



Experimental Aircraft Association Chapter 105 Portland, OR

Twin Oaks Airpark—7S3 www.EAA105.org The Purpose of EAA Chapter 105 is to Promote Aviation Education, Construction, Recreation and Safety for Enthusiasts of All Ages.

In This Issue

State-of-the-Chapter February '07	3
The End Truly Justifies the Means	4
Prev Meet: Braving the Elements to see Doug S	tenger's
RV-6 Project	7
Next Meet: Mike 'n Jeff Baxter's RV-7	9
National Recognition	10
Safety Thoughts: Passenger Briefings	11
TnT: Build your own Wing Jacks	13
Board Meeting Highlights	14
2005-06 Feature Article Index	17
Buy / Sell / Trade	
Contact! / TCs+FAs+FIs / Renewal Form	19

Next Meetings



• **Feb 8th** 7:00 PM – Mike and Jeff Baxter's RV-7; Hillsboro. Map pg 9

• **Feb 15th** Chapter Board Meeting, location TBA.

• **Feb 17th** Newsletter Deadline – Newsletter article contributions and ads are welcome at anytime, but may be held to a later issue if received after the deadline.

Tom and Martha **On the Cover** Sampson's RV-9A, photographed at the December pancake breakfast. It's been flying since mid-2006.

A correction: I'm told the owner of last month's Yak-52 cover is Noel Jones of Carlton, who bought it from Bob Harris..

Breakfast KP Duty Saturday, February 3rd, 2007

7:00 AM - 9:00 AM John Mates Ed Rogalin Tom Sampson Mike Seager Ron Singh Michelle Singh Bob Stark Chris Stone Roy Thoma Sandra Bes

9:00 AM – Cleanup Aden Rich Leejay Robles Steve Rosenstock Ralph Schildknecht David Sellers Al Strickfaden Colin Strong Bruce Swayze Jake Thiessen Micheal Psiropoulos

Saturday, March 3rd, 2007

7:00 AM - 9:00 AM Dave Salesky Laird Smith Robert Toppel John Trabosh Ron VanBladeren Richard Vanderford Dick VanGrunsven Jerry VanGrunsven Stan VanGrunsven P. Van Schoonhoven

9:00 AM - Cleanup Ken Warner John Warren Paul Watson Don Wentz Robin Wessel Carl Weston John Wilkey Mike Wilson **Jim Wilson** James Mike Wilson

Note to Volunteers who cannot serve: Please arrange replacements for yourselves, or contact Len Kauffman. lakauf @comcast.net or 503-885-1920

Loose Bits —

E-Delivery of the Chapter Newsletter

Are you still receiving a paper copy of the newsletter? Do you have a computer connection that will let you download and view an Adobe PDF file? Please consider switching to our electronic edition! Benefits to you are:

- prompt delivery
- color photos

• available in two resolutions: a small file, suitable for viewing on screen or a large file with detailed photos, designed for printing.

• The chapter gains the labor of printing, folding and mailing your issues and the expense (this issue will cost ~ \$1.50 to deliver!)

Update Your Contact and Project Information

Soon you will receive an email from the chapter - if we have your current email address! - that includes our record of your address, phone numbers, projects and flying aircraft.

Please take time to update any incorrect information with our database master, Randy Lervold. You can reply to the email when it comes, or drop a note to randy @romerlima.com. His phone numbers are in the 'Contact' section of the newsletter.

Also indicate if you'd like your contact info withheld in the Chapter Roster/Directory. We'll be updating the roster again this year and would like to share the most up-to-date information, but understand if you would prefer your phone and email info not be published.

Nehalem Bay State needs You

In the fall 2006 issue of the Oregon Department of Aviation's 'Flightlines' newsletter (http://www.oregon.gov/Aviation/docs/ Fall 2006.pdf), there is an article about the Nehalem Bay State Airport master plan study which is just getting underway.

Since Nehalem Bay State Airport is on land leased from State Parks, the question of whether to renew the lease and keep the airport open or do something else with the land it's on (e.g. turn it into more motor-home camping) will likely be on the table. So now, while the master plan is being developed, is the time to get involved to ensure that the plan includes keeping the airport.

If airport users don't step up to be represented, it's much more likely that the outcome will be something we don't like.

To get on the mailing list for updates and meetings, contact Ron Campbell at 503-986-0743 or email him at ron.campbell@state.or.us.

..... EAA Chapter 105

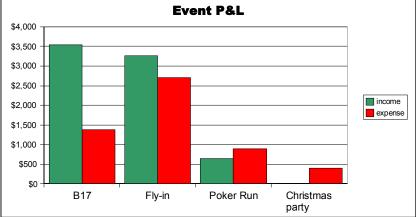
State-of-the-Chapter, February '07

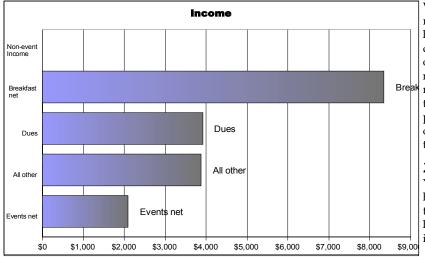
Randy Lervold, President

Annual planning meeting

Again for 2007 your board held an annual planning meeting, this year on Saturday, January 20th. At my suggestion we tried this last year for the first time and the board

unanimously felt it was effective and worthwhile. Same result this year. We begin with a thorough look at chapter





finances: where's our money coming from and where's it going to. Then we move on to annual projects, activities, youth programs, look at new program ideas, and any other ideas or business we see coming for the year. It really helps to consider the year as a whole so things can be prioritized and considered in context with everything else. With the year essentially all planned out the remainder of the year then becomes mostly an issue of execution. In all, a much more efficient use of the board's time and in my view this is important since we are all volunteering our time. Let's take a look at some of the high points from our 2007 meeting...

How the chapter pays the bills

The chapter had income last year of around \$27,000 and I thought you might be interested to see

where it comes from, see the attached graph. You might be surprised to learn that your dues are not our main source of income, our breakfast is. (So when you get the call that your name has come up for breakfast duty please take it seriously, it is a way we can all support the chapter.) "All other" by the way is various donations, the pie auction et cetera.

2006 review

The chapter had a net gain for 2006 of \$2,257 and that includes a one time expense of \$2,000 to get the Little Gee Bee back to the Smithsonian. In terms of accomplishments, we got our project hangar finished and made functional, Dick VanGrunsven led and completed the restoration of the Little Gee Bee, and we held our usual schedule of events that all came off well. We continued to enhance our chapter programs consisting of Technical Counselors, Flight Advisors, informative meetings, a very well equipped tool crib, an invaluable prop balance program, and of course the camaraderie of fellow aviation enthusiasts. In all I think it was a good year for the chapter.

2007 direction

Your board feels that the chapter is on a healthy course overall and will use 2007 to enhance and refine the direction we have established. As always, your input is needed and valued so please don't be shy about grabbing any officer or board member and letting them know what you think. As your President I welcome the chance to talk to any member and hear what's on your mind. If you can't find me at a meeting or the monthly breakfast my phones and e-mail address are all on the Contact page of the web site and in each newsletter. Don't be shy!

2007 events

While the Home Wing has held the NW RV Fly-in for 15 years now we realized that there wasn't an event for all chapter members to bring their aircraft out and show them off. I know there are lots of non-RV aircraft owned by chapter members that I'd like to take a look at and learn more about. With the healthy schedule of events we already have though, not to mention the other events around the country we like to attend during the flying season, we decided that we'd expand one of our existing events. For 2007 the Poker Run will become the "Poker Run & Chapter Fly-in" to be held on Saturday, September 8th. Many of the details have yet to be worked out but we'll start the day off with our traditional and popular Poker run, then spend the rest of the afternoon hosting an all-chapter fly-in culminating in a BBQ. There may even be a camp out and breakfast fly-out the next morning. Look for more on this as we get into the year.

Below is the schedule of Chapter 105 events for 2007

Event	Date	"Boss"
B17 tour	June 1-3	Rion Bourgeois
Scappoose fly-in	June 16	Joe Blank
Arlington meeting/	July 13	Randall Henderson
party		
HIO airshow	Aug 10-12	Rion Bourgeois
Poker Run	Sept 8	Jenny Hickman
Christmas party	Dec 14	Jenny Hickman

Young Eagles

Ron Singh (and Michelle) have agreed to run the Young Eagle program again for 2007 and will publish the year's list of YE events in the next newsletter. Expect a similar schedule to last year's. Pilot awards will also be updated and published soon.

Thanks to each of you for your support and participation, and here's to a great 2007!

...Randy

THE END TRULY JUSTIFIES THE MEANS...

Tom Sampson Photos: Tom Sampson and Benton Holzwarth

After 23 months and 1700 hours of construction by Martha and me, a "slow build" RV9a, Vans serial number 90535 /

the first time in July of this year with Mike Robertson on the stick for the maiden flight. Mike's "fix list" was short...it had high oil temps (as it turned out that was a "Dynon-Installer-incorrect-configuration error...oops), an over-pitched prop, and yes...even a heavy wing!

N728MT-"Tango"-went airborne for

Add on another 100-150 man-hours that we contributed to test flights, trouble shooting, disassembly for painting prep, and then reassembly after painting...and the result is the very neat airplane that sits in our hangar today at Twin Oaks. Tango is a wonderful aircraft, that performs almost as well as Van designed, coupled with a few custom tweaks and personal touches, which provides us with the results that will give us years of enjoyment.

Mainly, this write up is to say that an average guy, with

a few basic skills, can get very good results.

Up to the point of beginning the project my THREE biggest questions had been:

- Can I focus on a project of this magnitude for an extended amount of time?
- Do I have, or can I learn the skills needed to complete the project?
- Can I seek and find assistance if I need it? (a.k.a.... Am I willing to ask for help?)

A successful project...from plywood boxes to flight... requires all 3!

BACK TO THE BEGINNIG...

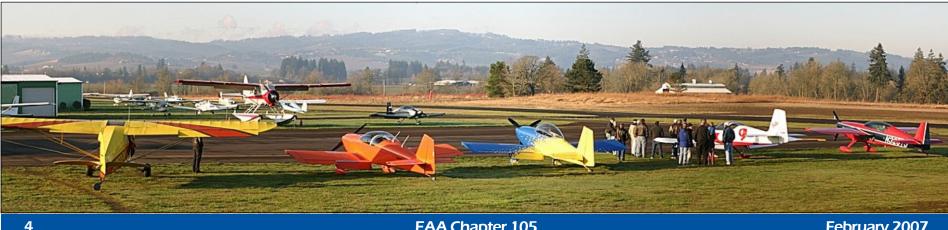
Why an RV gets built and flying isn't always so much about the nuts and bolts of the building, as it is about the person, their learning process and the experience gained that go along with it, and how you got to that point to begin with that says..."If I want to fly a better aircraft than is typically available for rent at the FBO, and do as much as I would like to, I need to build so it can be affordable."

Like a lot of us, my boyhood desire of flight came first to



me in dreams, then in cross country airline flights with family, and then in the building of both wood / dope and plastic model airplanes. But along the way, because I didn't have "commercial grade" evesight to fly professionally, my life took me into a more conventional route through education and into business. How many of us have stepped aside from our dream to go down the road that would be more realistic or reasonable? A lot, I'll wager.

But, one spring afternoon almost 7 years ago, I was talking with my Mom (who had been in and out of hospitals with serious medical problems)...and she told me "Tommy, if there was something in your life that you always wanted to do, make sure that you go and do it, before you get to be too old like me and all you can do is lay in bed and read." I asked Mom what her greatest dream had been, and she relayed to me that she had al-



EAA Chapter 105

February 2007



Tom Sampson and RV-9A "Tango" on the ramp at KMMV.

ways wanted to be a professional dancer...but ironically her poor health had kept her well away from that.

It turns out that that was my last conversation with her, as she soon slipped into a coma that she never recovered from. Flying home after her funeral, I was reading an inflight magazine, and lo...there was an ad for flight lessons touting that "anyone can learn to fly". Within weeks I was in the back seat of a J3 Cub at Evergreen



Field in Vancouver Washington taking my first lessons. That soon led to my building an all wood and fabric single seat open cockpit "MiniMax" fatultra light.

After a number of "Rotax-induced" engine failures and off-airport landings, Martha and I agreed that a more conventional certificated aircraft would be the way to go. Soon afterwards we located and bought a nicely restored 1946 Aeronca Champ. If any of you have flown a Champ, you know that they are a sweet and gentle aircraft, that get loads of nostalgic attention, and have the wonderful capacity to take you anywhere you want to go...so long as you are OK with getting there at 85 miles an hour.

Over the past 6 years while all this has been going on, the biggest supporter of my flying bug (besides my bride Martha) had been my Brother Billy. Billy flew copters in the service, and then later for the DC police. Billy always had an aircraft stashed away...a Piper Colt, a 152 banner tow plane, a 182, and a 172. I always looked to him in his role of "big brother" as an aviation expert, and I'm unable to count the hours of emails, phone calls, and conversations that he and I had around what would be the best aircraft to own.

That led me to taking the factory tour at Vans two and a half years ago, and to (what actually turned out to be a pretty expensive) "free demo flight" conducted by Gus. I soon acquired an abandoned RV9 tail kit, and after ordering the wings...the fun began.

ARRIVING AT THE PRESENT...

Of course, Brother Billy's first response was, "Hold on there...you're going to BUILD another one???"... thinking back of course to my days of "Rotax-induced" MiniMax engine failures.

But I countered nicely with Vans calendars, Intro Packet CDs, Café Reports, article snippets, photos, and statistics...and I believe that I eventually wore him down. Since then, an ongoing and relentless email stream passed between us helped to reinforce that.

So with Brother Billy's knowledge and blessing, the build process began in earnest.

And, I will freely admit that 2 $\frac{1}{2}$ years ago I knew NOTHING about metal construction.

Additionally...I knew LESS than NOTHING about electrical and fluid systems. And even worse...I had no skills other than woodworking...and you can guess how much help a table saw and a dado cutter will be in building an RV. In making the wing support jigs and workbenches maybe...but not for metal working.

But wait a minute...how is it that there is this great little



A well appointed front office.

aircraft sitting there in the hangar, inviting me to come fly?

Key Learning's During Our 1700 Hour Build Process:

1. How do you eat an elephant? One bite at a time.

- 2. Don't know what to do? Call your Technical Advisor and Fellow Builders. Also, check www.Vansairforce.net and do a forum search.
- 3. As your local EAA Technical Advisor says..."Read the manual, follow the directions, call if you have questions, do the best that you can, keep building, and if in doubt...think about it for a bit, get advice from people you trust, and then keep building. Oh yes, also...keep building."
- Maintain an excel spreadsheet and log daily work, hours spent.
- 5. Take LOADs of digital pictures. If you're not capable of designing and hosting your own web pages to document your construction, or consider using an online web hosting like www.Expercraft.com.
- 6. Keep up the building momentum...do something every day (unless you are out of town). That can include just standing in the garage and thinking about what is "next". It's easier to "keep building" if you'll commit 15-20 hours a week to your building process...vs skipping days and weeks at a time.
- 7. Time your next kit segment arrival (if your finances will allow it) to show up about the time that you think that you'll finish you current segment.

8. Be sure to take a Vans-acknowledged transition

5



Martha and Tom bundled up against a fine December morn.

training...absolutely invaluable if you haven't been flying a lot in the build process.

Help and Custom Touches...

Along the way (being first time builders) we also chose to get some extra help, and did a few things differently vs the more mainstream construction...

- 1. We bought a Larry Vetterman exhaust like for the RV10. Ours was the RV9 prototype. We get lots of comments on how quiet the motor is.
- 2. We originally installed dual throttle quadrants, and subsequently removed the left hand one ... as I was able to make the transition to right hand throttle and left hand sticking seamlessly.
- 3. We installed RV10 taxi vents below the NACA fresh air vents as we did a tip up...and they have made the hotter weather easier to handle with a nice breeze at the knees.
- 4. We hired Gary Howard at Pearson in Vancouver to build the wiring harness for both Dynons, radio, transponder, and altitude encoder.
- 5. We installed the EXP Bus from Vans. It has all solid state circuit breakers, and a neat annunciator panel that visually monitors all electrical circuits.
- 6. We got our strobe lights, strobe driver box, and LED-Nav lights from CreativeAir. The tail strobe/ Nav light we obtained from Vans.
- 7. After designing and cutting the panel, we powdercoated it to match the interior, plus reverse engraved placards for all switches.

- 8. We enlisted the help of Leighton Mangles, "Mr. Lancair", because of his fiber glassing expertise.
- 9. BOTH Dynons, Pitot and advice came from Tony at SafeAir1.
- 10.Paint Scheme? Danny at Twin Oaks managed the painting for us. While building, you'll get inspirations AND change your mind a BUNCH. Use the Vans diagrams to sketch your ideas, and take your digital camera to fly-ins. Our RV9a paint was inspired by the 1932 GeeBee Sportster that we first saw at the MMV Flight Museum, and I had it in my mind from the very beginning.

The Two Most Frequently Asked Questions are...

• Are you a builder or a flyer? I am BOTH!

You also hear this question as if there were two real choices to make, and one was made to the exclusion of the other. We accomplished our 1700 hour build process in just under 24 months, and this included 18 idle weeks because we didn't plan the kit segment arrivals well. And...while we were building, we didn't own another airplane to fly. I probably logged 25 total flight hours during the build process.

• Would we do it again? Would we go through the agony, doubt, mistakes, re-do's, and lack of confidence? You Bet!

In fact, today (December 28th, 2006) we were at Vans and picked up the wing kit for our soon to be RV7 ... tailwheel, slider, 200 hp...going airborne in 2008.

Final Thanks...

I couldn't have done any of this without LOTS of help, encouragement, and support.

Thanks Martha, there each step of the way, and who bucked over 8000 rivets.

Thanks Family AND Friends, for putting up with the never-ending "airplane talk."

Thanks Mom, for encouraging me to live the dream.

AND...thanks to Billy...for ALWAYS being my mentor.

CLEAR Prop...!!







Top: Martha smiles! Center: Paint was inspired by the 1932 GeeBee Sportster. Bottom: Doing what it does best — launching on another adventure.

EAA Chapter 105

Braving the Elements to see Doug Stenger's RV-6 Project

Doug's current project is an RV-6 with extended fuel tanks, the wings for which are in the jig. Doug will be talking about that as well as the various jigs, tools and techniques he's developed over the many years he's been doing homebuilt aircraft component construction.

Dunstan Fandel

After a last minute change of venue, the January meeting was held at Doug Stenger's place on Thursday, January 11th. Seventeen hearty souls braved the 19 degree weather and made the long drive out to Manning. Once we arrived,



we took refuge inside Doug's workshop, where a space heater had warmed the front half up to almost 45 degrees. Doug was even complaining of being too hot!...

The meeting started a bit later than planned, as we waited for any stragglers to arrive, but we got underway around 7:30, with Randall Henderson chairing the meeting. With the limited attendance, there were no milestones to report, and no news from other chapters. Once the formalities were completed, Doug gave us a presen-

tation on the RV6 wings with long range tanks he was building. These wings are the 37th set of RV wings that Doug has built in the last 15 years as a builder of components for others.

These RV6 wings were being modified to include a set of custom long range wing tanks in place of the standard tanks, with an estimated fuel capacity of around 60 gallons total. The longer tanks were being custom built by lengthening the existing tanks by a little more than 50% by incorporating the outer leading edge ribs into the existing tank. Doug had modified the spars by adding a doubler in front to add additional strength.

Doug showed us a few tricks he had for keeping all the ribs aligned during assembly. He inserts a long threaded rod thru the top of each rib, then slides a PVC spacer over the rod, between each rib. Once the spacers are in place, a nut is tightened at each end to pull the ribs straight and align them exactly.

Doug described for us his preferred method of riveting the wing skins into place; He pre-drills and countersinks each rivet, instead of dimpling. Doug prefers countersinking to dimpling because it creates less stress on the skin that shows as tiny dips and ridges around each rivet. Instead, countersinking allows him to create a wing or structure with a near flawless surface. He cautioned us that countersinking is not for the inexperienced, as it would be very easy to remove too much material and ruin an entire wing skin.

Once the prep work is complete, he applies a layer of adhesive to the top of each rib, lays the skin into place and with the help of an assistant, rivets the skin completely within a few hours. Again, he cautioned that this method was not for the inexperienced, as the glued skins were not intended to be removed.

After a few questions and answers, we moved to the back of Doug's shop, where the temperature was a bit closer to freezing, to watch a demonstration of Doug's new hand built English wheel.

The English Wheel is a tool to shape curved metal panels without pounding them over a pattern. Consisting of a large C shaped frame with two rolling wheels; a flat one at the top, and one curved at the bottom, the English wheel acts as a rolling anvil, pressing the metal between the two wheels, and forming it down over the lower



Leading edge skin is cleco'd into place.

The wings — Doug's 37th set — are being built side by side. Our host, Doug Stenger, in the blue vest.







curved wheel.

For more information, follow this link:

http://en.wikipedia.org/wiki/English_Wheel

Doug's wheel was enormous, standing over 7' tall, which was as Doug admits, a bit taller than was expected.

Doug's project was just being completed, so he was able to demonstrate its operation by forming a compound curve on a flat sheet of aluminum. Doug would like to attempt to make an all aluminum aircraft that has an aluminum cowling and wheel pants, instead of fiberglass.

After the demonstration, some of us proceeded into the larger part of his workshop, to see his large collection of basket case Taylorcraft airplanes, all awaiting a future salvage rebuild. Since it was exactly the same temperature in the big hanger as it was outside, our visit was, in a word, brief.

After moving back to the warmer part of the room, the meeting adjourned for the night.

...Dunstan



The nose ribs are spaced with sections of PVC pipe strung over a threaded rod.



The new LSA RV-12 made one of it's early appearances at the December pancake breakfast.



Ron Glass and Brent Anderson braved the cold.



Doug demonstrates the stretching action of his English Wheel.

February 2007

EAA Chapter 105

Meeting Coordinator: Randall Henderson

503-297-5045 randall @edt.com



Program: Mike and Jeff Baxter's RV-7 + Hints from an Auto Sheet Metal Guy Location: Mike Baxter's Home Address: 27700 NW Meek Rd, Hillsboro Date: Thursday, Feb 8th

The second meeting of 2007 will be at Mike Baxter's place, where he and his brother Jeff are working on an RV-7.

The plane is on its front gear, and still in the "sheet metal stage". The program will be a discussion of sheet metal techniques, with input from Mike's neighbor who is an automobile restoration specialist working on aluminum bodies for custom cars. He plans to talk about some new products for work in that area, and ways in which automotive paint techniques apply to painting airplanes.

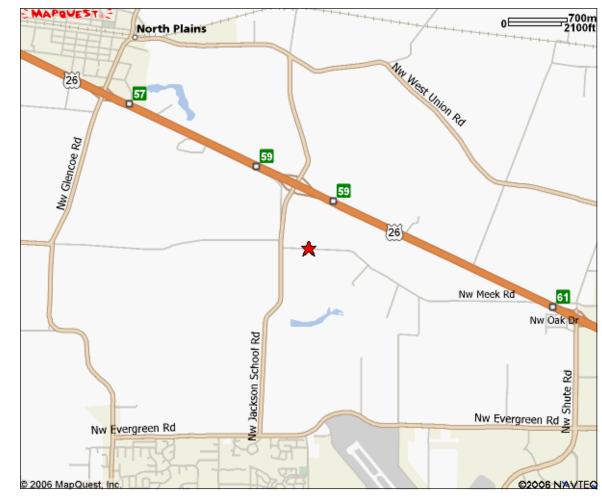
Flying

The location for this meeting is just north of Hillsboro airport, but it's not *on* the airport.

Driving

The location is a mile north of Hillsboro airport on Meek Rd. From HIO take Evergreen Rd west to Jackson School Rd. Turn north, and right onto Meek Rd. Continue to 27700 NW Meek Rd.

From the Sunset Hwy (Hwy 26) turn south on Jackson School Rd. Turn left onto Meek Rd. Continue to 27700 NW Meek Rd.



About the meetings...

Meetings are the second Thursday of the month, starting at 7:00pm, unless otherwise specified (here and in the newsletter), and are typically at the site of someone's experimental aircraft project or hangar.

The structure of the meetings is pretty loose. The first 40 minutes or so is generally spent socializing, eating chips and dip, and checking out the project. Then we get down to "business", with introductions of new members and guests, milestones, discussions of group issues, open items, and the host project. After that, it's back to BSing late into the evening.

Be sure to bring any tools, parts, etc. that you wish to sell, loan, give away, etc. And while you're there, throw a buck or two into the kitty, to help out the host for costs of purchasing the refreshments.

All are welcome, building or not, group member or not. Spouses too!

Meeting places are always needed.

Future Meetings

- Mar 8th: TBD
- Apr 12th: TBD

Experimental Aircraft Association

EAA Aviation Center P.O. Box 3086 Oshkosh, Wisconsin 54903-3086 920-426-4814 Fax: 920-426-6504

Paul H. Poberezny Founder Chairman of the Board

January 18, 2007

Randy Lervold President, EAA Chapter 105 5228 NW 14th Circle Camas WA 98607

Dear Randy,

In going through your Chapter newsletter, I found it to be very interesting. Please congratulate your newsletter editor, Benton Holzwarth. I thought the article on safety was very well prepared and of great interest to all of us who fly. An Air Academy scholarship fund, which many chapters work towards, is such a worthy cause for aviation. I read a number of letters talking about the young people who have attended the Air Academy and what an influence that program has on their lives, but their parents as well. Some often wonder what EAA is and it's not easy for many people to understand. We're quite diverse. Everyone understands what Coca-Cola or Pepsi is, but we in EAA are an aeronautical, educational and social organization. It takes those three components to bring us together.

Please give all the Chapter members my very best.

Sincerely, EXPERIMENTAL AIRCRAFT ASSOCIATION

Johensprey Paul Poberezny

Founder and Chairman of the Board

P.S. That was a nice cover shot; first full page one I've seen on a Chapter newsletter in a very long time.



National Recognition Randy Lervold

Yet another piece of mail from EAA, what now. Wait, this is a personal letter from... wow,

it's from the Founder and Chairman of the EAA, Paul Poberezny! Chapter members, please see the letter we received from Paul Poberezny, and join me in congratulating Benton for his outstanding work on the newsletter and Len Kauffman for his excellent series of safety articles. Seems that Paul likes their work. Keep up the good work guys!

...Randy



SAFETY THOUGHTS

Passenger Briefings

Len Kauffman

Last summer Benton Holzwarth made some interesting observations about a flight around Mt. St. Helens with his wife. It was only her second flight in a small airplane. He thought there were



safety issues related to keeping passengers calm and comfortable to reduce the chance that they might "get so freaked as to grab controls." Benton wrote:

"Nothing like that happened, but after we were down she remarked that everything was fine until we were maneuvering in the pattern. It turned a little rocky below about 3500 ft, and with the turns, and especially throttling back (that "it's got quiet" thing) she became a little more apprehensive."

We've all heard stories about pilots freezing up on the controls or passengers becoming frightened and latching onto anything nearby. My wife, Sheri, saw an example on a bumpy commercial flight returning to PDX several years ago. She was seated across the isle from a flight attendant (FA) jump seat. As they descended toward the airport the ride became quite rough. The young FA abruptly reached over the isle and did a white-knuckle death grip on the armrest of my wife's seat. Quite surprised, Sheri looked at the FA and saw terror in her face. She tried to comfort the attendant and assure her everything would be fine. The FA stated that she did not do well in turbulence. Not exactly what we would expect from an airline "crewmember".

I suspect that most pilots don't give much thought to possible passenger interference. It certainly is not a common problem. But think about a frightened passenger (like our FA friend above) in our small planes with the stick or yoke so close. It could be especially hazardous in a tandem planes where pilots cannot observe the backseater or easily take corrective action. It makes sense to ensure that riders are thoroughly briefed and kept comfortable during all phases of flight, especially a nervous passenger. Benton continued:

"I realized that I'd done a pretty good job of explaining everything that was going on either before or shortly after the fact, but hadn't done anything to prepare her for the landing, and stopped talking when I got busy with the maneuvering. Lesson: Landing is probably the scariest part for many passengers. I should have anticipated that and 'briefed' her before so she'd know what to expect."

FAR 91.519 requires that passengers receive an oral briefing before flight. Required items include smoking, use of seatbelts/harnesses, operation of entry door and emergency exits, location of survival equipment, use of oxygen equipment if installed, as well as ditching procedures and use of flotation equipment for flights over water. The briefing may be omitted if the pilot in command determines that passengers are familiar with contents of the briefing.

Although we wouldn't want to include more brief items than passengers can absorb, other topics might be considered depending on circumstances. Some examples are:

• STERILE COCKPIT: Have we ever missed an item on our Before Takeoff or Before Landing checklists because of passenger chitchat? The airlines refer to flight below 10,000 feet as the sterile period – that's when things get busy and distractions must be avoided. Casual cockpit conversation is not allowed and flight attendants are restricted from contacting the cockpit unless safety of flight issues arise. We might consider a similar policy while in the traffic pattern, during instrument approaches, or any particular busy period. If used, the briefing should include Sterile Cockpit expectation and how the pilot will indicate when they begin and end. Always advise passengers, however, that they must speak up whenever they notice something that might affect safety of flight.

- TRAFFIC WATCH: A second set of eyes can be quite helpful for spotting traffic and passengers are normally eager to help if asked. It's a good idea to introduce them early to the "clock" method of identifying intruder position. They'll learn quickly if we point out aircraft and call "traffic, three o'clock low" a few times. We should ask passengers to be especially watchful during any extended heads-down time.
- LISTENING WATCH: We can help passengers avoid interference with radio calls by discussing the a/c call sign. Most of us use the raised-hand method to indicate that conversation should stop when we receive a transmission – another good item to brief. Cockpit radio call awareness is particularly important during IFR flight. Once passengers are keyed into incoming transmissions, we might even get an occasional reminder of a missed call.
- MANEUVERS: The rule-of-thumb here is "no surprises". It is normally the unexpected that frightens passengers and causes airsickness. Whatever we plan to do during flight should be discussed beforehand to ensure their understanding and comfort. For abrupt maneuvers, it's a good idea to remind passengers again before executing them to see if they are still up to it. Sometimes maneuvers sound better on the ground than they do in the air. In addition, accumulative affects of the flight might change their level of comfort – so ask often how they are doing.
- EMERGENCIES: This one has no clear answers. We certainly don't want to create undue alarm, but we also don't want a hysterical passenger screaming "are we gonna die" while we're running our Engine Failure checklist and picking a landing spot. We might mention "very unlikely" emergencies (like engine failure) and explain that if one would ever happen we need them to remain calm and quiet so we can concentrate on doing our "pilot stuff" to get down safely.
- TURBULENCE: When we find rough air it's usually easy to judge how it affects our riders by looking at their facial expressions (tandem guys/gals are out of luck here) and talking with them. We can help put them at ease simply by explaining that the aircraft is



built to handle bumpy air. Just hearing us talk in our normal voice can be reassuring by itself. We might try changing altitude to find smoother air. If they begin to feel queasy it might be a good time to land at the nearest airport -- ask.

- CONTROL TRANSFER: If a passenger will fly the aircraft, it is very important to firmly establish who is flying the aircraft. When a transfer is made, the pilot should clearly state "You have the controls" and passenger responds with "I have the controls". The pilot regains control with "I have the controls". The pilot regains control with "I have the controls". This may sound overly formal, but it takes only one situation when both folks think the other is flying the plane to make anyone a believer. Obviously this practice is even more important in tandem planes
- EXPERIMENTAL AIRCRAFT: For those of us with experimental aircraft, we have the requirement to point out this fact and it's a good idea to help them understand what it means.
- OTHER ITEMS: With inexperienced and nervous passengers, we may want to talk about flaps & ailerons and demonstrate how they move. This could prevent alarm when they see wing parts "coming loose" in flight. We also might explain airplane noises (fuel pump, flap motor, tin-canning, system voice alerts, engine power reduction, etc.), banking for turns, and traffic patterns, etc.

It's helpful to break the briefing into smaller pieces to help prevent overload. We might discuss smoking, maneuvers, sterile cockpit, experimental aircraft, turbulence, early notice of airsickness, etc. before entering the aircraft. Once inside the plane it's time to explain operation of belts/harnesses, normal and emergency exits, survival equipment location, oxygen system if installed and ditching if it's an over water flight. With new passengers, we should move the stick/yoke and rudder pedals through their full range and explain that the area must remain clear at all times (especially important in tandems). Other items might be briefed prior to takeoff or during flight where practical examples can be used to cover control transfer, traffic watch, listening watch, etc.

Passenger experience and comfort will, of course, determine the extent of a briefing. Many of these items are important for first time or nervous passengers but not for others. Some items should be re-briefed over several flights until repeat passengers understand the aircraft and become comfortable with flight.

Frequent passengers can be brought up to the level of a crewmember over time and can be a real asset in the cockpit. It would include gradually teaching them about instruments (flight and engine), radios, nav equipment, switches, flight controls, sectionals, traffic patterns, etc. For IFR operations, it would include enroute charts and approach plates.

There is a timely article in December's AOPA PILOT (page 20) about AOPA Air Safety Foundation's Pinch-Hitter online course (www.asf.org/pinchhitter). Although I've not seen it yet, I suspect it is well worth the 60 minutes to take the course. It is directed toward significant others, but it may also help pilots prepare passengers for flight. I plan to check it out.

There is a lot to think about here. But it should be worth a little thought to assure passengers have a comfortable flight and reduce the chance of them interfering with operation of the aircraft. Thanks to Benton for his insight.

...Len





The RVs are cool, but there's something about watching the classics launch from Twin Oaks that really gets me going.

Tips 'n Techniques

Build your own Wing Jacks

Joe Blank

There comes a time in every aircraft builder/pilot adventures when he/she must change a tire or repack wheel

bearings. The conundrum then becomes, "How the heck do I safely raise my aircraft up without damaging it and scaring myself"! Face it folks, there's a lot of weight/ mass there, and if done improperly, expensive bodily and/or aircraft injury could clearly become an undesired result.

But of course, if you join a wonderful group such as our local EAA Chapter 105, one of the perks is to have access

to a wide variety of maintenance and construction tooling. One of these great tools are the Aircraft Jacks. They make the job a breeze.

But what happens if you live a considerable distance from the tools or they aren't available? There is the often time consuming drive to pick up and drop off the tools. Hmmm, wouldn't it be nice to have my own set of wing jacks. I thought about a workaround to this problem. The solution would have to be: (A) -Inexpensive (i.e. yes I can say it... cheap), (B) - Inexpensive, (C) -Easy to construct, and, (D) - More importantly-Safe to use. So off I went on the internet to see what was available to elevate my bird. Of course, there were all sorts of professional expensive looking aircraft wing jacks for sale, landing gear jack point solutions, etc,



but nothing that really fit my requirements or looked worthwhile. So I put the idea on the back burner for a while... until one day in the hanger I hit on it, or more accurately, tripped over it...

In the past I had constructed a couple of el-cheapo jack stand/blocks out of 4x4, 2x4, and 2x6 lumber. They were simple cribbed stacks of scrap lumber sawn in about 14" lengths and nailed together. I knew from using them to hold my truck up during tire rotations in the past, they would hold a LOT of weight... Significantly more that what my RV-6 weighs. If I could somehow make them slightly higher, stabilize them, and mount a bottle jack on them, that would work! So down to Harbor Freight I went, and

just happened to find 2 of their 1 ton bottle jacks on sale. Sweet! I then went about measuring how high the lum-

ber stand with the bottle jack would need to be next to the RV, and began sawing up a few more pieces of scrap lumber. It turns out that about 13 layers of 2" lumber (~20") was about right. I would also need to ensure that the bottle jack would not tip over at any time they were in use. By drilling 2 holes in the base area of the jacks and then securing with a couple of deck screws... Voila! They were securely attached.

A word about jacking the aircraft... "BE CAREFUL!" Before raising the 2 place RV series of aircraft, you must first securely anchor the tail down before raising the aircraft. Why? Since the Center of Gravity is most likely forward of the jack points, the aircraft will want to nose over. I wouldn't want to have to explain to my flying buddies why I have a cracked spinner or a damaged prop and can't go flying this



weekend. DOH! Draining or having minimum fuel onboard also helps make it lighter and moves the CG slightly aft. It's probably wise not to have wind, kids, pets, earthquakes, distractions, etc. in the area when performing this work as it could have unexpected results.

The 2 place RV jack points are co-located with the wing tie downs. You can use different means to support the aircraft in this area but the screw in jack point fittings work well here. Unfortunately, I don't own any... yet. Since I didn't want to ruin my expensive paint or dent the wing skins, I elected to use a small piece of lumber covered in cloth placed directly below the jack point area on the wing spar rivet line. Be careful to watch for oil canning in the area. This seemed to work quite well although the jack point fittings, I think, would work best. Continue to CAREFULLY jack and monitor the aircraft, alternating sides until both wheels are aloft. Carefully and quickly perform your work. Lowering the aircraft is simply just a reverse of the process.

When done, the el-cheapo jack stands stack and store neatly in a corner or under a work bench. I hope that this article has been useful in assisting you with your raised concerns over wing jacks...;-)

Blue Skies!



Board Meeting Highlights

Your Chapter 105 Board

The January Chapter 105 board meeting, an annual, allday planning session conveniend at 8:10 AM, Jan 20th, 2007. Attending this meeting were: Randy Lervold, Joe Blank, Dick VanGrunsven, Jim Mitchell, Joe Miller, Dunston Fandel, Rion Bourgeois, Mike McGee, Jenny Hickman, Len Kauffman, Ron Singh, Tom Louris and Benton Holzwarth.

• Bogardus Trust housekeeping: The Chapter 105 board selects the Bogardus Trust trustees and the Chapter 105 president is traditionally appointed as a trustee. With Rion's long tenure as chapter president, while trustees rotated off the end of their terms, the trust has sunk below its board count. Rion nominated Brent Anderson to a 4-year term. Voice vote was taken, with all agreeing to the selection.

• Assets and Expenses report (Jenny H): In short the chapter's assets are recovering towards their pre-market crash levels. [More specifics where they came up in the discussion. BJH]

• Chapter 105 has an obligation to repay a six-year, interest-free loan to the Bogardus Trust at the rate of \$1000 per year. Rion asks if we want to consider accelerating repayment of the loan, but discussion was tabled until the rest of the financials have been considered.

• RonS asked how the Bogardus Trust relates to Chapter 105. Rion explained that when George Bogardus died, even tho' he was not a member of 105 or national, but a long time friend of DickV and others in the group, he left his entire estate to Chapter 105, and gave Dick VanGrunsven full discretion to use the funds to support the chapter's goals and objectives.

The will suggested a trophy program and an education program for small airplane engine design. The trust provides for operating exclusively for charitable, scientific or educational purposes and administers the annual Bogardus Trophy program for the Oregon pilot and EAA chapter that gives the most Young Eagle rides.

The next Bogardus Trust meeting will be held on 12 Feb 2007.

• Chapter 105's financial summary (P&L and Assets) was circulated and the observations made:

• We netted \$2000 in 2006 (including a \$2k non-recurring expense)

• Dues are a significant income, but hardly dwarf other key items

- Our special events make the difference (B-17 visit, etc)
- The B-17 visit was the most profitable event

• Too many shirts were ordered for the NW RV Fly-In. Many have been sold at discounted (below cost) prices or are still sitting in stock.

• The Poker Run prize budget was tightened.

• The holiday party budget was less extravagant.

• Two points: There are still some holiday party expenses and receipts for printing the paper newsletter, for 2006, yet to be received.

In short, a goal agreed at the 2006 planning session was to better manage our expenses to improve the net. We think that goal was accomplished, even if our net income was lower in 2006 than in 2005.

Other discussion and observations:

• It was noted that the paper NLs are sometimes delivered too late for folks to receive the meeting information. (Not a dig at Charles who does the printing -- I think the USPS regularly handles our NLs as 3rd Class, even with 1st Class postage, just because they look like pamphlets. Suggestion was made to plug the benefits of switching to e-delivery again. Charles has switched back to using Office Depot for printing. We'd like know just how much that is costing per copy.

• Also noted, 'All Other' expenses for 2006 were well above 2005. Even with higher expenses, we grew the accounts by slightly more than \$2000 in the year just completed.

• On balance, our cash assets dropped by \$66k, in the course of our lease-hold improvements to the new chapter hangars (G1/G3) at Twin Oaks Airpark.

• The T Rowe Price mutual fund will be liquidated. With that money shifted back to the bank, we'll investigate a savings account or some other interest-bearing vehicle. Cash assets will total about \$16-\$17k. [The board adopted a guideline last year that we'd maintain our cash assets at a minimum (the hard deck) of \$8k, to guard against any unexpected income short-fall or rise in expenses.]

• Jenny would like to move the accounts to West Coast bank, as long as it's convenient for Donna Lervold as

well. Everyone agrees that that's completely up to her to make the treasurer job as easy and pleasant for herself as she can.

• The group again took up Rion's question of whether we want to accelerate the Bogardus Trust loan repayment. After some discussion, the group was swayed by the argument that, while we operated in the black in 2006, our cash flow is quite different from previous years, and that perhaps we ought to make the \$1000 payment this year and reconsider next year when we have an additional year of experience. The board voted to go ahead with a \$1000 payment, to go out immediately (rather than on the loan anniversary date.)

• A positive note on cash flow, Rion reports that he believes we now have the rental spaces completely filled.

• The final item on finances was the suggestion to look into moving some of the cash into an interest-bearing account of some sort.

Objectives:

• Last year our big project (and a multi-year adventure) was occupying two of Bob's hangars and the upgrades done to them. There were no new 'capital' projects suggested for this year. Most members seem to be fairly comfortable with the plans and activities the board has scheduled and seem in favor of continuing in our current direction.

• Observation: most chapters seem to put a great deal of effort into recruiting new members. We put almost no effort forth, and yet our member count is strong. Following the merge of the RV home wing and Chapter 105, our membership jumped to 230-240'ish, then drifted down slowly as some members decided to not renew. Since then the membership has begun climbing slowly again and now stands at 221. There was some brief talk of trying a mailing to the EAA's, AOPA's or FAA's address database for our local zip codes, but nothing along that line was decided.

We also thought we could take better recruiting advantage of the non-members coming to our breakfasts. We've had membership blanks available at the breakfasts for some time, but no strong push to make folks aware.

• Two areas emerged where we could improve: first (TomL), in getting more people involved in helping with the chapter activities.

Second, a stronger effort should be made to ensure guests and new members feel welcome. Often folks stick to their own 'cliques' and leave the new folks out of the conversations. Several suggestions were made that we'll try to carry out: Len will generate some "Hi, my name is..." tags (either sticky back or in the little holders). These tags would be distributed to several board members to ensure one or another has them at all meetings and at the Pancake Breakfast cashier table. The tags would highlight their status and encourage them to include what projects they have going or are interested in.

Another idea is for Randy to forward new member info to the board. We'll find a member to be their 'buddy' for a few months, to contact them ahead of meetings to make sure they're aware, ensure they're able to get to the chapter website and NL, and tout the other club benefits.

Another idea is to include their 'bio' info and a photo in the NL. Info to be collected by their 'buddy' or membership blank.

• We've talked in the past about ordering engraved name tags for the members. We decided to do a little research on them before making any decisions to go ahead with having them made.

• Additional activities: We considered adding fly-in or fly-out activities. In the end, we decided to hold off adding any new dates, but will work on 'upping' the fun factor and social aspects of the events we already have.

One idea we're working on is to grow the Poker Run into an all-day or day-and-a-half affair. The specifics are yet to be worked out, but thoughts are to start it a little later, then switch from last year's ice-cream social in the afternoon and everyone goes home, to activities going on through the day (a fly-in with prop-cards and the whole nine yards), with say a cold sandwich line available midday, and a BBQ (or catered) in the evening, camping on the field and a fly-out breakfast in the morning. For the fly-in part, encourage folks to bring their planes even if they aren't planning to fly in the Poker Run.

There were suggestions to keep the 'construction' activities (project visits, workshops, etc) strong, and boost the social activities. Informal fly-outs, more opportunities to schmooze.

Dick reminded us that we used to have a chapter fly-in but it dwindled for several reasons, including liability and insurance as well as other problems. On the other hand, the general meetings at Lenhardt's and Parkside to see multiple projects were very well attended and the hosts have said we'd be welcome to visit again.

There was a suggestion to host 'fly-marts' either regularly following the breakfasts or as special events combined, with the Poker Run, for instance. Dick pointed out that fewer people are building from scratch any more, so there is less need for random airplane parts and hand-medowns than there used to be. Still an interesting idea to try but might not generate the traffic one could hope.

• On the subject of fly-outs, Randy observed that flyouts will always have lower turn out than fly-ins, but that's OK, every event doesn't need to be designed to appeal to the broadest set of club members. Randy, speaking for Randall, noted that we have Nov and Dec covered with non-project meetings and will visit Van's in April and Parkside in June, and he'd prefer to keep the other dates for project visits.

Ideas for leveraging the new hangars:

• Some thoughts on hosting a movie night. The club has an LCD projector. It was also noted that if G-1 is occupied we won't have space for a 'theater.'

• We can organize 'workshops' on topics like welding and riveting. They could be either formal or less so. A time slot could be following the pancake breakfasts, timed to start when the breakfast volunteer crew is free to attend, say around 11:00 or 11:30. We'll need to find some 'instructors' to volunteer their skills.

• The fly-mart idea would be another way to use the new hangars.

• Dick notes that we should try to do lots of little things as space allows in the hangars. Rion adds that he'd like to see it become a 'destination,' a club-house where folks drop in to BS and get a cup of coffee.

• There was a suggestion to add speaking programs: Old flyer stories, a Regal insurance rep, etc, but it was noted that those are probably more appropriate for an evening program. We should probably talk to the Stark's before pushing too hard on boosting traffic to the new hangars. There was some discussion of pedestrian traffic on the airport and how to improve it for everyone.

There was general agreement that we work to expand activities at the hangar, and make greater efforts to welcome guests and new members. Especially try to get nametags onto them, so we can recognize them as guests and strike up a conversation.

A suggestion was made to put up a poster somewhere in the breakfast hangar (behind the coffee makers?) with info on chapter benefits (tool crib, prop balancer, etc) and join-up info. (Ties back into using the breakfasts as a recruiting venue.)

Operations:

• Logoware: The hats and shirt Randy ordered with the chapter logo have sold well. Some remain, but enough have sold already to cover our costs. Randy should reorder stocks as needed. There was interest in embroidered polo shirts as well. Randy agreed to look into that, bring samples to a board meeting and perhaps place one special order.

There was interest in updating the paper directories. Benton is willing to do them again. There was a suggestion to add them to the new member 'welcome kit'. We considered distributing to existing members as well, but decided against that. (Randy will continue to make the eversion available, gratis, which really works better for some people.) The price will again be \$1, and we will sell to anyone, (vs. the earlier position that we would only sell to current members.) Randy will send out the full DB record for members with an upcoming NL-availability announcement with a request to update any stale information and add an option to not be included in the directories.

• Tool Crib: Currently lives at Mike's hangar at HIO. Many of the high usage tools go from builder to builder w/o passing through Mike's hands. The fear was always that there'd be damage and no way to tell where it occurred, but that hasn't been the case since Mike has been handling the crib. In fact one tool came back repaired --Thanks Don Wentz for repairing the previously nonworking scale pad.

The downside of this arrangement is that now that Mike is working full time again, it's harder for him to get to the hangar to meet up with folks needing the tools. There has been a plan to build a locker at the new hangar and move the tools there. Regardless of whether they stay at HIO or move to Twin Oaks, there was a suggestion to add a co-meister. DunstanF works close to HIO and could be available. Rion could act as a co-meister at Twin Oaks, since his hangar is adjacent to the chapter hangars.

The tool list is on the chapter website. Mike has received a couple requests for the special Hartzell prop torque wrench. The decision was made to add both sizes of this torque wrench to the crib, perhaps buying Len's from him for one, if he's willing to part with it.

Mike would like a monthly budget to add new tools. Will contact board for anything over \$50 that he'd like to add. A borescope was considered again, but rejected due to special skills required to use it and the tool's fragility.

• The prop balancer program has been working well. The \$20 reserves-fee collected has covered costs. Randy will check whether we're due for a calibration on our unit.

• Hangar ops (Rion): Rion believes the spaces are all filled now. There were several sheets of Aluminum donated that is available for sale to a member. The extra magazine rack will be offered to Bob Stark and/or members. Rion donated a big-screen TV and projector screen. RandyL may bring his 30" brake/shear/slipRoll to the hangar for our use, but not as a donation. We could use a DVD player, but they're so cheap any more that we'll probably just buy one rather than wait for a donation. Jim Mitchell reports he just bought one for \$30.

Rion was authorized to buy a couple new combination locks for the rolling doors, and TomL will have man-door keys cut for the board members. Dunstan will look into some mini-blinds that would both help hide the hangar contents and darken the building if we were to hold a movie night in G1.

Going further on the security theme, JoeM reminded us that new member John Polos does security and might be persuaded to offer a professional opinion on our situation. There were questions asked about the outside light, which doesn't seem to have ever worked. Apparently, the wiring for it is a little confused. JoeB will look into wind-up timers that can be added to the thermostats, to shut the furnaces down after an hour or two.

• Chapter Project: There has been discussion many times of the chapter sponsoring an aircraft project that would be open to kids. Dick suggests that something like an RV-12 or maybe Sonex could work for kids, but other RV kits would not. Build-a-plane.org and the EAA sites were suggested as resources. There was some talk of restoring a plane (not necessarily by kids). A program for kids depends on someone standing up to head up the show and a couple reliable lieutenants.

EAA Nat'l frowns on chapters owning flying planes, so any project would be owned by one or more of the members working on it, or it could be for sale afterwards. A restoration for museum display, like the Little Gee Bee, cuts the liability, but results in no income or flyable plane when complete. We might be able to hook up with some org like the Centers for Airway Science folks to help with the organizing a project for kids. A kid project could also be run like a Junior Achievement program, but that too would add extra overhead to the effort. In any case, an educational project is a 'valid' use of hangar G-1, every hangar-based program doesn't have to be revenue generating.

• Breakfast Op: (JoeM) Louise Lane put together flow charts for organizing the individual breakfast setup and teardown tasks. More detail is needed on specific tasks -laminated (?) procedure cards for tasks like making coffee: how much coffee to use and what water temp. How many urns of regular and decaf. Other changes we've made (roll out rack, pre-cooked sausages) seem to be helping efficiency. There was some talk of looking into a 'bacon press', in the hope that it could help reduce the cook time. The issue of where to stack presses while working the grill was raised. Joe will look into these.

Activities:

• EAA's B-17 Visit - June 1-3 (Rion): Assigned roles would help, either assigned before the event or at least cards to be passed to volunteers describing what they're supposed to be doing. Too often there are people standing around, with no idea what needs to be done. We'll solicit volunteers. Board approved purchase of two 10x10 canopies for use at events like this. TomL offered that he'd modified his with pier-blocks to hold the legs without staking them to the ground. Randall handled media last year and we hope he'll do it again. There was some friction with the Hangar 59 guys.

• NW RV Fly-In - June 16 - Scappoose (JoeB): JoeB will head up again. The key area for improvement this year will be the BBQ op. Organizing folks to help with set-up and teardown, a cashier and people to police the area when the hoards descend. MikeR likely won't be able to

flip burgers this year so another chef will need to be found. Randy will run the shirt tent again. There was difficulty getting pilots (and our crew) to switch over to the ground frequency last year, comms can be improved. We'll put out a call for canopies from the members or look into renting some.

• OIA-HIO (Hillsboro Airshow) - Aug 10-12 (Rion): Rion will propose to the airshow folks that we not do the corral this year. In the past it's been right in a high pedestrian traffic area, making security and plane movement for the fly-by difficult. Instead he'll suggest the fly-by team park in the hot-pits. Our volunteers can work the food-booths or wherever else they're needed. Perhaps 902 will bring their BBQ grill, and if they need additional help with that we could offer to help them.

• Arlington - July 13 (Randy): Donna has agreed to help again with cooking. Randy will manage the household refreshments.

• Poker Run - Sept 8: Given the earlier discussion about enhancing the event several aspects seemed to be sorting themselves out. Planning remains, but there seems to be consensus to start the flying part of the event a little later in the day, and begin the follow-on fly-in event (prop cards and all!) at about 3:00-ish. Food will need to be available through the day, with, say, a cold sandwich line mid-day and a BBQ, or catered, in the evening.

• Holiday party - Dec 14th (JennyH): The Hickman's are inviting us over again. They'll move the party out to the hangar to make more space this time. There was talk of organizing a work-party to insulate their hangar.

• Young Eagles: Funneling flights into several main events seemed to work well for coordinators Ron and Michelle. A second option for event-days is at the breakfast events. Ron's goal is to make sure each kid has good experience rather than crank out numbers. Pearson Air Museum contacted Ron again, they're tentative for a May 19th event at (we believe) PAM's Open Cockpit day. Last year flights started an hour after the museum/event started and Ron/Michelle were behind all day. This time, will try to be ready to roll when the gates open this time to stay ahead of the crowd. Will try to get the Women In Aviation ladies to help again.

Ron thought both the B-17 and Scappoose Fly-In events were good venues for YE flights and Rion and JoeB agreed that it worked well for them, too. There was a

(Continued on page 18)

Editor's Notes

Benton Holzwarth v2



I won't apologize for the length of this month's Chapter Board Meeting notes.

It's a sign of how much we accomplished in the busy, allday session. We were able to take stock of the chapter's financial situation and goals, and make cohesive plans for the new year. A reading of the notes will give you some idea what to expect in the coming year. Hang on, it's gonna be fun! Better yet, find some detail that interests you, or something closely related and step up to help. That's what makes this club go!

Obit: The av-news outlets have noted that Bill Kershner, the "Spin Doctor" died January 8th at age 77, following a long battle with cancer. He soloed in an Aeronca Defender in 1945, age 16; flew Corsairs for the navy; and worked as a corporate pilot and test pilot. He wrote and illustrated five books, including his Student Pilot's Flight Manual which has sold over one million copies.

Why does it always seem like crunch-time to get the NL done comes on a day when it's sunny and mild outside, and I'd really rather be out putting around, looking down on the valley?

2006-07 Feature Article Index

This section chronicles our contributors for the previous 12 months (thank you authors and photographers!) and in the January issue provides a complete index to the previous year's articles. - Ed.

February '06

- Randy Lervold / Chapter Currents-Feb '06
- Benton Holzwarth / Ed Hayden's RV-10 Project at Hillsboro Airport (HIIO)
- Rion Bourgeois / Trivia—Tom Poberezny movie ٠
- Randall Henderson / TnT: Brake Line Fittings ٠
- Ron Singh / Raffle Results .
- Len Kauffman / Safety Thoughts ٠
- Steve Mahoney / Destinations: San Juan Islands
- Sandy Wilson / New Year's Eve 2005 at the Spruce Goose

March '06

• Benton Holzwarth / Building on a Budget: Greg

Halverson's RV-6 Project

- Rion Bourgeois / Trivia Tom Poberezny Movie
- Randall Henderson / Mandatory SB—AIEEEE!
- Budd Davisson / TnT: Heated Shop Floor
- Len Kauffman / Safety Thoughts
- Don Hammer / Destinations: Coeur d'Alene (COE):
- There is More to ID than Flying the Back Country

April '06

- Randy Lervold / Planning for Panel Upgrades
- Randall Henderson / Invoice no. 00004853
- Benton Holzwarth / Panel Clinic
- Rion Bourgeois / Trivia Four chapter Prez's currently involved in RV aircraft parts.
- Len Kauffman / Safety Thoughts: Control Locks
- Benton Holzwarth / TnT: Riveting Nutplates
- Mike McGee / Tool Crib Report from the Tool Meister

 Monte Rhoads / "Okie" J-5 Cub Turns "Oregonian" After a Local Restoration

May '06

- Rion Bourgeois / B-17 "Aluminum Overcast" Tour Stop
- Dann Parks / First Flight—N786DB
- Benton Holzwarth / A Look at the Lowry Lancair Legacy
- Randall Henderson / What Would I Do Different?
- Len Kauffman / Safety Thoughts: Wash DC ADIZ Bust

June '06

- Rion Bourgeois / B-17 Report
- Young Eagles Success
- Young Eagles Sharing the Joy
- Benton Holzwarth & Ken Howe / An Evening at Van's Aircraft
- Peter van Schoonhoven / Parkside Planes
- Len Kauffman / Safety Thoughts: Lessons

July '06

- Randall Henderson / TnT: Cabin Heat in the Panel
- Brian Moentenich / A Comparison of the Safety of GA, Experimental and RV Aircraft
- Benton Holzwarth / Parkside Paradise
- Joe Blank / 15th Annual NW RV Fly-In
- Len Kauffman / Safety Thoughts July 2006

August '06

- Benton Holzwarth / The RV-1
- Randall Henderson / Builder Motivation
- Mike McGee / Luau at the 2006 Arlington Flvin

• Randall Henderson / Flight of Discovery comes to Seaside

September '06

- Benton Holzwarth / Bringing Home the Hardware
- Benton Holzwarth / Chapter Hangar Grand Opening
- and First Look at the Restored Bogardus Little Gee Bee
- Jim Hoak / 2005 Aviation Nation
- Eric Newton / TnT: More Control Locks

October '06

• Randy Lervold / Our Chapter Hangar: The Whole Story

- Bob Flansburg / Fly Friendly @ HIO
- Benton Holzwarth / Ray Fogg's RV-8A
- Ken & Andy Howe / Poker Run From the Cockpit
- Len Kauffman / Van's RV Homecoming

November '06

- Randy Lervold / Bylaws Update and Chapter Elections
- Benton Holzwarth / Young Eagle Day 2 Sept 2006
- Dunstan Fandel / Randy Lervold's Paint Clinic
- Phil Chapman / Cylinder Cooling Wraps in Fibreglass and Silicone RTV
- FAA via Mike Robertson / AD Watch-2006-18-15 Hartzell Propeller Inc.
- Chet Nagle / USS Midway VA-25's Toilet Bomb

December '06

- John Jessen & John Cox / The Genesis of a Builder's Group
- · Benton Holzwarth / Cottage Industry Showcase and Annual Pie Auction
- Len Kauffman / Safety Thoughts: Mid-Air

January '07

• Ron Singh / Young Eagles-Air Academy Scholarship

- Len Kauffman / Safety Thoughts: Are You Blind?
- · Benton Holzwarth / A Holiday Soiree at the Hickman's
- Steve Mahoney / An Orcas Island Getaway
- Jim Bailie / Modifying Vise-Grips

EAA Chapter 105

(Continued from page 16)

suggestion to consider doing an event on the Poker Run / Fly-In day. We can add a breakfast day or two as 'sanctioned' events. Ron's main stress is always whether pilots will appear, especially at 'advertised' events like PAM where we feel more obliged.

Ron would like pilots to confirm before hand, which gives him an opportunity to tap pilots for currency, insurance, etc. Would like to forward the 'requirements' to the pilots and receive a positive response from them.

Brent asked Ron to take over the pilot awards. Rion suggests that if it's too busy that we just not do organized YE events with breakfast. (Individual pilots are always free to do informal rides at any time.) There was a suggestion to add a YE day in June/July.

Chapter YE Pilot awards are given at nearest meeting at to Int'l YE day.

No plans yet for Sponsoring a kid to AirVenture camp.

New program proposals:

• IAC 77 liaison report (Mike): Seems likely the world aerobatic championships will be in Pendleton. Local club is a little split on whether this is a good thing - great PR and excitement, but may also be damaging to the relationships they've cultivated with the locals. They'd love to have volunteer help if it comes to pass. There's also the issue of the up-front money required to get the show on the road, but the Seattle chapter will be helping and doesn't seem to think that will be an issue.

• Emergency Response Crew: There was discussion of a pre-arranged crew that would be on call to respond to chapter member aircraft incidents. We can check into what other chapters have done for protocols.

• Ron would like to do a documentary on Oregon Exp Aviation or Oregon Aviation in general. Would like to do a DVD for the next holiday party. Everyone immediately swamped him with suggestions for resources.

• Chapter bylaws indicate board meetings are to be held by board consensus. The board agreed for the year that Pres. Randy may cancel the regular monthly meeting if no pressing business is brought to his attention. In general, board meetings are on the third Thursday of each month, but the location varies.

Buy/Sell/Trade

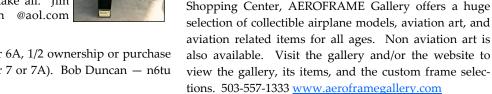
Ads are free but are subject to editing. Aviation related ads are given priority. We reserve the right to refuse any ad. Submit to the Editor, Benton Holzwarth (Benton @siletzbay.com) or call 503-684-2008. Please let us know when your item sells. Ads will run for four issues, and may be renewed or adjusted by contacting the editor. Last issue indicated by [mm/vv].

Classifieds

Box Bins – Free to chapter members, black corrugated box-bins, that are approximately 4"W x 6"H X 24"L. There are about 50 available, and are great for parts, tools, and supplies. Take one or take all. Jim Hoak - Evrynowthn @aol.com [02/07]



Want To Buy – RV-6 or 6A, 1/2 ownership or purchase outright (would consider 7 or 7A). Bob Duncan – n6tu @comcast.net [05/07]



Pilot's choice for aviation art, gifts, collectibles, and custom framing

(Not FAA/PMA/TSO or STC'd at this time.) Made from Organic Mat'l, in use 4 years on multiple acft -- last ~ 5X

standard linings, w/o wearing disks. Available in Cleve-

land -105 (2 rivet) and -106 (3 rivet) types. \$60 plus ship-

ping / set of 4 pads + rivets. If not completely satisfied in

the first 100 hours return for a refund. Contact Greg

Miller at 503-257-2573 or mauleguy @aol.com. Mail pay-

ment and shipping information to: GSM Machine & Tool

AEROFRAME Gallery - Aviation Merchandise and

Custom Picture Framing - Located at the intersection

of I-205 and 99E (McLoughlin Blvd.) in the Oregon City

Inc; 8750 N.E. Alberta St.; Portland, Or. 97220

Open for Business

Top Flight Interiors - Fine Aircraft upholstery, impeccable quality, custom interiors, leather specialist, imported textiles. Jesse Cary at Twin Oaks or 503-475-1036.

Web Sites, Applications & Desktop Publishing - Oregon Media, Phil Spingola phillip @OregonMedia.com or 503-201-4896

Duckworks Landing Lights – Standard kits start at \$75. Round Halogen and Xenon HID lights are available for new installations and upgrades of our kits and others. For details/pricing see www.duckworksaviation.com or call 503-543-3653

Bill Esther Engraving – Contact Bill for help with your custom engraving project. See sample work at http:// www.rvproject.com/esther_engraving.html ecaps.1 @juno.com or 503-851-6375

Long-life Brake Pads – For Experimental Aircraft only

Brentz Enterprises – Tail Lynx – Tail steering springs made from aircraft-grade materials. Small, strong, streamlined and all Stainless steel. Now available through Van's Aircraft - www.vansaircraft.com or 503-678-6545



The meeting adjourned at 3:15.

EAA Chapter 105

February 2007

	Chapter Office		EAA Flight Advisors Randy Lervold 360-882-8728, randy @romeolima.com, Ch. 2	105, RV-8 & -3B bldr, Vancouver-Ptld Flight Rd
President, Web Master &	Randy Lervold randy @romeolima.com	360-882-8728 h	Mike Seager 503-429-5103 (hm) 503-429-1562 (hangar) rv6c	
DB Admin			EAA Tech Counselors	TECHN
Vice President	Joe Blank jeblank @molalla.net	503-829-6333 h	Dan Benua 503-702-5387, danbenua @yahoo.com, Ch. 105, l Joe Blank 503-829-6333, jeblank @Molalla.net, RV-6 + Taylo Jerry Darrah 503-254-9992, Ch. 902, A&P, Glastar bldr, Ptld	rcraft Bldr, Molalla-Ptld
Secretary & NL Editor	Benton Holzwarth benton @siletzbay.com	503-684-2008 h	Randall Henderson 503-297-5045, randall @edt.com, EA Ralph Hudson 503-630-3713, rah @meic.com, Ch. 105, Glas	A Ch. 105, RV-6 bldr, HIO-Ptld
Treasurer & Poker Run Coord	Jennifer Hickman jennhickman @aol.com	503-651-2230 h	Ptld+Estacada Randy Lervold 360-882-8728, randy @romeolima.com, Ch. 3 Brian Moentenich 503-666-7518, Brian.L.Moentenich @usac	ce.army.mil, Ch. 902, RV-6A bldr, Ptld-TTD
Meeting Coordinator	Randall Henderson randall @edt.com	503-297-5045 h	Bill Truax 360-582-0324, goonybrd @olypen.com, Ch. 105, F Don Wentz 503-543-3653, janetwentz @centurytel.net, Ch. 1	
Director, Facilities Mgr & Legal Counsel	Rion Bourgeois rion @att.net	503-646-8763 h	Flight Instructors James Jula 503-757-8872, jmjula @yahoo.com, HIO + SPB,7S3 — CFI Performance, Complex, Tailwheel	, CFII, MEI—Single-Engine Land/Sea, Multi-Engine Land, I
Director & Librarian	Jim Mitchell jmichell1 @msn.com	503-644-5258 h		
Director & Facilities Mgr	Ralph Schildknecht ralphranger @earthlink.net	503-968-0166 h		rship Registration / Renewal For apter 105 — www.eaa105.org
Director & Breakfast Crew Chief	Joe Miller jwmcmm @easystreet.com	503-647-2059 h	Send to:Jennifer Hickman 24172 S. Skylane Dr. Canby, OR 97013	Dues: \$20/yr e-delivery of newsletter \$25/yr for mailed paper newsletter Make checks to " EAA Chapter 105 "
Director & Breakfast Volun- teer Coord	Len Kauffman lakauf @comcast.net	503-885-1920 h	For renewals, indicate changed information only Name:	New E-delivery (\$20) Paper delivery (
Quartermaster & Tool Meister	Mike McGee jmpcrftr @teleport.com	503-701-6315 cell	Address:	Renewing multiple years:
Director & Youth Activities Coord	Ron Singh rsingh75 @comcast.net	503-646-2144	City/St/Zip:	yrs,\$totalWithhold Contact Info from Director
Director & Bogardus Trust	Dick VanGrunsven engineering2	503-678-6545 x327	Home Ph: Work Ph:	Nat'l EAA #: Own / Fly:
Liaison	@vansaircraft.com		Cell Ph:	Current Project:
Director & Ad Hoc Projects	Tom Louris tlouris @comcast.net	503-914-8009 cell	E-Mail:	,
Director & Ad Hoc Projects	Dunstan Fandel dunstan.fandelsun.com	503-614-9737 h	Spouse's Name:	Completed Projects: Comments:
19			EAA Chapter 105	February 20



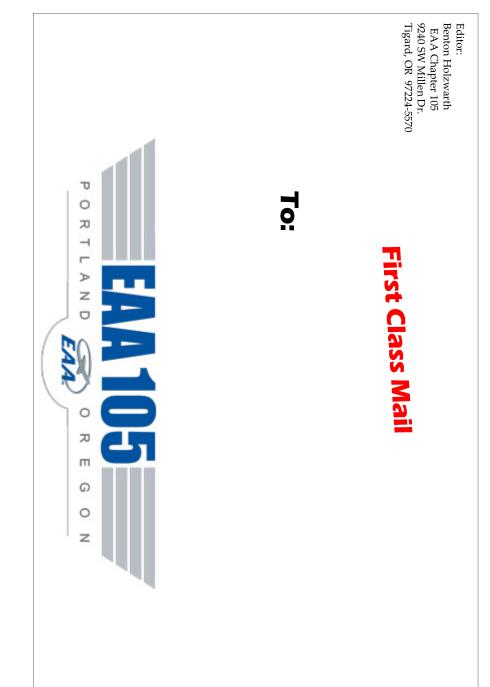
The Pemberton's on Felts field, Spokane, are restoring a Boeing 40C. It looks like it'll be stunning when completed.

Next General Meeting VAF-Home Wing / Chapter 105

- Mike 'n Jeff Baxter's RV-7 project ٠
- Feb 8th, 2007 @ 7:00 PM •
- Map on pg. 9 ٠

Next Board of Directors Meeting Feb 15th, 2007 @ 7:00 PM

- Location TBD contact a Board Member if you'd like to ٠ attend. Everyone really is welcome!



EAA Chapter 105 / Volume 47 Number 2 / February 2007