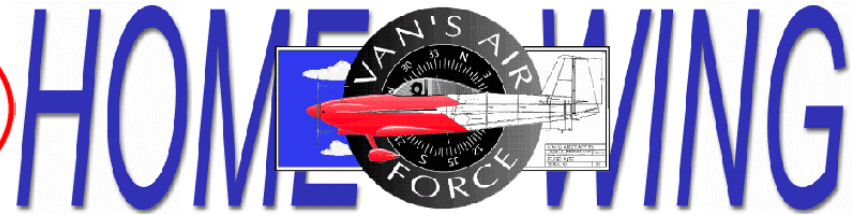


# Experimental Aircraft Association

## Chapter 105 Portland, OR

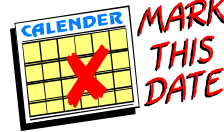
Twin Oaks Airpark—7S3 [www.EAA105.org](http://www.EAA105.org)

The Purpose of EAA Chapter 105 is to Promote Aviation Education, Construction, Recreation and Safety for Enthusiasts of All Ages.



### Next Meetings

- **November 10<sup>th</sup>** – Chapter Meeting: Luran Paine & Our Annual Pie Auction at the Twin Oaks Breakfast Hangar.
- **November 17<sup>th</sup>** – Board Meeting: 7:00 PM; Baja Fresh on Scholls Ferry Rd.



### Newsletter Deadline

- **November 18<sup>th</sup>** – Newsletter article contributions and ads are welcome anytime, but may be held to a later issue if received after the deadline.



**122.75**

J. Rion Bourgeois, Chapter President

### Transitions

You go through several stages in the building of an experimental aircraft. You start out researching the process itself, and deciding which aircraft would be right for you. Then you purchase a kit and become a builder, and learn about airframe construction, engine installation, systems installation, electrical systems, instruments and cockpits.

If you are building an RV, you transition from tail kit, to wing kit, to fuselage kit, to finish kit. At each stage, you develop new skills. Your attitude towards the kit building experience also develops and matures. If you are building a standard kit, at the tail kit stage, you have a tremendous amount of enthusiasm and sprint out of the blocks. By the time you start the fuselage, you realize you are running a marathon, and will have developed the dogged determination necessary to finish (if you finish).

When you finally start the finish kit, you spot the light at the end of the tunnel, and the original excitement and enthusiasm returns, peaking with the first flight. Then comes the realization that the first flight is not the end of the construction process: there is a de-bugging and modification period as you work out little issues with the operation and maintenance of the aircraft. This may involve little things like turning down the exhaust pipe tips and adding foam and tape around the canopy frame to eliminate and reduce noises. It may involve big things like propeller blade replacement and engine tear down inspection.

### Wanted: Pancake Chef

Full Time / Part Time (On the job training available, muscle-shirt optional!) Talk to Neil Arney. 8+ years is enough, I'm ready to look at the plates from the other side of the counter.

### Breakfast KP Duty

#### Saturday, November 5<sup>th</sup>, 2005

7:00 AM	9:00 AM
Roy Glass	David Bonkowski
Bob Duncan	Ed Hayden
Len Kauffman	Jim Hoak
Dan Harris	Clay Hofrock
Rob Hickman	Benton Holzwarth
John Jessen	Denny Jackson
David James	Jerry Jerome

#### Saturday, December 3<sup>rd</sup>, 2005

7:00 AM	9:00 AM
John Halle	Paul Johnson
Randall Henderson	Charles Kaluza
Jeff Jasinsky	Stephen Kautz
Steve Johansen	Bill Kenny
Steve Johnson	Martin Koxxy
Keith Gover	Peter Lang
Randy Lervold	Glenn Longley

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

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tions as you refine your hot start technique. It may involve medium size things like replacing starters, mags or ignition systems as you determine which are compatible with each other or your choice of engine options. It may involve major reconstruction of your instrument panel, depending upon your ability to resist the tyranny of the new. But you will be amazed to discover how much you still had to learn AFTER the first flight, which for years had appeared to be the finish line of this long educational adventure.

Eventually, you will transition to the long sought after goal: competent, frequent, and relatively care free operation of your aircraft, and, in my case, a long cross-country trip to Oshkosh and beyond. But this too involves yet another opportunity to learn new skills as you embark on the never ending maintenance of your aircraft. This includes resolving little issues like cracking in your baffles (yes Virginia, it will happen to you), what oil to use for break-in and post-break-in, what is normal oil consumption, and which log gets which notations and entries of your maintenance and repairs. You also transition to learning new skills and developing new interests, like how to pack your



Here's a picture of Samson. We have been taxiing it and are awaiting the FAA stamp. Should fly soon. (Steve Wolf, Oct 18, 2005; <http://www.wolfpitts.com>) See pg 8

aircraft for a camping trip, aerobatics, Young Eagles flights, and formation flying. It is a long, worthwhile and educational endeavor, this experimental aircraft hobby of ours.

If you are like most builders, you will also become involved in the community of homebuilders and pilots, their alphabet soup groups like the EAA, AOPA and their local chapters, and less structured organizations like builders groups and formation flight wings. You may also experience a series of transitions in your involvement with these groups. You may remain just a member, getting the magazines and newsletters, or you may become more involved, volunteering or participating "on the ground" at pancake breakfasts, flyins, flyouts and meetings, or joining in letter writing campaigns or attending meetings to protect our airports and freedom of flight. If you are a member of a builders group or EAA chapter, you may find your interest waxing and waning as your project nears completion and has its first flight: where you initially may attend every meeting, visiting tail kits eventually loses its appeal.

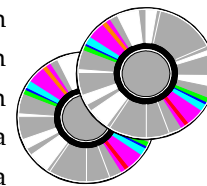
You may eventually transition to become more involved in running your local chapter, helping with the administration and conducting of activities. You may find that there are similarities in building and maintaining an aircraft, and building and maintaining a non-profit organization: they both take time, teach new skills, and bring the reward of self-satisfaction with a job well done. But in the case of helping administer a non-profit, you get the additional reward of helping others.

Many of those who transition into administration eventually transition out, either due to "burn out" by taking on too much without enough assistance, or because of the need to invest their time elsewhere, like family and jobs. Some move on because they develop other interests, like warbirds, or heavy aerobatics. Some move on because they just lose interest in flying. But what makes an organization successful is having a meaningful mission, meaningful activities, and providing meaningful benefits for its

## Newsletter Archives Now Online!

I've recently completed a long awaited feature... online newsletter archives. Yes, the mother lode is now online -- Home Wing newsletters from 1992 through 2003, and Chapter 105 issues from 2003 on. Just go to the usual Newsletter page and there are links to each archive.

There had been some interest in distributing a CD ROM with the Home Wing newsletters on them. We can still do that on a by-request basis. If you'd like a copy just let me know and I'll burn one for you.



Thanks to Amit Dagan and Mike McGee for helping assemble all the files.

[www.eaa105.org](http://www.eaa105.org) webmaster,  
Randy Lervold

members. That type of organization will endure as those who administer it transition in and out.

Our chapter is undergoing a transition now. Elections for President, Vice-president, Secretary and Treasurer were held at the October chapter meeting. Next year's officers are: Randy Lervold, president; Randall Henderson, vice-president; Benton Holzwarth secretary; and Jenny Hickman treasurer.

No, this has not been a long drawn out prelude to announce I am moving on. But I am moving over. Next year I will continue to be involved in the administration of the chapter, but the heavy lifting will be done by others. It will not be sea change: Benton Holzwarth and Jenny Hickman continue as secretary and treasurer, and Benton is still performing double duty as newsletter edi-

tor. Randy Lervold is moving up from the vice-president slot to president, but continues as webmaster. Randall is an officer for the first time, but has been the chapter meeting coordinator for two years, and was a long time member of the Home Wing management committee. As usual, many of the directors will also carry over, including Dick Van Grunsven. Also, except for Lois Lane, who has been transferred to India by her employer, the breakfast crew chiefs will be back: Joe and Char Miller, Jenny Hickman, Jim Pace and Neil Arney [for now -Ed.] Mike McGee is still buying breakfast supplies and remains as toolmeister, and Len Kauffman is still coordinating breakfast volunteers. Jim Mitchell is still our librarian. Tom Louris remains as Young Eagles coordinator.

The chapter will continue to provide the activities and benefits it has for several years: monthly educational meeting at projects and/or guest speakers; the monthly breakfast; monthly newsletter; website; tool crib; prop balancing; Young Eagles flights; Scappoose RV fly-in; Poker Run; Arlington meeting/party/camp; Hillsboro Airshow support; and support of youth aviation education. The Little Gee Bee project is almost complete, but perhaps there will be a new chapter project in the new project hangar.

In that regards, I hope that the project hangar will be the source for a significant transition for the chapter. We will soon have space for chapter members to build or maintain projects, space for a chapter project, and space for youth group activities. If we take advantage of it, the chapter may see some exciting new developments. I am looking forward to being a part of it.

### Leather Jacket Raffle

The EAA has donated a really nice leather flight jacket to the chapter for a fund-raising event. The board of directors has decided to raffle it off to raise funds for next year's AirVenture scholarship fund. The jacket is made of soft, "buttery", brown leather with an embroidered eagle and EAA logo on the back. Size is XL. Tickets will be available for sale at the breakfasts, chapter meetings, and at the Christmas Banquet on December 16 at the Hickman's on Dietz Airpark when the drawing will be held. Tickets will be \$5 each, with no more than 500 sold.

### Parting Humor (on change)

God grant me the courage to change things, and the peace of mind to accept things I cannot change - and the wisdom to know the difference. Marriage changes the soft-spoken bride of today into the oft-spoken wife of tomorrow. A woman changes a lot after marriage: her husband's habits, friends and hours.



# Youth Aviation Activities

## Raffle

*Supporting our Future Aviators*

One of the chapter's goals is to encourage, educate, and support youth in aviation. In addition to the Young Eagles program, the chapter will be further developing various activities for youth within the ages of 8 and 17

**\$5 per ticket**

*Win this Jacket*

**The prize is an EAA Leather Jacket** (size XL) with an approximate value of \$350

The proceeds from this raffle will help sponsor a youth (12 to 17 year old) to attend the National EAA Air Academy during AirVenture 2006

Tickets will be on sale at the chapter breakfasts, meetings, and Christmas Banquet

The Drawing will take place at the Chapter Christmas Banquet. You do not need to be present to win

See [www.eaa105.org](http://www.eaa105.org) for details

## Bob Dutton, Past Chapter President, Dies at 70

Robert D. Dutton, age 70, passed away peacefully on the morning of October 1, 2005. He is survived by wife Maryann Dutton of 45 years, and children Pam, Greg and Jenny. Devoted husband, loving father, and faithful friend, Robert was respected and loved by everyone he touched. He is remembered by his family and friends for his loyalty, devotion, wisdom, and amazing resourcefulness. He is remembered by all for his ready laugh, contagious smile, and playful sense of humor. He is honored by his country for his bravery and steadfast devotion to duty in the face of danger. In service to our nation's freedom from 1959 to 1974, Robert Dutton was meritoriously awarded the Distinguished Flying Cross, the Air Medal eighteen times, and he completed over 100 aerial combat missions for the US Air Force Security Service from September to May of 1969 while serving in the Republic of Vietnam. He is one of our nation's unsung heroes. The funeral service was held Thursday, Oct. 6 in Tualatin, OR

### Carl Battjes Recalls...

"Bob Dutton was active in Chapter 105 in the 1980's and was president in 1984. Although he maintained interest in homebuilt airplanes for many years he spent more time



flying RC models and flying his full size Beech and lately volunteering at Evergreen Air Museum, McMinnville."

"On my return trip from Oshkosh in 1988 I landed at Ida Grove, Iowa to see the giant RC model airplanes. Who was there to greet me as I pulled into a tiedown spot, none other than Bob Dutton with a big grin on his face--small world--this was total coincidence."

### History in Oregon

Robert Dutton was born in Medford, Oregon. His family moved to the Portland area in 1941 where his father became a ship welder in the Port of Portland and later opened a welding shop off of SE 82nd Avenue. Robert met Maryann in 1950, enlisted in the United States Air Force in 1952, and returned to marry Maryann in Portland on June 4, 1960. After retiring from the US Air Force in Alaska, Robert and Maryann moved to Spokane, Washington for three years and then returned to West Linn in 1978 where they have lived since.

## Bill Jackson Dies at 68

Bill Jackson, age 68, died Sept 29, at his home. He was born and raised in Portland. [Carl Battjes provides his recollections...] He was a multiple aircraft owner, restorer, and builder. He had a Piper J-3 on floats which he kept in a hangar on the Multnomah Channel. He managed an occasional takeoff and landing at Sunset Airstrip (with the benefit of a dolly for takeoff) Bill and Al Seymour, Sunset resident and business partner, built a pair of Marquart Charger biplanes. Bill and his wife Bette lived in a beautiful well equipped home and hangar at the North Plains strip.

In 1974 Bill "babysat" my J-3 for a few months while I worked away from home. This was a "win-win" situation although I think his smile was bigger than mine.

### Evergreen Aviation Museum Volunteer

Since his service in the USAF, Robert Dutton has been an avid aviation enthusiast. From the day he witnessed the transport of the Hughes HK-1 "Spruce Goose" on barges through the Willamette Falls in Oregon City, Robert took immediate interest in the massive aircraft. He became one of the original restoration team members that rebuilt the Spruce Goose which is now on display at the Evergreen Aviation Museum in McMinnville. Robert continued to serve at the museum for several years, taking personal pride in the ongoing maintenance of the museum's displays. "He was a solid asset to our operation and a good friend to our society," writes Museum Director Michael Wright. "He will be missed." The museum's Web site: [www.sprucegoose.org](http://www.sprucegoose.org).

President of the Oregon Chapter of the Experimental Aircraft Association (EAA) in 1984. He was instrumental in moving the chapter to its current location, Twin Oaks Airpark in Hillsboro, where he served as facilities manager.

## Aviation Legend will be missed, never forgotten

From his friends at the EAA Chapter at Independence.....

It is with a real sadness that I must report the passing of Myron "Buzz" Buswell. He died yesterday, September 24, 2005, on a day when many of the chapter members were flying seventy Young Eagles. His EAA number was 571, and he was our elder statesman within the organization. He was one of the "Beaverton Outlaws," knew Les Long and George Bogardus, and was a pioneer of the movement.

Best regards, Mike Pongracz  
EAA Chapter Secretary

## Tips 'n Techniques

### MIL-G-81322 (Aeroshell 22) Grease for Tailwheels

Pete Forsyth

After I installed the full swivel tail wheel on my RV-4 I noticed that during the cold winter months the swivel bearing was stiff. Around that time I re-packed the main wheel bearings with the MIL-G-81322 (Aeroshell 22) grease that Cleveland specifies and noticed that the Aeroshell 22 had a very different, less stringy, texture from the automotive chassis grease that was in the tail wheel swivel. So I cleaned the auto chassis grease out of the swivel and re-lubed it with Aeroshell 22. Presto. Problem solved.

On the same subject, during the Oct 05 condition inspection workshop, I got the impression that tail wheel bearing longevity is an issue. This is another place that I've used Aeroshell 22 with good results, although I admit that the tail wheel design makes the lube process messy. During that same workshop we got to see a tail wheel swivel disassembled and I noticed that mine is in better shape. This has caused me to think that others may benefit from the use of Aeroshell 22 or some other brand of MIL-G-81322 grease in their tail wheel bearings and swivels.

### Hey — Help keep this pump primed!

Got an idea, maybe even an idea *all the RV guys know*? Well we're not all RV guys, here! Seen a great reuse of a tool — or a misuse to avoid? Click a picture, write a few words, and send 'em in. There must be 1001 great ideas out there, and a little of Tony Bingelis in all of us. I'd like to see operational tricks, too.

### Safetizing Your SCAT Tubing

Benton Holzwarth via Len Kauffman

Looking over Len's RV-6A at the last meeting, I think it was Doug Stenger who noted and asked about the red goop on Len's SCAT tubing. Len answered that Van's advises the treatment, but doesn't volunteer why. When he asked, the reply made sense: the bead of RTV acts to stop tears that will spiral up the cloth, turning the tube back into a slinky if they get started. Use high-temp RTV (or whatever is appropriate for your application) and it's probably best applied while the tube is new and clean.



### On staying motivated...

I have found that sustaining a long regular effort over the monotonous months requires a bit of extra fun and enjoyment. So, I set up a few interesting small projects to run concurrently. I allow myself a half hour for these at the start of my 2 hr (or whatever) stint just to get me going. I then switch over to the "regular" task when my "fluids" are up to temp. I also sweep up and put away around the shop as a way to get going when I am having a "slow start". I notice that just getting myself out to the shop and picking up a tool to do something "breaks the ice", every time.

Kent  
Kent White  
TM Technologies  
[www.tinmantech.com](http://www.tinmantech.com)

## Chapter 105: version 2006

Randy Lervold

The election of chapter officers for 2006 was held at the October meeting and is now history, the results are detailed elsewhere in this newsletter. Yours truly was elected (drafted?) President. So you might ask, what would possess someone to accept a position such as this? Good question, and one I'd like to answer just so you know my own personal motivations.

I believe that if one is to belong to any volunteer organization, the type that exists typically to serve a common interest or activity for the benefit of it's members, one has an obligation, over the long run, to make a contribution himself/herself. Experimental aviation has become an important part of my life, just as it has for most of you. There is no question that my involvement in experimental aviation is enhanced by the opportunity to associate with all of you through our chapter. Therefore at some point in time I feel I need to make a contribution myself. Well, I'm still healthy, gainfully employed, and have at least some time to devote to it, so why not now? Especially compelling was Rion's plea... he's spent the last four years as President this time in addition to a year back in '95. Ok Rion, you've certainly paid your dues, time for me to do my stint so I can then sit back and relax when the next guy/gal takes over. Actually, Rion won't be relaxing too much, he's agreed to remain on the board and be our new Facilities Manager, hopefully with the assistance of some others who will comprise a team to manage our new chapter hangar.

I'm a real believer in the "plan your work, work your plan" mentality and accordingly I'm looking ahead to 2006. I will arrange a day-long board meeting probably in January or February to plan out the chapter's direc-

tion and activities for 2006. Sure, we can steer things according to what we (the board) think ought to happen, but you collectively are the membership and we need to know what you think and what you'd like to see happen. I'm happy to be the central point of contact so between now and the end of the year please let me know your thoughts. Send me an e-mail, call me, or stop me to chat at a meeting or monthly breakfast, but let me know what you'd like to see, the board certainly doesn't have all the best ideas. And, just as importantly, if you'd like to get involved in some manner with running the chapter or any activities please let me know, we can always use the help and the fresh ideas. The 2006 board will be formed and seated by the end of the year, if you'd like to get involved there's lots to do!

...Randy  
randy@romeolima.com  
360-882-8728 w  
360-817-9091 h

## Roy Glass' First Flight

Roy Glass

Photos Kathy McGaughey

On Saturday, 22 October, 2005, RV-6 N164RG (s/n 60266) made its maiden flight from the Portland-Hillsboro airport after 8 years of part-time construction in three houses and one hangar. Flight characteristics were excellent -- just like an RV should. It is a night VFR equipped airplane with a Lycoming O-320-D1A with Lasar electronic ignition, Hartzell constant-speed prop, Dynon D10A, E.I. engine gages, AOA pro, Garmin GX250XL GPS/Com, and weighs 1068 pounds with interior but no paint.



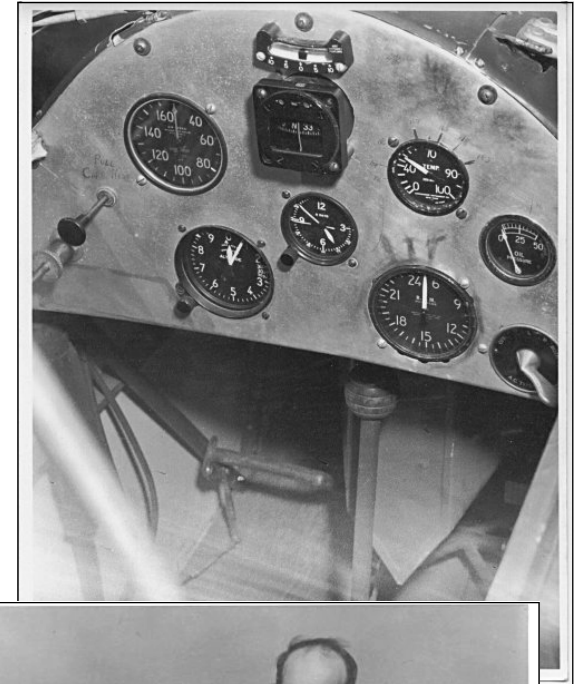
## Little Gee Bee

The Little Gee Bee project continues steady progress under Dick VanGrunsven's organization. Writes Dick, "Mike Story has been working on the exhaust system and is nearly finished. Some details remain on the engine controls and the carb intake box. We are still waiting on the plexi-glass canopy and windshield, the one remaining large project. These are enroute from our supplier...

I don't have current photos of the project, but Dean Sigler forwarded these, from his research into the "Little Gee Bee" script and reg-number appearance.



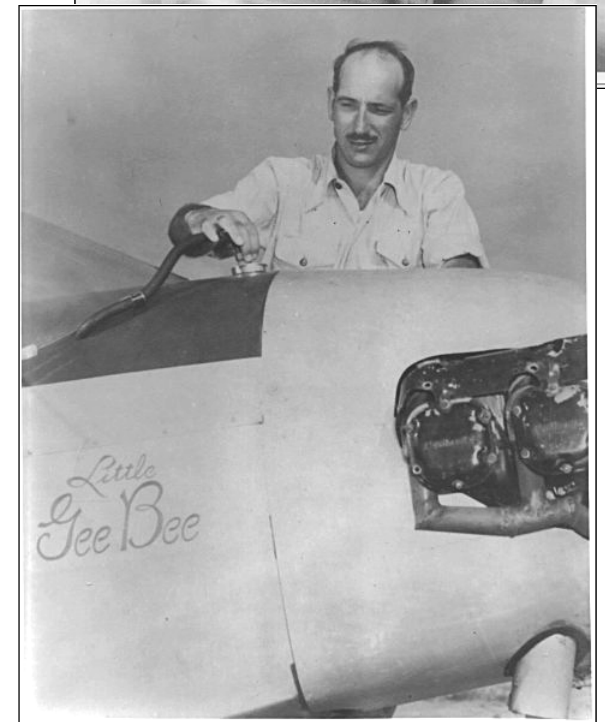
*"American Airman's Association".*



*"Little Gee Bee".*



*"NX 31250".*



*Panel detail and "Little Gee Bee" script.*

## Steve Wolf's "New" Samson Flies



The test flight went very well. Flies hands off and rolls great. It was like seeing an old friend again. Got 2 flights in today (Nov 2) and a little formation with Kathy in the S-1. Will spend the winter flying off the 40 hours - I think I'll put the canopy on for the rest of the flights!

Steve Wolf

## Prop Balancer Program Update

Randy Lervold



We are approaching the one year point in with our prop balancer program so I thought you might be interested in an update as to how the program is going. For a full description of both the program, and some of the principles involved, please refer my article on the program in the November 2004 newsletter, then the follow-up article with more information in the December 2004 issue. (note: all newsletters, including the Home Wing archives, are now available on the Chapter web site at


[www.eaa105.org/Newsletter/](http://www.eaa105.org/Newsletter/))

In the past year we've balanced 31 member propellers, plus a few practice planes. In almost all cases (other than when the accelerometer failed during the demonstration at the chapter meeting last summer!) we have been able to achieve our goal of .02 IPS. We've finished outfitting the equipment with the tools and supplies we need and learned much about the nuances of the equipment and how to get a quality balance job.

As you may recall we've been charging a fee of \$10 per job for repair reserves and consumable supplies (tape and weights). The accelerometer failed last summer but was covered on warranty. Next year the warranty will expire and that accelerometer along would have been over \$400. Therefore the fee has been increased to \$20 to better cover any such future expenses. Of course this remains a fantastic chapter benefit, the going rate for a commercially done job is currently \$150-\$250. By the way, we've done several planes now that were balanced professionally but using older equipment. We measured them first before removing the weights, and in every single case we were able to achieve a better result, usually by a fairly wide margin by cutting the error at least in half.

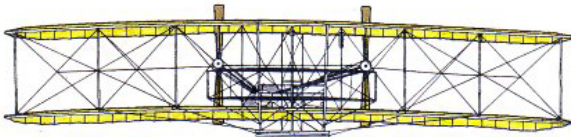
Below I've included the results from the log sheet we keep on an ongoing basis. Also below are the balance "standards" as published by DSS, the maker of our equipment. I thought you might find it interesting to peruse the results relative to the standards. Almost all pilots who have an initial error of .2 IPS or greater report noticing the improvement right away. Just ask Randy DeBauw or Bill Drake what they noticed as soon as they were airborne.

Early on we struggled a bit with planes that had a small initial error (good balance) — we couldn't seem to find



### Santa Maria Chapter 499


*"Celebrating the Spirit of Flight"*





### The Last FLY-In & Bar-B-Que

(of 2005)  
Saturday, December 3<sup>rd</sup>, at the Golden West Hangar,  
3209 Corsair Circle at SMX

11:30 AM Santa Maria Style Bar-B-Que by the 499er's


10:00 AM  

 Everything you wanted to know about "Pilot-assisted Annuals" by John Frank John has given this session for several years at Air-Venture at Oshkosh

1:30 PM  

 "The Latest and Greatest Avionics for us" by Steve Walker - HUD's, GPS's, Moving Maps, Nap of the Earth, & Flat screens

8:00 - 9:30 AM Breakfast in the Vintner Room at the  

 Hotel Santa Maria

Friday evening "Early Birds" join us for HAPPY HOUR 5-8:00 pm

3455 Skyway Drive, Santa Maria Ca 93455  
(805) 928-8000  
[www.radisson.com/santamariaca](http://www.radisson.com/santamariaca)





## Propeller/Engine Vibration Levels

0.8 IPS +	Dangerous
0.4 to 0.8 IPS	Rough
0.2 to 0.4 IPS	Moderately rough
0.1 to 0.2 IPS	Fair
0.1 IPS and below	Smooth

the combination of weights to correct these small errors. Since then we've found some techniques to address these cases. The balancer was sent back to the manufacturer just before AirVenture this summer to be fixed and I happened to stop by their booth while at OSH to ask a few questions. I found out they had not only replaced the failed accelerometer but that they had viewed our data files which are stored in the computer. They were most complimentary of the work we were doing – "good job" to the balancer crew!

By any measure I think you'd have to call this program a success. If you'd like to have your prop balanced just contact me for scheduling. We've settled into a pattern where most of our balancing takes place at the new chapter hangar during or after the monthly breakfast. For those of you with certified aircraft, we can balance them but you will need an A&P to oversee the operation and sign off your airframe log. Bob Stark seems willing to perform this service for a nominal fee, contact him for specifics.

...Randy

## Balance Log

Date	Owner	Aircraft	Prop	Initial	Final	By
11/13/04	Rion Bourgeois	RV-4	MT 3-blade	.235	.013	Lervold/Griff
11/14/04	Rob Hickman	RV-4	Hartzell	.137	.016	Hickman
1/30/05	John Warren	RV-3	MT electric	.191	.014	Lervold/Griff
1/30/05	Peter Vanschoonhoven	RV-3	MT electric	.316	.008	Lervold/Griff
3/19/05	Mike McGee	RV-4	Sensenich	.233	.009	McGee
4/3/05	Mike Wilson	RV-4	MT MTV12-B	.060	.060	Lervold/Griff
4/3/05	Harmon Lange	RV-8A	WW 200RV	.482	.013	Lervold/Griff
4/3/05	Brent Ohlgren	RV-6A	Hartzell	.197	.022	Lervold/Griff
4/20/05	Pat Hammell	RV-6A	Sensenich	.347	.021	Lervold/Griff
4/20/05	Alan Cossitt	Thundergull	IvoProp	.034	.034	Lervold/Griff
5/7/05	Steve Johansen	RV-8A	Hartzell	.041	.018	Lervold/Griff
5/7/05	Jake Thiessen	RV-9A	Sensenich	.141	.017	Lervold/Griff
5/7/05	Joe Miller	RV-9A	WW 151	.245	.009	Griff/Hick/McGee
5/7/05	Brian Moentenich	RV-6A	Sensenich	.444	.013	Hickman/McGee
5/7/05	Dale Wotring	RV-6A	Sensenich	.143	.027	Hickman/McGee
6/4/05	Bob Haan	RV6A	Hartzell	.226	.019	Hickman
6/5/05	Jerry Cochran	RV-6A	Hartzell	.559	.021	Lervold/Griff
7/2/05	Randy DeBauw	RV-10	Hartzell	.311	.013	Lervold/Griff
7/2/05	Jim Hoak	C-172	McCauley	.482	.032	Lervold/Griff
7/2/05	Jerry VanGrunsven	RV-8A	Hartzell	.155	.017	Lervold/Griff
7/19/05	Harmon Lange	RV-8A	WW 200RV	.550	.014	Lervold/Griff
7/19/05	Don Wentz	RV-6	WW 200RV	.073	.017	Lervold/Griff
8/11/05	Randall Henderson	RV-6	Hartzell	.222	.007	Lervold/Griff
9/3/05	Walt Foster	RV-6A	Sensenich	.164	.006	Lervold/Griff
9/3/05	Bob Clark	RV-9A	Hartzell	.319	.014	Lervold/Griff
9/3/05	Ralph Hudson	Glasair S2	McCauley	.201	.010	Lervold/Griff
9/5/05	Greg Miller	Bushwacker	McCauley	.318	.010	Griff
9/12/05	George Adkins	RV-9A/Subaru	MT electric	.569	.027	McGee
9/12/05	George Adkins	RV-9A/Subaru	MT electric	.135	.012	McGee
10/1/05	Jake Thiessen	RV-9A	Hartzell, blended	.060	.008	Lervold/Griff
10/1/05	Bill Drake	RV-6	Hartzell	.567	.008	Lervold/Griff

# Len Kauffman's RV-8 Project & Panel Electrical Tutorial

Benton Holzwarth

The October general meeting was held at Len Kauffman's hangar on Aurora airport. His RV-8 project and Panel Electrical seminar were the subject for the evening.

After the usual socializing and pre-game festivities, Randall called the meeting to order. Gary Dunfee says he has a stock of used 12V batteries, both 26Ah (equiv to 35Ah under most 'ratings') as well as Hawker recombinant gas batteries. Good for experimentals or bench/hangar use. Make arrangements to pick up at a 902 or 105 meeting and make a reasonable donation to the chapter of your choice. We had three guests and one newly certified private pilot.

Ron Singh announced he was set up to sell raffle tickets. \$5 to buy a chance at a nice EAA Leather Jacket (size XL).

Gary Dunfee also announced that chapter 902 and the



*Len guides practice soldering wires into a DB-9 connector — typical of the assemblies he's prepared for his installation.*

OPA are combining their holiday parties on Dec 16th. 902's Christavia project has moved to their club house now, at the Mulino airport.

Mike McGee has been attending the IAC chapter 77 meetings at Aurora. Their big event for next season is the Pendleton contest in August. Also local flyer Greg Howard took 8th place in the Nationals in his G-200.

Brent Anderson was back from the Reno Air Races with interesting stories of people flying faster and not as fast as they were expected to. All the results are available from <http://www.airrace.org>. Brent's advice is to fly into Carson City rather than Reno. The bus ride to Reno is easy, and once there you don't need a car.

## Voting for Next Year's Officers

Rion called for the vote for next year's chapter officers. He read the slate of names proposed by the current officers and board. There being no other nominations, a straight yea/nay vote was taken and carried. Next year's club officers will be Randy Lervold, Pres; Randall Henderson, Vice Pres; Benton Holzwarth, Sec'y; and Jenny Hickman, Treasurer.

## Frank from Pacific Coast Avionics

With that, the meeting got underway, and Len introduced Frank, the service mgr at Pacific Coast Avionics. He spoke for several minutes with pearls of advice and answers to questions. He remarked that a typical panel will have about 500 interconnects (think about that and realize you really do need to plan what you're going to do before you start!) Len's panel will be somewhat more complex, and he guesses it will have about 1500 inter-

connects.

He talked about the services PCA can provide along the lines of building panels for homebuilders. They have the CNC router to cut the holes quickly and accurately from a CAD design. Cutting a typical panel runs ~\$540. They also recommend powder-coating panels (~\$150 extra.) said it doesn't show when you slip with the screwdriver and gouge your way across the surface.

On antennas, his guideline is to keep the bases of the nav/com antennas at least 30" apart. GPS antennas should be further from nav/com and other antennas. GPS antennas can be hidden under fiberglass and many builders make a recessed 'cup' in their glare shield set the GPS antenna in that, then cover with fabric or vinyl. Transponder cables should be less than 10' long.

He strongly recommends not standing the antenna bases on the gaskets that come with them. Instead, he says toss the gasket, remove the paint where the antenna will mount and fasten the antenna down metal to metal. Then apply a bead of a non-corroding RTV around the base to seal out water.



*Keeping your materials and tools close at hand is another key to an efficient work environment.*

## Len Continues with his Ship

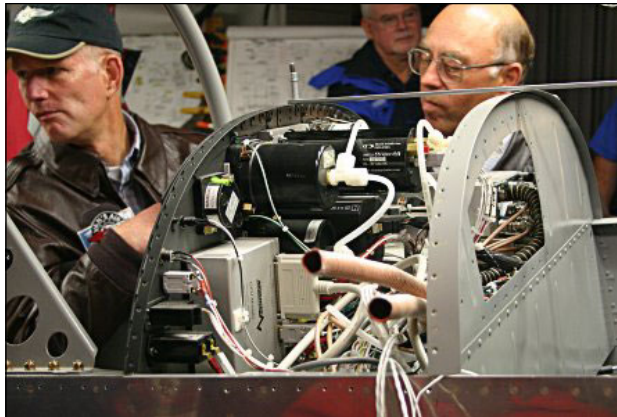
He started by picking the bits he wanted for his all-electric panel. The layout would allow stick in the right hand and switches accessible with the left. He used [www.epanelbuilder.com](http://www.epanelbuilder.com) to work with different layouts and MS-Paint on his own computer to play further with the layouts and print copies. The electronics behind all the instrument faces will go in the lower area of the forward baggage compartment.

Len recommends staying below 80% of any breaker's rated current. AC43-13 has guidelines for what wire size to use given the current carried and the run length. Make sure your switches are DC-rated; just because they say they're rated for 2A AC, doesn't mean they'll handle 2A DC reliably. Use only Tefzel insulated wire. Van's provides good information for planning the electrical aspect and several people suggested Bob Knuckolls' Aero Electric Connection books and seminars.

The when ready to begin cutting wire for the panel, lay the panel face down on a pad sitting on the seats. If you wire the panel with it laid out, there will be enough slack in the wires to lay it back out when it comes to the inevitable maintenance. But having allowed this much slack in the wires, resist the temptation to allow a bit more for 'good measure'. The space is tight enough without extra coils of wire to tuck in everywhere. And be sure when the panel is in place that all the loose wire is tied down to avoid chafing.

When routing wires through conduits, always run a pull-through wire along with your new conductor -- then you'll always have a spare wire available to pull in the next wire. For marking, you can jot numbers on a piece of heat-shrink tubing with a sharpie, then slide it onto the wire and shrink. Your friends will be impressed with how small you can write. You can also write on a slip of paper, wrap that around the wire and place clear

heat-shrink over it. For tie-wraps, a 'tie-wrap gun' was suggested. Pulls the bundle tight, then clips the tie off without the sharp snag sticking out. Using the regular style tie-wraps you can clip of the excess with 'flush-cutting' wire cutters. Someone also suggested a Velcro type product that is permanent enough for this application.



*The clean simplicity of the panel front side belies the complexity of getting the electrons where they need to be at the back side. Organization and planning are essential to a successful outcome. Len emphasized marking every wire, and several methods of marking and organizing were kicked around by the folks who've been there.*

Len was concerned with how tightly the antenna coax was going to need to bend coming out the back of his radio to clear the panel just forward of it, but then found some 90-deg elbow BNC adapters which will avoid the tight bend in the wire. Norvac Electronics (in the Cirrus biz park in Beaverton) is one local source for that sort of hardware.

He also emphasized using a two-point ground system. Never depend, or even allow, the airplane frame to be used as a ground point for your electronics. Always include a return wire that connects back to a common point. Then this one-point ground system is refined by separating the radios and audio equipment from everything else.

It was an interesting program, with a different bent than I've seen before; thanks Len, for a fun and informative evening.

**IMPORTANT:** *The Van's Air Force Home Wing and EAA Chapter 105 newsletter is in no way a publication of Van's Aircraft or any other corporation. All products reviewed or mentioned are not necessarily recommended for use by the Home Wing or EAA Chapter 105, but are included for informational purposes only. All building or flying tips represent only the means by which the builder whose name is associated with the tip chose to build or fly his/her aircraft. Builder's tips are not meant to replace the plans and instructions from Van's Aircraft or any other company. All information is presented only as a source of information, and this newsletter is a forum for exchange and the sharing of ideas and construction methods only. NO responsibility or liability is assumed, expressed, or implied as to the suitability, accuracy, safety or approval thereof. Any party using the suggestions, ideas, or examples does so at their own risk and discretion and without recourse against anyone. The editors of the Home Wing and EAA Chapter 105 newsletters and the builder's tips submitters are not responsible for any product, incorrect construction, design failure, unsafe aircraft operation practice, nor any other peril. Any material printed within may not be reprinted without specific, written permission, and then should include credit to the original source and author. The Home Wing and EAA Chapter 105 newsletter is published monthly. A complimentary issue for new builders is available upon request. Mail or e-mail all subscriptions, ideas, tips, tricks, and articles to the newsletter editor.*

Meeting Coordinator:

**Randall Henderson**

503-297-5045  
Randall @edt.com



October 2005 Meeting

**Program: Lauran Paine &  
Our Annual Pie Auction**

**Address: Twin Oaks (7S3) Breakfast Hangar  
12405 SW River Rd, Hillsboro**

**Date: Thurs., November 10<sup>th</sup>**

**Time: 7:00 PM**

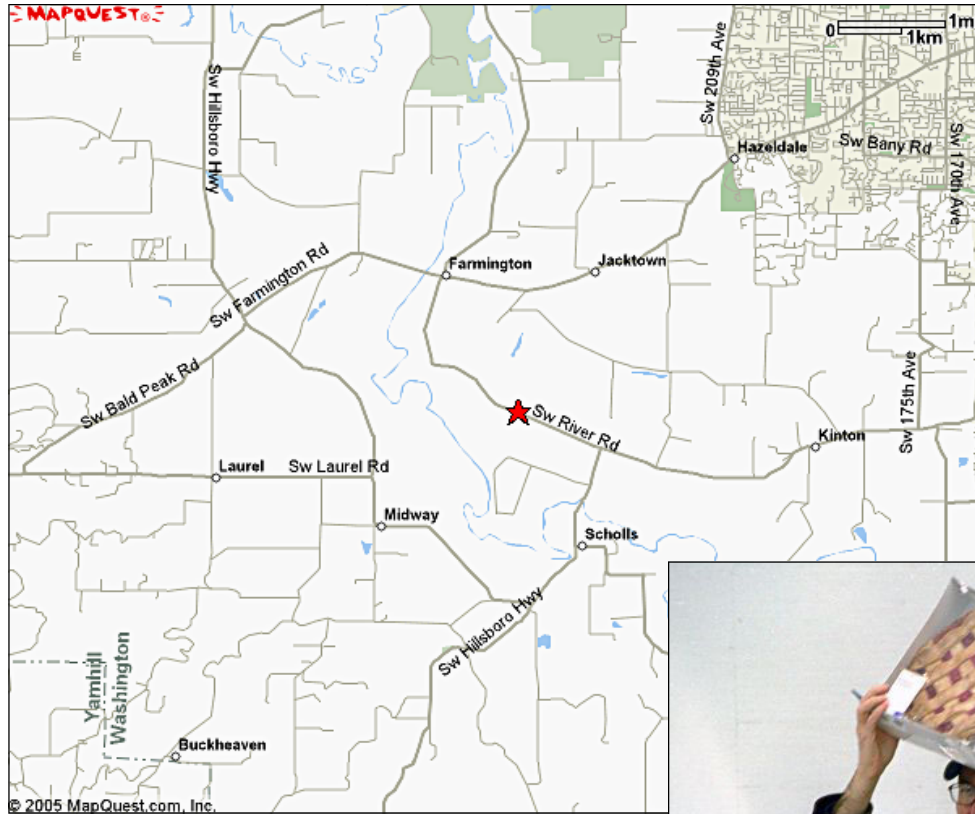
**November Program:**

The November meeting will be at the old chapter hangar (breakfast hangar) at Starks Twin Oaks Airport, and will be a dual program. First will be a talk by aviation author and columnist Lauran Paine. Then we'll move on to our annual Pie Auction.



Lauran is a member of EAA chapter 105 and an RV-8 builder, though he rarely makes the meetings since he spends most of his time either working on his RV-8 at his hangar down in Salem, or writing columns and articles in his unique down-home style for magazines such as EAA Sport Aviation, Pilot Getaways, and AOPA Pilot.

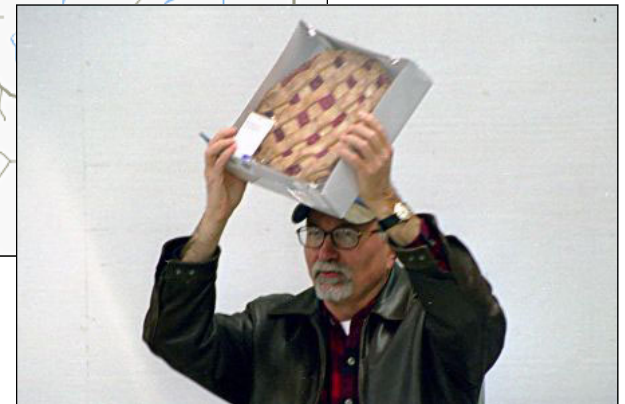
The Pie Auction is always a fun event, especially when Hank Bullock is the auctioneer, and fortunately for us, he has agreed to do it again this year. So bring a pie or your



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wallet, and preferably both!

Raffle tickets for the EAA Vision of Eagles jacket will also be on sale. This is a fine-quality, real leather jacket that anyone would be proud to wear. No value given but it's likely around \$300. There's only one jacket, size XL; there will be no exchange for a different size. Tickets \$5 ea.



**Future Meetings**

- Dec 16<sup>th</sup>: Annual Holiday party at the Hickman's – Dietz Airpark, Canby**
- Jan 12<sup>th</sup> – Ed Hayden, RV-10, Portland**
- Feb 9<sup>th</sup> – Greg Halverson, RV-6, Portland**

**About the meetings:**

Meetings are (usually) the second Thursday of the month, starting at 7:00 PM, unless otherwise noted, and are typically at the site of someone's experimental aircraft project or hangar.



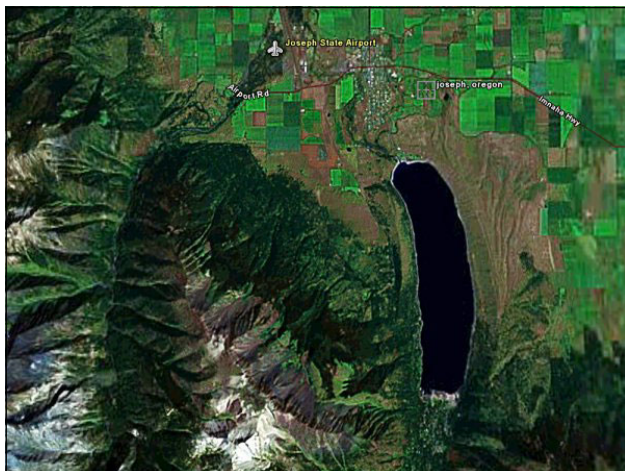
# DESTINATIONS



## Three Summertime Fly-out Destinations

Donovan Hammer

With the past summer's flying season rapidly becoming a fading memory it might soon be time to start considering what adventures might be in store for next summer's flying season. In that vein I offer up three suggestions for fly-out destinations that you might want to add to your list of places under consideration. All of these destinations rank among some of my favorite fly-out experiences. I selected three trips to cover a range of vacation opportunities from a three-day weekend up to a full week and more. My commentary is directed towards a wide range of readers including those for whom a flying vacation is still a new experience (refer to the travel sug-



*Aerial view of Joseph, OR and Wallowa lake. It's about 2 or 2-1/2 miles from the airstrip (top center) to the north end of the lake. Image via Google-Earth.*

gestions at the end of this article). Perhaps some of the more experienced travelers will also submit their own favorite fly-out destinations for future editions of this newsletter.

### Wallowa Lake; Joseph, OR (4S3)

Located in north eastern Oregon, Wallowa Lake is an alpine lake surrounded by the small but beautiful Wallowa mountain range. Wallowa Lake is about 5 miles south of Joseph, Oregon which itself is also a nice destination. In fact, you fly into Joseph State - 4S3. Joseph State is a very nice recently renovated airport whose runway length and elevation provide access for almost all airplanes.

When we went a couple of years ago we stayed at the Wallowa Lake Lodge, but there are several other fine alternatives. Car rental is not a practical option here. For ground transportation, we were directed by the lodge to contact Ray who is the owner of the nearby Strawberry Wilderness Inn B&B. Ray also happens to be the airport manager as such. Ray is a great guy and at the time of our visit he would not charge us for the transportation. However, we did make sure to give Ray a nice tip for his trouble and to cover for gas money. You may still want to ask the people at the place where you choose to stay for recommendations regarding ground transportation.

Once you get to the resort area everything that you would need for a long weekend's stay is within easy walking distance no matter where you might be staying. The Wallowa Lake Lodge is a very pleasant if somewhat rustic facility with its own nice restaurant. There are also

nice family style restaurants within a few blocks. Also within walking distance is a marina for boat and fishing tackle rental, a stable for horseback riding, and probably my favorite, a tram to the top of Mt Howard. The views from the top of Mt Howard were fantastic so you will want to take the hiking trail around the summit. You will also probably want to have lunch at the Summit Café as well.

By any measure this is an easy half-day flying trip from the Portland area even with a weather diversion through the Columbia Gorge. An airplane brings on a whole new way of looking at a trip to the Wallowa mountains in that it is now within easy access for something as short as a three-day weekend (i.e. a two-night stay) which still allows for the possibility of a full day bracketed by two half-days of activities. Although, weekend accommodations do book up early in the summer so if a weekend is desirable you may have to plan ahead a bit.

### Yellowstone National Park; West Yellowstone, MT (WYS)

West Yellowstone is probably the closest one can get to Yellowstone National Park in an airplane and still have



*Falls on the Yellowstone River.*



*The Grizzly and Wolf Discovery Center*

the use of a full service airport. The town of West Yellowstone is literally adjacent to the west entrance of the park. At an airport elevation of 6644 ft it would be prudent to seriously consider density altitude in any preflight planning. But before I scare anyone away, a runway length of 8399 ft makes this destination accessible for most light airplanes particularly if weight limits are not violated and if arrivals and departures are planned for the cooler, calmer morning hours.

The airport provides commercial service for feeder airlines and the FBO shares a common building with the terminal which makes security a bit of an issue, but the folks at Yellowstone Aviation made us feel right at home and were very helpful in

making any security procedure only a minor inconvenience. On the bright side being in the terminal building places the Avis and Budget rental car desks just a short walk away. We found the gentleman at Avis was also friendly and accommodating as we were upgraded to a convertible with no extra cost because of a minor mix-up.

West Yellowstone is a family oriented tourist destination offering a range of options for food and lodging that will fit almost all budgets. Beyond Yellowstone Park itself, there are a number of in-town attractions to entertain the whole family. We particularly enjoyed the Grizzly and Wolf Discovery Center. The town can also boast of an IMAX theater as well as a number of shops and arcades. Day-long guided van tours can also be arranged for those who perhaps prefer this as a method for sightseeing in the park.

This is pretty much a full day's flight as there is really no direct route for most of us who have airplanes of modest performance. To avoid one of the most mountainous parts of Idaho, it is best to follow the Snake River Plain and approach West Yellowstone from the south. In fact, a route from Portland to Redmond, then to Burns, and then an eastward heading towards the Snake River Plain will avoid all the mountainous terrain except the Cascades and the lower ridges around West Yellowstone.

### **The South Dakota Black Hills and Badlands; Rapid City, SD (RAP)**

Rapid City is centrally located for those that are planning to visit the South Dakota's Black Hills and Badlands regions. The Rapid City Regional airport has a lot of the big city facilities with a smaller town flavor. All of the major car rental companies can be found on field. The folks at Westjet provided us with professional red carpet treatment.

When they summoned the rental car it was delivered almost before we could finish unpacking and securing our plane. A little added treat was making friends with the FBO's cat who was a near spitting image of our airport kitty back here at McMinnville. So, here is an example that even a professional operation can have a laid back friendly atmosphere.



*The Needles, along the Needles highway*

Even though Rapid City has a lot of excellent lodging choices we like to stay in the Black Hills. For this trip, Custer was nicely situated for our trips down to the Hot Springs area to the south. Summer months are a great time to visit the Black Hills if you like to see wildlife such as buffalo and antelope. But I would suggest that it is best to time a trip to end about a week ahead of the Sturgis Rally, which is held the first part of August, or wait until several weeks afterwards. A half of a million



*The Badlands of South Dakota*

Harley Davidson motorcycles roaming the Black Hills for the two or three weeks that straddle the rally tends to spook the wildlife into the furthest reaches.

This year has seen the opening of the Minuteman Missile Historic Site which offers a look at the Minuteman missile silos and the launch control facilities which were part of our cold war era. This facility is east of Rapid City near the east entrance of the Badlands National Park. I can recommend the tour at the Minuteman Missile Historic Site, but get reservations well ahead as the number of available slots are limited. It would be a good to combine this visit with one to the Badlands National Park, Wall Drugs Store, or the South Dakota Air and Space Museum at Ellsworth Air Force Base.

The Black Hills region has so many attractions that it would be difficult to cover all my favorites, but obviously everyone has to visit Mt. Rushmore and the Crazy Horse Memorial. Deadwood is always a good choice and be sure to take one of the Boot Hill tours. There is Custer State Park for the best wildlife viewing and you will want to drive the Iron Mountain Road starting from the Custer State Park end first. Let me also add to the list Jewel Cave and the Needles Highway. Do not overlook the Hot Springs area to the south of the Black Hills. Down that way are Wind Cave, the Mammoth Site, and the Wild Horse Sanctuary.

A one-way trip to Rapid City is what I would classify as a two day trip if for no other reason other than the Rocky Mountains are inconveniently located just a little beyond the half-way point between the Portland area



*Minuteman missile control console.*

and Rapid City. Even if you are lucky enough to rush the family out the door early enough to make that crack of dawn departure the sun is already one hour ahead of you and you will be getting to the continental divide just in time to encounter those nasty mountain thunder storms that are frequently part of the typical summer afternoon. Since you cannot tell in advance what the convective activity will be the day of your trip, it is just better to anticipate that you'll be sitting poolside, soda in hand, in Idaho Falls or Driggs. From there you can watch those fascinatingly beautiful cloud buildups safely from the ground. More likely as not, the flying conditions over the mountains will be much more enjoyable early the next morning. On your return trip you will be through the continental divide about midday if you get an early departure. But now the prevailing westerly winds are likely to be against you so you might be pushing things if you try to make the whole return trip in a single day. And besides, the Cascade Mountains can have their own share of afternoon thunder storms in the summer.

### **Travel suggestion #1**

Leave yourself plenty of time to allow for those unexpected delays. That is, do not pack too many air miles into a single day. When my wife and I fly our airplane as part of a vacation, we consider the journey to be an integral part of the adventure much like those family road-trips of times past. If mere transportation is all that is needed, perhaps the airlines or the family car is a better choice. There are just too many unforeseen delays such as route diversions and delayed departures due to weather, or the

extra long rest stop due to a busy restaurant, an airsick family member, or a long line at the fuel pump. Just assume that the travel time is at least going to take half again longer than calculated and then shorten the distance accordingly. Good judgment tends to erode quickly with the pressures due to fading daylight, a race with bad weather, or just the idea of forfeiting a room deposit.

### **Travel suggestion #2**

Try to book accommodations with a national hotel chain that is known to cater to business travelers as they generally have the more lenient cancellation policies and then follow up by verifying what those policies are. This helps to remove one of those seemingly insignificant anxieties that have made too many people push on when they should have stayed put. For those who own notebook computer, hotels that cater to the business traveler usually provide internet access so that it is possible to access the same flight planning resources that can be accessed at home. This is good for keeping track of weather developments, NOTAMS, and pop-up TFRs the night before or even days ahead of when you go back to the airport.

Wallowa Lake related web sites links:

<http://www.wallowalake.net/>  
<http://www.wallowalaketrampway.com/>

West Yellowstone related web site links:

<http://www.westyellowstonechamber.com/>  
<http://www.grizzlydiscoveryctr.org/>  
<http://www.yellowstoneaviation.com/>

Rapid City related web site links:

<http://www.rapidcitycvb.com/pg/dc/index.html>  
<http://www.blackhillsbadlands.com/go.asp?ID=161>  
<http://www.nps.gov/mimi/>

## 2005 Aviation Calendar

Dec 3	Chapter 499 Fly-In & BBQ – Flyer pg 8.
It's	definitely getting to the end of the flying season!

## Chapter Calendar

Nov 5	Pancake Breakfast – Twin Oaks Airpark
Nov 10	General Meeting— Lauran Paine & Pie Auction, Twin Oaks Airpark
Nov 17	Board Meeting – 7:00 PM @ BajaFresh, 12286 SW Scholls Ferry Rd
Dec 3	Pancake Breakfast – Twin Oaks Airpark
Dec 16	General Meeting – Holiday Party at the FRIDAY Hickman's, Dietz Airpark, Canby
Jan 7	Pancake Breakfast – Twin Oaks Airpark
Jan 12	General Meeting – Ed Hayden's RV-10 project, Portland

## Editor's Notes

Benton Holzwarth

My friend Dave Schwartz, from work, has been forwarding lots of great photos and info from his circle of contacts. He relocated to this area from Spokane. The Samson photos, Vandenberg, and the 'Pembernton' photos in previous issues, come via Dave.

The piece on flying to Wallowa Lake / Yellowstone / Black Hills came about from a friend trying to encourage me to continue 'expanding my envelope'. I've been flying for 7-8 years, but hadn't been east of the Cascades until this summer. I'd like to see this new 'Destinations' heading continue. Straight travelogues are great, and I love the photos, but if anyone is interested in writing up flying adventures with details on the *mechanics* of planning the flight and flying the plan, I would benefit and expect others in our group would as well.



## Board Meeting Highlights

Your Chapter 105 Board

The October Chapter 105 board meeting was held at Baja Fresh on Scholl's Ferry Rd on Thursday, Oct 20th, and was brought to order shortly after 7:00 PM. In attendance this evening: Jim Mitchell, Mike McGee, Dick Van-Grunsven, Rion Bourgeois, Joe Miller, Randy Lervold, Randall Henderson, Ralph Schildknecht, Ralph Schildknecht and Benton Holzwarth.

The previous meeting's minutes were circulated ahead of the meeting for review and were approved as submitted.

- New officers (Rion): Rion announced that the slate of chapter officers proposed to the members at the October general meeting were approved by acclamation. Beginning with the new year, the chapter officers will be Randy Lervold, Pres; Randall Henderson, Vice Pres; Benton Holzwarth, Sec'y; and Jenny Hickman, Treasurer. Rion will 'retire' to the board.

- Chapter Bylaws (Randy): Randy had noticed that the chapter bylaws are confused by the application of a couple sets of amendments made over the years. To determine the guidelines for any particular area, one needs first to read the original document, then apply any adjustments from the later changes. He's completed a reorganizing the set into a fresh, single statement of the club bylaws, and will seek one or two minor adjustments to bring the document into compliance with how we actually operate the group. Since the document also needs to be filed with the state and IRS to maintain our 'charitable' status, Rion is being drawn into the project as well. They will begin work on the task after the turn of the year.

- Project Hangar Status (Rion): Work is in progress, getting the concrete apron poured adjacent to the existing

hangar end wall. A bid was received for the steel needed for the wall push-out project. The general contractor we're working with thought he might be able to do better, so is looking for other offers.

- Upcoming Meetings (Randall): Nov: Luran Paine speaking & annual pie auction at the breakfast hangar; Dec: Holiday Banquet at the Hickman's, Canby; Jan: Ed Hayden's RV-10 project, Beaverton; Feb: Greg Halverson's RV-6 project; Mar: Dave Lowrey's Lancair Legacy project & FG for Dummies session.

- Chapter Hangar Sign: Randy is working on some new artwork. He has a vision for 'rebranding' the chapter and pulling our scattered logo's and useage together in a cohesive way. Stay tuned for more info...

- Centers for Airway Science: The Bogardus Trust has 'purchased' a table for eight and a few seats are still available for the dinner/dance and fund-raising auction. [Too late now. It was in Oct.]

- EAA Leather Jacket Raffle (Ron Singh, by proxy): 15 tickets have sold, Ron will set up a table, separate from the cashier, at the Nov and Dec pancake breakfasts.

### Open Floor –

- Tools (MikeM): Randall reported that the engine compression tester has received a little damage, the knobs for the regulators have been a little dinged up. This brings up the downside of letting the club tools pass from member to member rather than back through the toolmeister for each exchange -- it becomes impossible to determine where along the line the tool was damaged. There was some discussion of buying a 37-deg tube flaring tool. The argument against is that many people already have them in their tool kits so there's never a problem borrowing one from someone. But they're not too expensive either. No decision taken to pursue. On the lighter side,



Mike reports what every toolmeister knows: it's nice to have the club tools available at your hangar when you need 'em.

- Roster Booklets (Benton asking/reporting): There was some movement towards producing paper roster booklets like the club sent out in year's past. No further progress has been noted. Benton will check with the folks that were pressing.

- Randy announced, in case the story begins to circulate, that he and Mike Wilson are organizing a Formation Flight clinic to be held at Redmond around June/July of next year. He wanted to emphasize and clarify that this event is being organized completely outside of the EAA and chapter umbrella.

- Roy Glass was expected to have his first-flight in his RV-6 shortly. Benton will check back with him for a progress report. Dick adds that Van's customers are close to bringing 2000 -6s to the air.

The meeting adjourned at 7:45 PM. The next chapter board meeting will be at Baja Fresh at 12286 SW Scholls Ferry Rd, between Washington Sq and the old PGE building on Nov 17th.

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## 2004-05 Feature Article Index

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

### November '04

- Randy Lervold / New Prop Balancer Program!
- Amit Dagan / WHEN'ZITGONNABEDONE?
- Mike McGee / Oct Meeting: Hillsboro Airport — Condition Inspection with Randall Henderson, Dan Benua and Randy Lervold

### December '04

- Randy Lervold / Are You Off Balance?
- Amit Dagan / Phase 2, First Flight or The Next Question After the Whenzitgonnabedone
- Brian Moentenich / A Review of RV Accidents in the Last Year
- Benton Holzwarth / Nov Meeting: Twin Oaks Airport -- Mike Robertson on LSA & LSP Rules and our Annual Pie Auction

### January '05

- Amit Dagan / Thermodynamics and Applied Material Sciences in Plexi-land *or* What Size to Drill the Holes in the Canopy
- Dick VanGrunsven / Little GEE BEE Restoration Project
- Don Hammer / Demystifying the Taildragger (Part One of Two)

### February '05

- Amit Dagan / Can You Hear Me Now?
- Benton Holzwarth / January Meeting at the VanGrunsven Sunset Shop: History Lessons and Restoration of the Bogardus Little GEE BEE
- Don Hammer / Making Sense of the Enigmatic Wheel Landing (Part Two of Two)

### March '05

- Randy Lervold / Builder Motivation Day
- Benton Holzwarth / February Meeting at Dan & Sun Benua's Shop; RV-10 in Progress & Metal Working Tips
- Randall Henderson / Conferences and the Puyallup Air Fair

### April '05

- Mike Linse / Threaded Static Port Fitting
- Randall Henderson / Stuck on Orcas Island
- Benton Holzwarth & Jim Hoak / An Evening at Van's Aircraft Factory
- Mike McGee / How Smooth It Is! (Prop Balancing)

### May '05

- Mike Shaw / Some Things to Watch For When Flying in Canada
- Benton Holzwarth / Less is More—Randy Lervold and his RV-3B

### June '05

- Randy DeBauw / First Flight of N610RV
- Benton Holzwarth / Doug Stenger's Shop; Banks, OR
- Don (Duck) Wentz / Allen Duberstein Memorial
- Gary Dunfee / Young Eagles at HIO
- Benton Holzwarth / Planes, Trains and Automobiles

### July '05

- Benton Holzwarth / Roseburg Warbird Airshow & Bogardus Trophy Presentation
- Joe Blank / 14th Annual Northwest RV Fly-In
- Randy Lervold / Prop Balancing at the Chapter Project Hangar

### August '05

- Benton Holzwarth, Jim Hoak & Randall Henderson / Luau at the NW EAA Fly-In — Arlington
- Jenny Hickman / Poker Run 2005

### September '05

- Benton Holzwarth / Chapter 105's 4th Annual Poker Run
- Joe Blank / Tips 'n Techniques: Maintaining Your Oil Temperature
- Benton Holzwarth & Jim Hoak / Open House at Lenhardt Airpark

### October '05

- Randall Henderson / TnT: Breathing Oxygen Mount
- Gary Dunfee / TnT: Comm Antenna Reception
- Benton Holzwarth / Precision Airmotive w/ Alan Jesmer

## 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/yy].

## Classifieds

**Bob Boring's 2002 RV-6A N613LE For Sale** -- Airframe & Engine - TT SNEW 132; Completed March 2002; Lycoming O-360 180 Hp; Sensenich Fixed Pitch Metal Prop; Garmin 295 Color GPS; Apollo SL 40 Com; Apollo SL 70 Mode C Transponder. Asking \$75,000. Located in Hangar PLS B-6 at Troutdale, OR (KTTD) Contact Brian Moentenich 503-808-4266 (work) 503-666-7518 (home)



### Av Magazines for Sale

I have collected over 77 years worth of aviation magazines. The Sport Aviations are nearly complete '74 to '05, the Experimenters are nearly complete 89 to 05 (1 year missing), the Kit Planes are nearly complete '85 to '02. The other magazines are mostly '60s & 70s -- 68 issues of Air Progress, 60 issues of Sport Flying, 54 issues of Air Classics, 10 issues of Popular Rotorcraft and a few other odd aviation magazines. First 3 categories are in excellent condition, rest are in very good condition. There are well over 850 issues in this collection. I would like \$400 for the collection. Will consider offers and trades. Regards, Marv Foster in Salem, Cammy302@aol.com [01/06]

**For Sale** -- Glasair I-RG, IO-320 w/ CS prop, IFR, 350 TTAF, 780



SMOH. Deluxe panel based around Garmin GNS430 IFR GPS/NAV/COM. Wing leveler. Too many features and options to list - more photos and details at <http://home.comcast.net/~alannegrin/4sale.html> Asking \$74,995. Contact Alan Negrin 425-466-8472 or [alannegrin@hotmail.com](mailto:alannegrin@hotmail.com) [11/05]

## 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](mailto: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](http://www.duckworksaviation.com) or call 503-543-2298

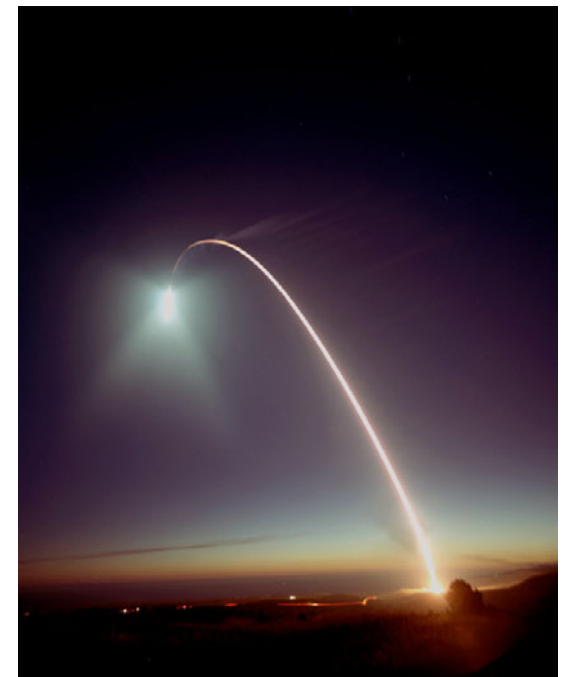
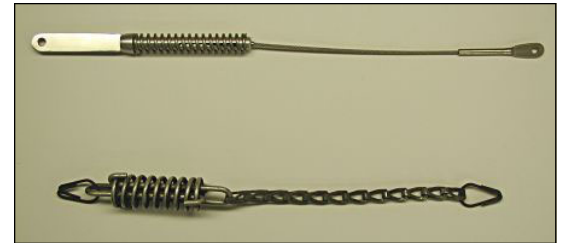
**Bill Esther Engraving** -- Contact Bill for help with your custom engraving project. See sample work at [http://www.rvproject.com/esther\\_engraving.html](http://www.rvproject.com/esther_engraving.html) [ecaps.1@juno.com](mailto:ecaps.1@juno.com) or 503-851-6375

**Long-life Brake Pads** -- For Experimental Aircraft only (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 Cleveland -105 (2 rivet) and -106 (3 rivet) types. \$60 plus shipping / 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](mailto:mauleguy@aol.com). Mail payment and shipping information to: GSM Machine & Tool Inc; 8750 N.E. Alberta St.; Portland, Or. 97220

**AEROFRAME Gallery** -- **Aviation Merchandise and Custom Picture Framing** -- Located at the intersection of I-205 and 99E (McLoughlin Blvd.) in the Oregon City Shopping Center, AEROFRAME Gallery offers a huge selection of collectible airplane models, aviation art, and aviation related items for all ages. Non aviation art is also available. Visit the gallery and/or the website to view the gallery, its items, and the custom frame selections. 503-557-1333 [www.aeroframegallery.com](http://www.aeroframegallery.com)



**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](http://www.vansaircraft.com) or 503-678-6545



Night Launch at Vendenberg AFB Photo: Dennis Rosenauer, via Dave Schwartz

## “Contact!” Chapter Officers and Staff

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**Don Wentz** 503-543-3653, janetwentz @centurytel.net, Ch. 105, RV-6 bldr, Scappoose-Ptld



## Portland/Twin Oaks EAA Chapter 105

### Membership Registration / Renewal Form

Dues: \$20/yr e-delivery of newsletter, \$25/yr for mailed paper newsletter  
 Make checks to “EAA Chapter 105” please

Send to: Jennifer Hickman  
 24172 S. Skylane Dr.  
 Canby, OR 97013

For Renewals, indicate **changed** information only  
 Check: New \_\_\_\_\_ Renewal \_\_\_\_\_  
 E-delivery (\$20) \_\_\_\_\_ Paper delivery (\$25) \_\_\_\_\_  
 Renewing multiple years: \_\_\_\_\_ yrs, \_\_\_\_\_ \$ total

Name: \_\_\_\_\_

National EAA #: \_\_\_\_\_

Address: \_\_\_\_\_

Own / Fly: \_\_\_\_\_

City/St/Zip: \_\_\_\_\_

Project (Let us know what you're working on): \_\_\_\_\_

Home Ph: \_\_\_\_\_

Completed: Yes / No / 90% done 'n 90% to go: \_\_\_\_\_

Work Ph: \_\_\_\_\_

Comments: \_\_\_\_\_

Cell Ph: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Spouse's Name: \_\_\_\_\_





**Next General Meeting  
VAF-Home Wing / Chapter 105**

- Luran Paine & the Annual Pie Auction
- Thursday, November 10<sup>th</sup> — 7:00 PM
- Bring Pies, Checkbooks — or Both!

**Next Chapter 105 Board of Directors  
Meeting**

(Everyone is welcome to attend!)

- Baja Fresh on Scholls Ferry Rd.
- Thursday, November 17<sup>th</sup> — 7:00 PM



Editor:  
Benton Holzwarth  
EAA Chapter 105  
9240 SW Millen Dr.  
Tigard, OR 97224-5570

To:

**HOME WING** **EAA Chapter 105**  
Portland, OR — Twin Oaks Airpark 7S3

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