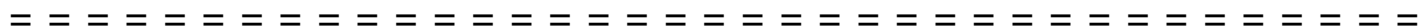


***The Newsletter of the Home Wing of Van's Air Force; Builders and Fliers of Van's RV Series Aircraft***

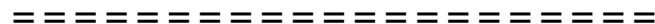


**DECEMBER MEETING**

The December meeting was held at Rod Kimmel's home with the usual excellent attendance. Rod's strategy of distracting everyone's attention from his workmanship with massive food was appreciated, but somewhat needless considering the high quality of workmanship on his wings thus far. Bill Benedict provided a review of the electric flap recall, things to consider about staying at Oshkosh, and described a plan to have RV builders support the building of a young eagles RV (see details later in this newsletter). Ken Scott provided details on 'he extensive rebuild of his totaled RV. Don Wentz brought in a couple of Aero-Traders and had some interesting points including the comparative resale values of RV's and Glasairs, and potentially buying an uncompleted (or completed) kit just for parting out. Examples included completed experimentals with O-320s for less than the cost of the O-320 alone.

up the hill to the right. Park in the circle or driveway and go up the steps to the workshop over the garage that sits behind the house.

As always, remember to bring in any tools or other things you are ready to loan out, give away, or sell.



**SUBSCRIPTIONS DUE**

Look at the date under your address on the cover. **THAT IS THE DATE YOUR \$10 IS DUE.** Use the form at the back of this newsletter to subscribe or renew. A short note updating the editor on your status would be appreciated too. *If you are paid up but the date doesn't reflect this, please give the Editors a call so they can correct it.*

**Meeting Notice** - Frank Justice, Meeting Coordinator  
 (503) 590-3991 Frank\_K\_Justice@ccm.ssd.intel.com

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Place: Charlie Kaluza's Home  
 2979 SW Mountain Lane, West Lynn  
 Date: January 9<sup>th</sup> (2<sup>nd</sup> Thursday of the month)  
 Time: 7:00 pm

**EVENTS CALENDAR**

**EAA Chapter 105 Monthly Meeting** Thursday, January 16th (third Thursday of every month), 7:00 pm at the EAA 105 Hangar/Clubhouse, Twin Oaks Airpark.

**EAA Chapter 105 "Breakfast at the Aileron Cafe"** Saturday, February 1st (first Saturday of every month) at Twin Oaks Airpark, 8:00 am.

**EAA Chapter 105 "Winter Banquet"**

When: Friday, January 10; 7-10pm.  
 Where: Rheinlander Restaurant, Sandy Blvd, Rind  
 Who: Chapter 105 Members  
 Cost: \$21 per person - covers full meal

The January meeting of the Portland RV Builders' Group will be held at Charlie Kaluza's place out in West Lynn. Charlie has his RV-6A fuselage skinning about done. To get there go south on Stafford Road which is the last exit from 1-205 going south before you hit 1-5. Go about one mile on Stafford road; at the top of a hill where the road turns right, you turn left onto Mountain Road. Then take the second left which is SW Mountain Lane. This is more like a big driveway than a road. Charlie is at 2979 SW Mountain Lane, the first house past the basketball hoop (whatever that means). It is a long driveway going

**VAN'S AIRCRAFT CALENDARS**

The 1997 Calendars are now for sale at Van's. We will have them available for sale at this month's meeting for a reduced rate of \$7 each. Get 'em while their hot!

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**FROM THE "BIG MESS" Jerald**

*and Kathy Hall, Editors*

I won't vouch for this month's newsletter, since I'm typing it with my baby screaming in my ear! Hey... Jerald just carried her out to the garage to look at the wings, and she stopped crying...a true daddy's girl!

Brent Ohlgren (the new Toolmeister) has apparently skipped the country (hopefully only temporarily), last report had him somewhere in Bolivia I believe. Let's hope his departure was not related to the \$750 check we sent him for the builder's group tools... See the details on the tools now available later in this newsletter.

As mentioned during last month's meeting, we need more people to contribute articles to the newsletter. We currently have two major contributors (Don Wentz and Randall Henderson) who routinely contribute a sizable portion of the newsletter, however there are bound to be some juicy builder's tips out there just waiting for a place in the spotlight. We'd love to get some articles from those of you with completed planes describing the places and events that you are visiting. In fact, as a service to our readers, Kathy and I always available to ride shotgun on one of your outings, we'll do all the writing and publishing, you provide the plane. Can't beat a deal like that!

Updates on builder progress are also appreciated, make it a point to write a few sentences on your progress whenever you renew to the newsletter. For recent completions, we're also running a special. If you're too busy flying to type up that completion report, don't worry, that's what the newsletter editors are for. We'll tag along on one of your flights (after the 40 hours are up, we're not that crazy...) and then write-up a flight report.

Too busy to write up an article or builder's tip? No problem, we take great dictation. Give us a call and give us the details.

**MORE MODIFICATIONS TO N790DW**

*by Don Wentz*

Well, I finally broke down at Oshkosh and got a handheld GPS. I had been holding-out for a Flybuddy GPS panel mount to replace my Loran, but was never able to find one for less than \$1200, and I couldn't see paying that much for a non-moving map unit.

So, here I am with my new Garmin GPS 90 (\$600) handheld, but the problem is, I have to hold it in my hand (go figure!). I just had to find a way to mount it.

After looking all over the cockpit for a place to put it, I finally decided on what I felt to be the best, least obtrusive, cleanest place. I was able to sell (give-away?) my Loran, which left the slot at the top of my radio stack empty. I moved the KLX125 and transponder up to the top of the stack, which left some room between the radios and the throttle/mixture controls. I made a filler panel and installed my EGT in it, to fill the extra space (my EGT had been tied-wrapped under the panel temporarily).

To the right of my mixture control, where my prop control never got installed, there was now a tall narrow space available, so I made a small bracket and mounted the GPS bracket to it, and wired it into the panel.

I have now flown the -6 twice with this new installation, and am very pleased with the result. I can now just glance at the unit and press the buttons without trying to hang on to it so it won't fall. I am now very glad I bought it as it is now easy to use, and I can really enjoy the usefulness of the moving map and other features of the unit.

Of course, I would have preferred a panel mount unit, but not for the cost difference. So, for those of you still planning your panel, you have the ability to plan for room to mount a handheld GPS and make it look good and be easy to access.

Good luck! The  
Duck

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**EAA 105 BREAKFAST AT THE AILERON CAFE**

This month's EAA breakfast was quite a success, helped out by the first day of good flying weather in several weeks. The food was good as usual, as was the company. At least 8-10 RV's showed up and rides were available for the asking. Dennis Jackson stole the show with his recently painted RV-4. I wont attempt to describe the color scheme, but suffice it to say it is "attention getting". There was a constant crowd around Dennis's plane, with a typical comment being "boy, that would really look aggressive in the air". Dennis had the painting done by professionals and there may be something to the saying "you get what you pay for" as his paint job wasn't cheap, but sure looks good.

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**RANDALL'S PERSONAL STATUS REPORT**

*by Randall Henderson*

While I was editing the newsletter I was reluctant to bore the group too much with my ongoing project status, so I mostly avoided printing it in here. But now I'm not editor any more so what the heck, I'll bore you to death with it!

My fuselage is out of the jig, and I've been working for some months now on filling in the "top side" of the plane. Seats, floors, flap actuator (electric), and top skins are all drilled, and most are riveted. I dusted off the tail feathers and fitted them to the fuselage, including preliminary rigging of the rudder and elevators. It was quite a thrill to sit in there and wag the rudder back and forth with my feet and move the elevator up and down with the stick! And yes, I DID make airplane noises with my mouth while doing so! (Tip: if you are planning on installing optional rudder cable fairings with nutplates, do this while the fuselage is still in the jig, and BEFORE riveting on the side skins. I didn't, and it was not easy getting those nut plates in there!)

I made a few modifications, including installing a sub-floor in the forward cockpit. It is pretty much as I described in the Newsletter a few months back, and I like the way it came out, although it does add some weight of course. I also raised the rudder pedals up by an inch to accommodate my 'size 13 gunboats'. This involved adding a 1" piece of UHMW plastic under the bearing blocks on the sides, getting longer bolts to match, and moving the center bearing block arm up by 1".

A few weeks ago I finally broke down and got some help - called Doug Stenger and he came over for most of a

weekend and we worked mostly on building and skinning the forward top structure. I hired Doug not because I was having any particular problems, but because I was dragging a bit, and I figured it would help get the project going again with some visible progress. And it worked! Not only did we get a whole lot of work done, it also gave me a "jump start", and I've been moving along a lot faster since. I'll probably call him again soon, as I'm getting ready to start fitting the canopy.

With the top forward structure on I realized that things were starting to close in on me in terms of painting. So, since I have all the parts pretty much built, I went ahead and started painting the interior with.... finish paint! I'm sure I'll have lots of touch-up to do later but at least if I get a base coat on everything now, I won't have to hassle as much with painting 'around' stuff once I start getting all the systems installed. One thing I discovered while doing this is that I'm no painter. No big surprise, but the experience reinforced my long-standing feeling that when the time comes I will probably not be the one to put that nice finish coat on the outside of my plane.

My finish kit has been delivered and inventoried, and I've prepped and primed the steel parts (glad that's over with), and am preparing to start fitting the canopy.

Oshkosh 97 here I come! (yeah right.)

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**BUILDER'S TIPS** ...Thanks to all who share them with us!

**Vari-Prime**

*by Jerald Hall*

When Kathy and I started building our RV-6A down in Florida 4 years ago, Van-Prime was all the rage for priming. Many people are now using other primers, but we've had good success with Van-Prime so we've stuck with it. That is, until we ran out last week.

After calling a number of paint supply houses in Oregon and Washington we learned that Vari-Prime has been outlawed in at least these two states. It wasn't clear whether this was a nationwide ban or not, but at least for builders in the Northwest it's time to find a new primer.

We're leaning towards the Courtalds primer, but would be interested in hearing suggestions from other builders. Maybe we could get a good primer debate started, I know Randall would be interested in discussing this topic some more....

**Paint Spots**

While painting the polyurethane enamel on the various cockpit parts, Randall observed a good number of spots on the parts in which the pigment appeared to have separated from the clear coat. After trying a number of different corrective actions, he now believes the problem was temperature. Randall does his painting in his heated shop, but wisely turns off the heaters before painting to avoid getting prematurely airborne. Pieces painted early in the process turned out fine, but pieces painted near the end of the session tended to have more spots. He believes this may have been due to the temperature in the shop dropping too low.

**Close Encounters of the Metallic Kind**

or, "How to Ruin an Airplane Building Saturday" by  
*Jerald Hall*

A few months ago I was in the shop cutting a piece of aluminum with a cutting wheel chucked in my die grinder.

Occasionally I'll forget to wear my hearing, eye, or respiratory protection, but not this time. Looking like a creature from a Spielberg movie, I was blissfully turning the extra length of aluminum flange into house dust (I wonder what happens to an electronic air filter when it sucks in a cloud of aluminum dust....guess I'll find out) when the exhaust of the die grinder worked its way over to a pile of accumulating aluminum dust. The results, I'm sure, were spectacular, as bits of aluminum with diameters from, microscopic to about 1/16" were suddenly blown into a cloud around my head. Unfortunately, I missed out on this glorious sight as one of the first particles (one of the 1/16" ones) made its way past the side guards on my safety glasses, past my emergency backup protection (my contact lenses), and embedded itself into the cornea of my eye. It being before noon on a Saturday, I was forced to work my way up two flights of stairs, into the Master bedroom to wake Kathy. After convincing her that it would be best not to wait until Monday to see a doctor, she got up and started calling the local doctors. Living in Scappoose does have some disadvantages... No doctors could see me and they referred us to the urgency care clinic, which was closed. We finally ended up at St. Vincent's hospital, a 45 minute drive. After the 20 minute check-in process, the nurse pointed to the waiting area and left. That's when Kathy jinxed us again by saying "as long as someone with a heart attack or broken arm doesn't walk in, we should be next." Of course, not two minutes later a family entered with a 12 year old boy holding his arm. 5 minutes after that, an elderly man came in complaining of chest pains. Luckily, the wait was just an hour and I was whisked into the examination room. When rinsing

failed to remove the chunk of aluminum, the doctor brought out a ten dollar Q-tip (I know, I read the bill. Of course, for ten dollars its called a "surgical cleansing swab") and extracted the massive piece of aluminum I'll spare you the details of the tetanus shot-The moral: Safety glasses don't protect you from swirling dust. Be aware of where your tool exhaust is directed and keep it away from bits of aluminum that can be kicked up.

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**YOUNG EAGLES RV-6A DONATIONS**

*by Bill Benedict*

At the Dec. '96 meeting of the Home Wing of Van's Air Force, the concept of a Young Eagles RV-6A built and operated by EAA-Oshkosh was presented to the Group. There are a lot of individuals within this country whom have the financial ability to donate funds or aircraft to the EAA Foundation. But there are not many loosely knit organizations such as the RV Builders Groups that are dedicated enough as a group to come forward and make pledges of the magnitude necessary to purchase a kit and the parts necessary to build an aircraft. Van's A/C proposed that we as individuals step forward and make pledges to finance a Quickbuild RV-6A. This air craft would be built at Oshkosh with volunteer labor, owned and operated by the EAA Foundation when completed, for the purpose of a Young Eagles' touring aircraft. At the meeting, pledges of \$660 were made toward the project. This is a tax free contribution, and those wishing to contribute will be able to join the momentum by making a check out to the "EAA Foundation", noting on the check "memo:" "EAA Young Eagles RV-6A" and sending the check to Van's Aircraft, attention: Sandy. Those who made pledges will be contacted in the future to fulfill their obligation.

Even though the RV series of homebuilt aircraft are the most popular homebuilts, there are none on display at Oshkosh, neither flying nor static. This summer is Van's 25th year of attending Oshkosh with an RV aircraft, and there are plans to make the RV a part of the museum display. This project will complement the static museum aircraft with a flying aircraft.

Bill <billb@europa.com>

RV-4-180 soon. N894RV with over 400 hours behind a O-320, Over 1000 RV flying hours.

These opinions are mine and do not necessarily represent the opinions or position of my employer.

**HANGAR HUMOR**

**Top 10 Signs You Need to get a Life**

*Randall Henderson*

10. Your friends regularly introduce you as "the guy who's building an airplane."

9. You can count the number of friends you have who are NOT building RVs on one hand.

8. Your wife suggests going to Europe on vacation, and your reaction is to groan and say, "Two whole weeks not working on my airplane?"

7. Your wife suggests buying a new car, and your reaction is to groan and say, "All that money, just for a ground vehicle?"

6. One of your secret fantasies has you living in a trailer out by the airport.

5. Your daily e-mail at work consists of three dozen RV related messages plus one or two that are actually related to work.

4. You don't own any calendars except for the ones from Vans'.

3. Whenever you see a garage that's bigger than yours, you drool with envy.

2. Before Christmas, you circled a bunch of things in the Avery Tool catalog and casually left it laying out on the coffee table.

1. You used to edit the "Home Wing" newsletter - and you kind of miss it.

**Homepage Locations on the Internet**

**EAA Homepage**

[www.eaa.org](http://www.eaa.org)

**John Hovan's RV Homepage**

[rv.austin.apple.com/jhovan/home.html](http://rv.austin.apple.com/jhovan/home.html)

Includes Frank Justice's RV Construction Instructions.  
Links to other RV Homepages and information sources.

**Matronics' RV Homepage**

[www.matronics.com/rv-list/index.htm](http://www.matronics.com/rv-list/index.htm)

Information on Matronics' products.  
Subscribe to the world-wide RV-list to participate in the RV forum.  
Searchable archive of past RV-list discussion topics.

**Van's Aircraft Homepage**

[home.earthlink.net/rkhu/vans](http://home.earthlink.net/rkhu/vans)

Information on all kits.  
Ordering information.  
E-mail address: 76455.1602@compuserve.com

**Van's Air Force Home Wing Homepage**

[www.edt.com :80/homewing](http://www.edt.com:80/homewing)

Upcoming events, including Builder's Group meeting location.  
Newsletter subscription form.

**THE TOOL EXCHANGE**

*The new Toolmeister is Brent Ohlgren, 288-8197. Let him know if you have jigs, tools, shop space, etc. to loan, exchange, or otherwise provide - at NO COST - or if you are looking for something specific to borrow. And whether your item is listed here or not, go ahead and bring it to the meeting.*

Home Wing Tools available: Hole template for instrument panel, Wire crimping tool and die, Brake lining rivet set tool, and Tune-up and Annual Equipment (Compression check, Mag timing light, Timing dial, Mag adjustment tool, Plug gap-per, high voltage cable tester, and Plug vibrator cleaner). Contact Brent Ohlgren, 288-8197.

Cutting wheel mandrel, custom made by Stan VanGrunsven to use for cutting your canopy. Knob on the outside makes it much easier to hold steady and not screw up that expensive piece of Plexiglas. Mike Seager currently has one of them, I have the other. I also have some graduated diameter screw dimple dies that Stan made - useful for dimpling the tight spaces in the wing spar aft of the fuel tanks. Randall Henderson 503-297-5045.

Joggle tool. Rion Bourgeois. 646-8763

PropTach (optical electronic tach, use to calibrate your tachometer) - Butch Walters had it last - 360-636-2483

Engine Stand - Don Wentz 503-696-7185

Engine Hoist. Norm Rainey

Aileron bracket locator tool. Adjustable aileron push-pull tube (for measuring the exact length to cut the real ones). Randall Henderson 503-297-5045

Precision chemical scale, for measuring pro-seal. Brent Anderson, 646-6380. Surveyor's

transit level - handy way to level wing and fuselage jigs. Bill Kenny, 590-801 1

Back Riveting Contraption - large, counter-weighted bucking bar and suspension system, and offset back rivet sets. (See "Back Riveting Wing Skins, December 1994 issue). Bob Neuner 771-6361

Lead crucible with electric heating element for melting lead for the elevator counterweights. Doug Stenger, 324-6993 Table saw taper jig, for tapering wing spar flange strips. Carl Weston 649-8830.

**WANTED** Ads are FREE.

GPS-90 compatible external antennae. Don Wentz. 503-696-7185. 1/97

50 year old RV-6 pilot looking for woman co-pilot/companion. I'm 5'9"/160 lbs, enjoy flying, camping, and jogging. It helps if you're (plane) crazy. Call Steve Johansen 503-363-5687. 12/96

Looking for used kits, possibly a new tail kit. John Hsu. Hsubox@proxals.com. 12/96

Volunteers: For all of you RVers out there, as you may know, we are rebuilding the original RV-3 for donation to the EAA museum this summer. Gary Standley has it in his garage, and with some occasional help, has gotten a long way on it. But he NEEDS HELP. Now that summer is over, we need some able bodies to spend some time working on the fuselage to get it finished. One or two ramrods that would organize helpers would be great as well. Contact Don Wentz (696-71 85) or Gary 10/96

New RV builder in need of tools. Please write with list of tools available and prices. Rich Anthes, 2541 Richert Ave Clovis CA 93611 9/96

FOR SALE/ RENT Ads are FREE.

Apollo Loran Antennae. This is the standard Loran 45 degree whip antennae with the streamlined base. \$130 in several TAP ads - will sell for 1/2, \$65. Don Wentz. 503-696-7185. 1/97

RV-6 Fuselage jig - 2 planes built on it. \$225. Steve Householder. 503-297-8760 days, 503-662-3697 eve. 1/97

Encounter with Impala has re-arranged priorities! RV-8 Empennage, finished. Buyer mounts weights and installs fiberglass. Get a head start on a great airplane. Ken Scott. 503-646-51 17 days, 503-645-1594 evenings. 12/96

25 AH Gel Cell Batteries (used) -Free for the asking. Gary Dunfee. 631-7262. 11/96

New left & right slick mags - \$400 obo. RV-6 bottom cowl (std) - make offer. Wing tip lens kit - \$10. KX-99 handheld linear amp and Flitecomm intercom - \$500. Butch Walters 360-636-2483 10/96

Blaisdell Saw, at SE 42nd & Division, has used, sharpened #30 & #40 bits, 12" long with the quick release for \$2.25. Kevin Lane. 1 0/96

Finished tail kit (with all the fiberglass work done and primered), and the wing kit which has the spars done. Excellent workmanship. Includes set of plans. Asking \$4,150 for both FOB Eugene. Wally Anderson 541-683-2328(w) or 541-342-5240(h) 10/96

EGT CHT instrument with single probes for \$50, a dual gauge for \$30, and a compass for \$20. Wally Anderson 541-683-2328(w)or541-342-5240(h) 10/96

Duckworks Landing Lights. Retro-fittable, light, easy installation. Kits start at \$69 (discount for Rid RVators). Don Wentz, 503-696-7185 for info.

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**"Home Wing" Newsletter Subscription/Renewal**

Please fill out and mail to Jerald & Kathy Hall, 32034 J.P. West Rd., Scappoose, OR 97056-2600, along with \$10 for renewals or new subscriptions. Please make checks payable to Kathy Hall. If you are renewing, you only need to give your name, date, payment method, and any other information that has changed. Use this form for address changes too.

Name _____	Spouse's Name _____
Address _____	Home Phone _____
City, State, Zip _____	Work Phone _____
Pmt(\$10/yr) Check _ Cash _ Info change only _	E-mail Address. _____
Project (RV-3, 4, 6, 6A, 8) _____	Comments? _____
Progress: _____	_____
Tail In Progress _ Finished _	_____
Wings In Progress _ Finished _	_____
Fuselage In Progress _ Finished _	_____
Finish In Progress _ Finished (i.e. flying) _	_____