane. Performance wise, it compares with a \$400,000 Mooney retract. Yet the RV-10 is simpler to operate (fixed landing gear) and roomier, although that Lycoming 540 will use more fuel than the Mooney's engine.

As always, when RV guys get to talking, the conversation eventually covers the new projects under development at Van's. One such project is departure from Van's "tried and true," use of an engine other than a Lycoming. Van's is testing an RV-10 with a 200 h.p. Continental engine. Although highly speculated, Troy didn't know if Van's was testing a diesel engine or not.

Also on Van's backburner is a project that is dear to Dick Van Grundsven's heart, soaring. Being unable to justify development of a high-performance sailplane strictly competition soaring, Van is working on a motorglider in his spare time, while not developing the more marketable "go fast" models that the company is known for producing. Currently dubbed the RV-11, this motorglider is currently being constructed with the Australian-built Jabiru engine. The project is a long way from completion with no projected fly date set. As such, there are no current plans to enter kit production.

Working on his own

Troy earned his FAA license for repair of radios and avionics, then worked for 15 years at United Airlines in Indianapolis as a mechanic. A victim of the airline's struggle to survive after the 9/11 attacks, Troy was laid off when United closed the Indianapolis maintenance hub a year ago. Shortly thereafter he went to work at Eagle Creek Aviation as a mechanic. Anxious to get back into building, Troy started a part-time business known as Grov-Air, doing RV Builder's Assistance. In May Troy left Eagle Creek and has dedicated himself to Grov-Air full time.

Troy is helping a guy from Florida build an RV-8A; the owner of the project comes up every two weeks to work in it. Troy had the instrument panel on the workbench in the garage during the meeting so show off the instruments and details. With the Dynon "glass cockpit" instrument powered and in place Troy picked up the panel and simulated some maneuvers. The solid-state instrument reacted just like a conventional gyro, plus displayed many more parameters. Additionally, Troy demonstrated its ability to display custom checklists and other features. Although the Dynon could function as the lone instrument, the builder has opted for a few "steam gauges" for backup.

Besides working on his RV-10 and his client's RV-8A, Troy is helping his father build an RV-10 in Texas. Currently, he goes to Texas every two months for about a week at a time. He recently returned from a two-week stint where he went to help his father "shoot" the wings.

Going hand-in-hand with his builder's assistance service, Troy is a Tech Counselor for Chapter 1311, and he is volunteering as a flight counselor, too.

Andrea used to sell computer software; now she is working on the marketing for their builder's assistance enterprise. She says that her "full time plus" job is taking care of Troy and the girls, plus assisting Troy with the business and the building (when needed), plus doing the bookwork and anything else, like

answering emails.

Andrea hasn't yet officially logged any hours, but she has done some of the flying with Troy over the past 15 years. Her goal is to be a pilot by the time the RV-10 flies, but so far all of the funding seems to keep getting funneled toward building the RV-10 and the new business.

Troy has worked on many aircraft projects at his home, including some that were done literally in the home. Andrea relates the story about the time that Troy was working on a Cessna 182 nose gear in the living room. The procedure was to heat one part and freeze the other to fit them together. Once the parts were ready to be assembled Troy pounded them onto the living room floor, and in doing so cut a circular hole into the carpet. Embarrassed by his mistake, Troy made a perfect patch for the carpet then fitted it in place but didn't tell Andrea. One day she vacuumed the carpet and sucked up the plug. Hmmm, how does a vacuum cleaner make a round hole in a carpet? She claims that she quickly figured out what happened.

The Next Generation

Besides Andrea, Troy's two daughters love to go flying, too, which is a large part of the reason he needed to build a plane with four seats. The eldest, eight-year-old Tessa, claims that she helps her dad in the shop all of the time, and confidently professes that she, too, will one day be a pilot. Jenna, only four years old, is too young to care about her future. But she is comfortable in the shop, too. As the meeting carried on into the late hours, Jenna laid down on a garage floor mat, rolled into a ball and quickly fell into a sound sleep. Ahh, life is good.