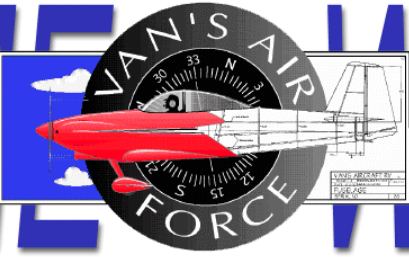


HOME WING



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



All good things take time and Rion Bourgeois's RV-4 is no exception. From the MT three blade prop / Aerosport IO-320 to the tail wheel, the fit and finish on Rion's bird will be a tough act to follow for any good craftsman. Yeah, so it's taken a while to get this far, he still won't have the long term builders title for another four years.

This Month...

- ***August Meeting is Builders Motivation Day at Troutdale***
- ***A Tilt Down Panel and Fiberglass extras for your interior***
- ***Economical paint booth***

Events Calendar

Meeting coordinator:
Randall Henderson
 503-297-5045
 randallh@attbi.com




July 2003 Meeting

Place: **Kevin and Brian's Hangar, Troutdale Airport**
 Address: **Hangar D10**
 Date: **Thursday August 14, 2003**
 Time: **6:00 pm NOTE TIME CHANGE**
 Phone: **503-784-5754**

The May meeting will be at Troutdale Airport. In addition to Kevin Lane and Brian Monteneich's RV-6As, there will be several projects to look at -- Larry Lehman's -6A tailtragger (no its not a typo -- it was converted to a tail wheel but the FAA wouldn't let him change the model no.) Brian Freeman will have his -6A project out, he's on the finish kit. Rian's new -7a will be there, and Kevin's custom -8 wings (four fuel tanks!)

There will be some **Builders Motivation** rides going on as well -- come early if you want to participate. People with flying planes are invited to fly in and provide rides to those who are still working on their planes. **PILOTS and RIDERS** contact Mike McGee to put your name on the roster. jmprcfr@teleport.com

From past experience we know that people come out of the woodwork any time rides are offered. As always, priority will be given to *active builders*, with a builder's number, and ONE person per project (the builder, primary helper, or spouse). If there's still time after all of those have flown, we may be able to can take "extras", but please try to respect our need to prioritize, and remember that the pilots are volunteering their time and airplanes. The idea of this event is to be a motivational impetus for active builders -- if you're looking for a demo ride, Van's is more than willing to do that for you.

Driving:

Take I-84 east, beware of state sheriffs with radar near 207th exit. Exit Troutdale (exit 17), continue past the gas stations, pass under I-84 (left) then straight to go around east end of airport. Enter the parking lot near the control tower, left to Aerowest gate. (Gate will be open

EAA CHAPTER 105 Pancake Breakfast:

Learn to eat grits on the first Saturday of every month at Twin Oaks Airpark, 8:00 am, \$5.00 (usually lot's of RVs to look at, too!)

This month: 8/2/2003

EAA CHAPTER 105 Monthly Meeting:

Third Thursday of every month at the EAA 105 hangar/clubhouse, Twin Oaks Airpark, 7:00 pm. www.eaa105.org for details

This month: 8/21/2003

EAA CHAPTER 782 Monthly Meeting:

Fourth Tuesday of every month at 7:00 pm.

This month: 8/25/2003

EAA CHAPTER 902 Monthly Meeting:

Second Wednesday of every month at Mulino Airpark 7:00 pm

This month: 8/13/2003

or we'll have someone posted there -- call the phone # above if you can't get in.) Proceed past the above-ground fuel tanks, left to the last blue hanger on the right, D-10, and park on the grass.

Want to host a meeting?

[Contact the Meeting Coordinator](#)

Future Meetings

[September -- Ray Fogg RV-8 Sunset Airpark](#)

[October -- Amit Dagan RV-7 Portland](#)

[November -- TBD](#)



This Month's Contributors



Kevin Lane—editor, carpenter, currently serving time as a second time RV builder.

<http://home.comcast.net/~n3773>



Mike McGee - editor, unemployed engineer, full time RV builder.

<http://home.teleport.com/~dianas-rv9a/>



Randall Henderson—monthly meetings and fly-out activities.

<http://www.edt.com:80/homewing/>



Bob Haan - shares more of his tips from Home Depot. This month a quick and inexpensive paint booth.



Randy Lervold - Randy still handles the newsletter e-mail distribution

<http://www.rv-8.com>

Your picture here!! (maybe even with Vance's friend)

Dan Parks has a way with interior glass



Mike McGee - editor with rivet gun out of the holster.

RV-9A under construction

E.I.C.

-- Mike McGee

Wow, in the drivers seat for another issue while Kevin's off to the Midwest for a week. Oshkosh you ask? Nope, family reunion. Bummer, and so close to Whitman Field, too.

This issue is a bit lighter as Kevin has returned to full time financial asset and I, while occasionally being a part time financial asset have been full time (more or less) building airplane parts. Not a bad summer so far.

Isn't it a good feeling when the momentum gets going and you pick away for hours at the cleco-drill-move cleco-drill-uncleco-debur and so on. Next thing you know you have something that looks like it goes on a plane. Sometimes that momentum can be a good thing and sometimes a bad thing. Try as I might, all the bad momentum didn't end up on the bottom side of the HS or elevators. And, darn-it, there isn't a bottom side to the other parts.

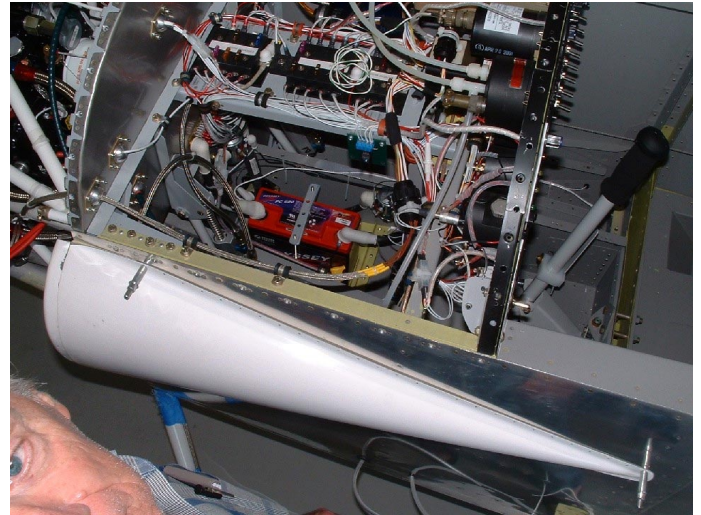
As the summer goes, my RV-4 hanger-queen has finally seen some sky under it's wings again. A few trips around the valley and a weekend at Arlington, I almost feel like a pilot again. That being the case there is a sometimes available RV-4 back seat complete with flight controls for any breakfast run on most mornings. Inquire within (must have current flight review, valid medical, and tail-wheel endorsement).

Blue skies,,,

mgm

July Meeting @ Twin Oaks Airpark

Rion Bourgeois RV-4



Plenty of details to feast your eyes on in Rion's RV-4. Since 1991 he has been picking away at it and it looks like it could fly sometime this year or next. The attention to detail is apparent as you look over the fuselage. A few alterations here and there will make for a very fine day/night VFR ship. A bird's eye view of the front side of the panel demonstrates a clean wiring job. Notice the GPS mounted on the canopy frame just below eye level.

The engine is an Aerosport Power IO-320 with

high compression pistons, one LightSpeed ignition and a MT constant speed prop. It has an output of approximately 170 hp.

The July meeting had a pretty good turnout considering Arlington had just got rolling. The weather was good and helped bring out a bunch of Home Wing planes to the meeting. I counted nine including Ryan Johnson's RV-7A with a whole 17 hours on it and Van with the RV-10 fresh out of spin testing.



Flyin season— Arlington

A little late for the photo session of the Home Wing contingent at the Northwest EAA Flyin at Arlington, Sunday stragglers N996RV and N558RL (in a Saturday evening photo) hold down the grass at the “RV Lot”. There were probably at least a dozen planes from Home Wing at this year’s event. A contingent of two from the SoCal Wing and a few dozen other RVs from all around the west were in attendance. This is of course the home field for the BlackJack squadron and they contributed to the show in their usual precision style.



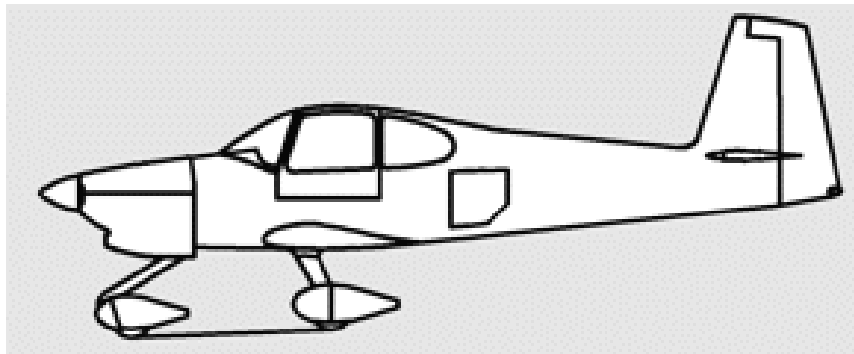
First Flight — Jeff Jasinsky’s RV-8

July 26th, 2003, after five years four months of construction, N184TJ took flight.



RV-10 — The new RV is off and selling

As of this writing there are 60 serial numbers already gone for the RV-10 in the first three days of sales. A couple of local Home Wingers high tailed it to Van’s on Tuesday July 29th to get in on the first run. Robin Wessel got #23. I wonder who got the single digits?



Custom Interior Mods

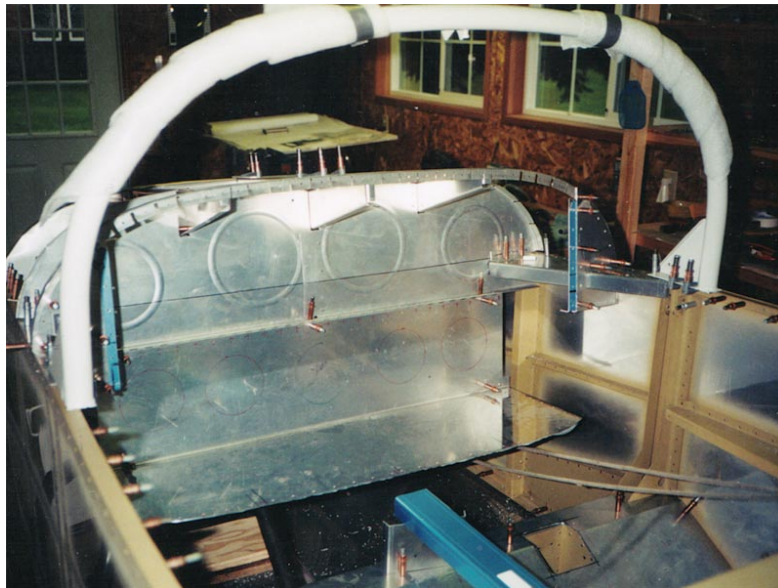
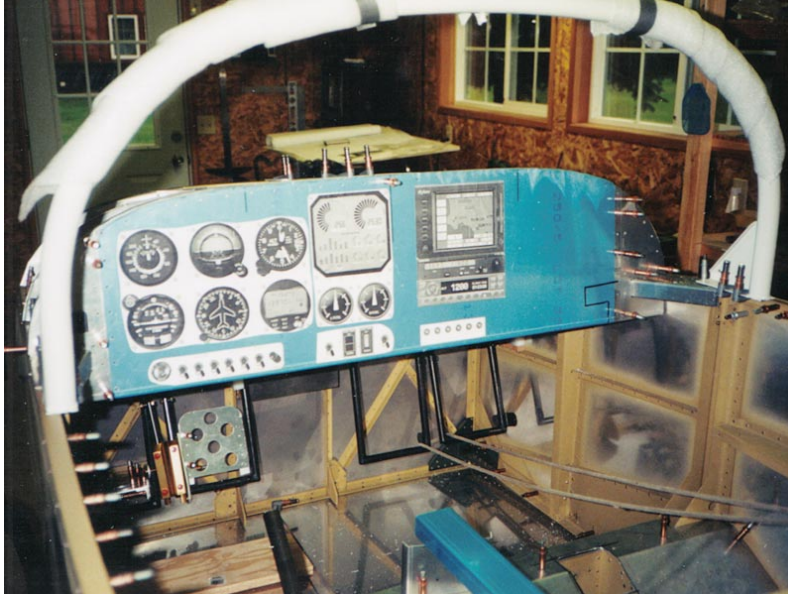
By Home Wing member Dann Parks

Tilt-down Instrument Panel

I saw photos of a tilt-down instrument panel that someone had done in Australia and it was intriguing. It seemed like a good idea, but they had hinged it at the bottom of the panel (f-6103) and the swing arc would cause long instruments -- like attitude gyros -- mounted high on the panel to contact the $\frac{3}{4}$ " angle and glare shield while tilting down. I solved that problem by moving the hinge point forward, to the bottom of the f-6105 bulk-head. I added a piece of aluminum sheet to connect the bottom of f-6105 to the bottom of the instrument panel (f-6103). The instrument panel was cut to a square end on each side to allow it to drop down. The ends with the cut-outs for the f-6110 deck are permanently mounted.

Once this sheet and the panel are connected with some diagonal braces, it will make a large L-shaped space that will allow me to mount all of the electronics in the panel on the workbench. I can then

simply put the pin through the hinge, connect the wires, tilt it up and I'm done. All the wiring and plumbing will culminate into this space along the hinge-line which will allow the panel to be tilted down without disconnecting anything and have easy access to all the plane's electronics.



Panel_1.jpg shows the panel -- with some paper gauges taped on it -- in the up position. Panel_2.jpg shows it hanging down. Great access to everything. Vents holes will be cut in the aluminum sheet that hinges the panel to the bottom of the f-6105 bulk-head.

Center Console and Upholstery Panels

As I started to think about upholstery, I was looking for an alternative to gluing material to the inside skin. I wanted a smoother look and more importantly I wanted to cover wiring, but still have access to inspect everything. I decided to make a couple of light-weight fiberglass panels contoured to the inside of the cockpit. These would be upholstered and snapped in place with upholstery pins. They would make a very clean look, but could be easily removed. I laid them up inside the fuselage over 1/4" ridged foam, adding flanges for attachment to the bulkheads and seat floor.

I also decided to make a center console that would provide an arm rest and would mount a JBM quadrant into the front portion. The console is the width

of the electric flap brace and runs to the front of the seat. I have checked and this does not interfere with full stick movement with my legs and the quadrant is mounted forward enough so that at idle my elbow does not hit the electric flap brace.

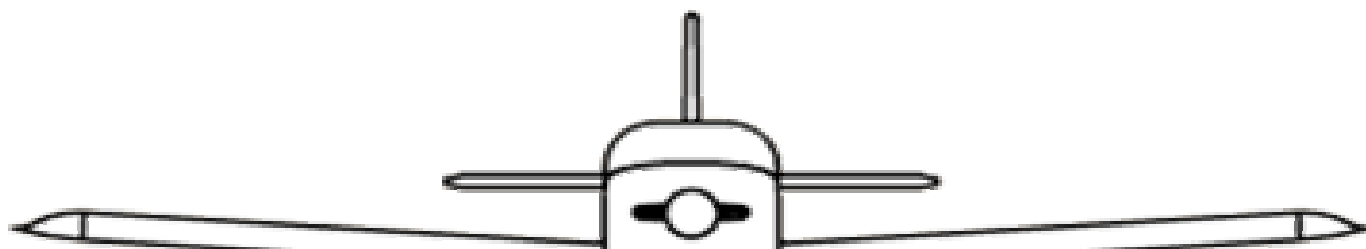
It also seems to provide a very handy support to climb in and out. The console could easily be opened up for storage with a lid on the top.

Console.jpg shows the console being laid up in the cockpit. The quadrant will be cut flush into the front area. Side_panel.jpg shows the side



panels being laid up.

Dann Parks



Could Ya' Give Me A Haan?

Bob Haan

PVC Pipe Paint Booth

PVC Pipe and PVC connectors can be used to build the frame for a paint booth. This frame can be covered with a plastic sheet to form the booth. Use the $\frac{3}{4}$ inch PVC Pipe and connectors, not the $\frac{1}{2}$ inch size. The price difference between $\frac{1}{2}$ inch and $\frac{3}{4}$ inch is insignificant but the rigidity of the $\frac{3}{4}$ pipe assembly is very significant.

PVC pipe comes in 10 foot lengths and costs \$1.38 for $\frac{3}{4}$ diameter pipe. Buy tees in quantities of ten and the cost per Tee becomes about \$.20 each. Since you do not have to have a leak proof design, you can create most any connector type using a Tee as the connector. For example, a tee can be used as a 90 degree elbow; or as a straight connection.

The height of the paint booth is determined by the length of what we will call the pillars. By selecting 80.5 inches, we can make 3 pillars from two 10 ft pipes and one tee. Note, the insertion of one tee increases the length of that run of pipe by 1 inch. To get 3 pillars from two 10 foot pipes, cut each 10 ft pipe into 2 tubes, one 80.5 in and the other 39.5 in. Note that this requires only one cut. From these two 10 footers we will get two 80.5s and two 39.5s. The two 39.5s are connected together with a tee to yield the 3rd 80.5 in. pillar.

The horizontal beams at the base and the top of the paint booth can be any length. We used 80.5 inches. This had the advantage again of yielding 3 beams for each two 10 ft pipes and one tee.

We found that the spacing between the pillars that were connected to and that held up the top beams could not be as long as 10 feet because the top beams would sag to much under their own load let alone the load of the plastic sheet that needed to be supported. This

problem was solved by using the pillars created by assembling the two 39.5s to each other using a tee as top and bottom beams. One tee is pointing up and one tee is pointing down and these tees are connected to each other via an additional pillar. This provides vertical support of the beams every 39.5 inches.

When the PVC components are connected the frame looks very flimsy. The fix is to attach cords to opposite corners and tighten them until the frame is square. We were surprised at how strong the frame was when the geometry was squared using these diagonal cords to pull each section into a square or rectangle.

The paint booth is very sturdy. It is free standing except for one end which is attached to an outside wall of our shop. There are no connections or support from above such as strings connected to the ceiling.

Next month more details, for example how to make a door. Cleaning the air, etc.

Bob



RV's and Earlobes

A travel story by **Kevin Lane**

The fourth of July weekend this year was picture perfect. The weather I wouldn't have changed one degree. My RV started acting up however, some very loud squawking in the wheels. So, I missed the Saturday fly-in breakfast while I tore apart the nose wheel, and, after finding nothing more than a tire in need of inflation, the brakes. Still nothing stood out as terribly bad or wrong. I do need some new tires so I left the wheel pants off. There is no doubt in my mind now that they are good for at least 10 knots.

So, I had a bit of apprehension when I decided to fly up to the San Juans on Sunday. Ellen hadn't flown with me since Labor Day of last year. She works full time now and can't go gallivanting around the country like I do, well, did. We had to drop off some keys at Galvin Flying Service at Boeing Field on the way up.

Toledo was indefinite ceilings, one mile vis. Seattle was scattered. We went VFR on top, tops being only 3000'. I picked 8,500' for cruise, which cleared us over Mt. St. Helens. Seattle turned out to be just scattered, and I descended under flight watch's eye through SeaTac airspace towards Renton, settling in at 900' as I passed between SEA and Renton.

The brakes were flawless on landing. You definitely are on alert when the possibility of a brake locking up seems more than remote. Pulling into Galvin the brakes squawked a bit, but didn't actually grab.

So we were off again, my sectional permanently marked with the latest "temporary" flight restrictions. Hint – fly above 5,000' and don't worry about any of them. By now it was pushing 1 pm and we decided to fly into East Sound on Orcas Island for lunch. It is about a ¼ mile walk into town from the airport along a graveled pedestrian trail. We ate again at Vern's because they have ocean-front, outdoor dining. Ellen found several shops in town that offer very nice local crafts. She used to work at Saturday Market, so has an eye and a nose, for nice artists work. I just have a nose for them. Those shops all have "that smell", of frilly soap, and lavender, and, unhhh, gives me chills down my back. I bought her some earrings and got off the hook for our 24th wedding anniversary on Monday!

We wandered back to the airport. A Fairchild continued to give rides. "Watch out for that guy", I thought. He was the one that decided to change the pattern as I was approaching the airport, but then changed

his mind again to the way everyone else was set up, flying giant S-turns as he made up his mind, seemingly oblivious to the rest of the world, all for a 3 mph breeze.

We blasted off out of East Sound to Friday Harbor, which is on the same radio frequency. You can fly there faster than you can figure out the airport code for the GPS. (FHR, not FRH). We walked into town, maybe ten minutes from the airport. The ferry had just arrived. We found out that many of the people there had been in line since 10:30 that morning. It was now like 4:30pm. At least it wasn't raining. They were selling a lot of ice cream cones. A big refrigerated ice cream truck was even making a delivery. We found a kayak rental place and talked with the owners about renting. Get reservations. They take you out to where you can kayak with the whales. I guess this is good. I had figured on just paddling around with fishes, not mammals. So we had accomplished all our chores, lunch, and the kayaks, plus the bonus anniversary thing. This was a sweet day.

You know how you always check before you pull out on the runway? Yes, totally unannounced, a twin comes blasting into Friday Harbor. I noticed him on short, short final. I was good and didn't make any sarcastic comments. If I had a high wing plane I could have repeated the cinnamon bun roll up I saw at SNF one year when a Baron landed on top of a Cessna pulling out on the active. But, that's why we fly low wings, right?

The flight home we were good and flew the I-5 corridor instead of the Mt. St. Helen's direct route, which takes, what, another 5 minutes? I haven't written about my flying for some time now, so thought it would be most fair to expose a side of me when I have passengers on board. I am slowly realizing that that shouldn't affect how you fly and make decisions, but I



Earrings good...camera bad!

would guess that we all behave this way to some extent. So, the day was a success, the RV a great project, and she really loved the earrings. Yes, the most important part of this story, the earrings. Twenty four years, guys, and I'm building my second RV! Hear me, it's the earrings.

July 2003

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Meeting Coordinator, Webmaster, Flying Activities...*Randall Henderson* 503 297-5045

Annual Fly-in Boss...*Don Wentz* 503 543-2298

The Tool Crib

Being a current Home Wing entitles you to access the group's tools, a major benefit. The Home Wing owns a growing selection of those expensive and seldom-used tools that are very nice to have access to. This program is managed by The Toolmeister: **Amit Dagan (503) 292-9780** amitdagan@hotmail.com Please help protect the group's assets, observe our Tool Policy:

- Everything goes through Amit — do not give the tool to another member.
- Amit will keep an accurate sign-out sheet for each item so he knows where it is at all times.
- Amit will inspect all tools upon their return. If there is any damage he will ask you to pay for the repair . More Tool Crib rules can be found at the Home Wing website

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- **Randall Henderson** 503-297-5045 randallh@attbi.com (EAA Ch. 105, RV-6 builder, Hillsboro-Portland area)
- **Randy Lervold** 360-817-9091, randy@rv-8.com (EAA Ch. 105, RV-8 builder, Vancouver/Portland area)
- **Dave Lewis, Sr.** 503-690-8237 (EA Ch. 105, multiple RV builder, Hillsboro-Portland area)
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EAA Flight Advisor

Dave Lewis, Sr. 503-690-8237 (EA Ch. 105, multiple RV builder, Hillsboro-Portland area)



Subscription Due Dates

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E-mail subscribers: Look for your name and renewal date in the e-mail that the newsletter is attached to.

All subscription data is tracked in an Access database. Data entry errors can happen - if you find an error in your renewal date please contact the **Randy Lervold**.

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Classifieds...

FOR SALE/WANTED

Duckworks Landing Lights - Retro-fittable, light, easy installation. Kits start at \$75, check 'em out at www.duckworksaviation.com

FOR SALE:

RV-3 parts (many)

RV-6, 340 TT, 160 hp O-320, King KX-135A

RV-4, 450 hr. TT, O-320 160 hp.

Contact Bernie Elsner, aviatorone@gorge.net, 509-493-2161
10/03

FOR SALE UPS GX-65 GPS/COM, still in the box \$2400.
Magellan SkyBlazer GPS model 42001 (handheld), never used, still in the box. Paid \$600, make offer.

Dave Carlson 503.320.6997 davelcarlson@msn.com 10/03

FOR SALE ANR Headset Pilot Avionics PA 17-79 DNC XL

Wanted: 2 of 4 partners to share in a finished RV-6A tip up, to be based at Twin Oaks - or possibly Aurora or HIO. basic IFR, 160hp ,email us at rv6partnership@yahoo.com

Classifieds are free to Home Wing members. Ads will run for three months. Send to editor by e-mail or mail. Renewals ok, just let editor know. Date at end of the ad is last month ad scheduled to run.

Share hangar at TTD with Bob Boring, room for RV only, split \$237/mo

VIDEO TAPES - RV-6 construction videos by George Orndorff.

-RV-6 Quickbuild, 3 tapes

-RV Finishing kit, 3 tapes

Both sets for \$25, or separately for \$15 each set.

Contact Joe @ 503-829-6333 or jeblank@molalla.net

July 2003

Home Wing Membership Sign-up/Renewal

To join or renew, fill out this form and mail to **Randy Lervold, 5228 NW 14th Circle, Camas, WA 98607**, along with \$10 for renewals or new subscriptions. *Please make checks payable to either Randy Lervold or Home Wing.* If you are renewing you only need to give your name, payment method, and any other information that has changed. Please don't forget your e-mail address and newsletter distribution method.

Use this form for address changes too!

name – **Payment** – cash() check() (payable to Home Wing)

address – EAA chapter -

city/st/zip-

home phone/work phone- **e-mail address-**

If info change only, such as building status or address change, check here-()

Building – RV3() RV4() RV6()/6A() RV7()/7A() RV8()/8A() RV9()/9A() undecided()

Status – empennage() wings() fuselage() finish() flying() tail number(N)

*note – only e-mail (acrobat PDF format) delivery of newsletter is available for new members, no snail mail (USPS)

- -above info to appear in a member roster listing available to members only

-----fold-----fold-----fold-----fold-----

Return address:

Randy Lervold

5228 NW 14th Circle

Camas, WA 98607