



The Newsletter of the Portland RVators; Builders and Fliers of Van's RV Series Aircraft



May Meeting

The May meeting was at Scappoose Airport, in Blackie and Norm's Hangar, and outside too! It turned into a mini-fly-in, with Bill Benedict flying in in his RV-4, Mike Seager in Van's RV-6, and Ken Scott. Don Wentz pulled out his RV-6 and gave a few rides. And of course we all got a chance to look over Blackie's "crash-and-go special" RV-4, which he has all fixed up and flying again. Norm Rainey's RV-6 was there for us to look over as well.

In addition to discussion of and final preparation for the fly-in, Stan and Eilene VanGrunsven brought copies of their son Gene's Video montage of different RV related events. They also brought a TV and VCR so we were able to get a preview. They had some copies left so you'll probably still be able to get one at a future meeting.

Meeting Notice

Frank Justice, Meeting Coordinator

Place: EAA Chapter 292 Hangar Independence Airport (7S5)
Date: Thursday, July 13
Time: 7:00 PM

The May meeting will be a "fly-out" meeting at Independence Airport, in conjunction with the Salem/Independence EAA chapter 292, who is having their meeting on the same day.

Agenda will include "debriefing" from the fly-in. Hopefully we'll also get some RVs in there we can crawl all over as well. EAA chapter 292 will be discussing their involvement in the upcoming Builder's Conference at Aurora (see calendar), so if anyone's interested in attending or helping out, this will be a good opportunity to do discuss it with them.

Anyone who has an extra seat or needs a ride down should call me (Frank Justice) at 629-7808 (days) or 590-3991 (eves), and I'll help you coordinate.

General Business

Randall Henderson, Editor

The Fly-in Season is HERE!

And how! First there was the Science Bowl winners trip to Boeing museum (fly-OUT actually), then Sun-Fun, then Schrock's, then the big Portland RVators shindig, and Salmon arm (did anyone brave the weather for that?), and Packwood, and State EAA at Estacata, and coming up is Arlington, then Oshkosh, and Van's homecoming... how am I supposed to ever get any BUILDING done??? Fortunately I've managed to temper my enthusiasm a little bit (thank Jeanne) and NOT go to every one of them. Unfortunately (for you), you now get to plow through a ton of drivel about all of them in this "fly-in special" issue of the newsletter.

Be a Part of History

If you've read the April '95 issue of the RVator, you know about Jon Johansen, the Australian RV-4 builder who flew it from Australia to New Zealand, and plans to fly to Oshkosh via Japan, Hawaii, and Santa Barbara, CA. Jon has asked for sponsorship from various organizations, and Van's has agreed to partial sponsorship. A member of our group who wishes to remain anonymous has made a generous "seed" donation of \$50, in the hopes that the Portland RVators can make a gift, as a "sub-sponsor". Here's your chance to be part of history! I'll "pass the hat" at the meeting if anyone's interested, or contact me (Randall Henderson, 297-5045) if you would like to help out. I'll forward whatever we come up with to Van's in the Portland RVators' name.

Back Issues

Carl Weston has made a copy of all my back issues of the Portland RVators newsletter, which go back to

Feb. 1992. Carl has offered to have copies made for anyone who wants them, for the cost of printing. Look him up at a meeting or call him at 649-8830.

Top Ten List

As I'm sure you all know by now (since I haven't stopped talking about it yet), I had a memorable trip to Sun-n-Fun with Van's crew. Did you think I might get tired of it and spare you a top ten list about the whole thing? No such luck, pal. Here it is, my list of the

TOP TEN THINGS I LEARNED ON MY SUN-N-FUN TRIP

- 10. Those sectionals really slide by underneath you at 200 mph
- 9. Seven days is a long time to do anything, even hang out at a fly-in
- 8. I want an O-360....
- 7. When Bill says be ready to work, he means it!
- 6. Man, stay away from them fire ants!
- 5. RVs are really great airplanes -- no wait... I already knew that
- 4. I want a constant speed prop....
- 3. This is one beautiful country
- 2. It probably isn't a bad idea to have current charts, especially when the old ones don't show the major new international airport that's on your route...
- 1. I sure am glad I live in Oregon!

Subscriptions Due:

Look at the date under your address on the cover. **THAT IS THE DATE YOUR \$10 IS DUE.** Mail to me or give it to me at the next meeting (my address is the return address on the cover). If you are paid up but the date doesn't reflect this, please give me a call so I can correct it.



EVENTS CALENDAR

Northwest EAA Fly-in, Arlington, WA - July 5-9 (360) 435-5857. Puget Sound RVators picnic Saturday, July 8, 1:00pm, east side of the field, just south of the north gas pumps. Take the shuttle over from the airshow area before the airshow starts, and watch the show from there -- less crowded and a better crowd!

EAA Chapter 105 Meeting Thursday July 20, (third Thursday of every month), 7pm at Twin Oaks Airpark. Good programs, don't miss em.
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Some "young eagles" show that you don't *need* a high wing to get shelter from the rain

Scappoose Airport Appreciation Day Sunday July 23, 10 AM - 4 PM. (503) 543-3121

EAA Oshkosh July 27-Aug. 2. Carl Hay (297-3091) is looking for anyone interested in making a "group flight" of RVs.

EAA Chapter 105 "Breakfast at the Aileron Cafe" Saturday August 5, (first Saturday of every month) at Twin Oaks Airpark, 8am.

Corvallis Air Fair August 12 & 13. B.G. member Steve Kimura says: *The local OPA chapter is co-sponsoring the event, and it would be great if we had some static displays. I volunteered to take care of the fly-in people this year. The deal is: fly in = free food.* Can't argue with that.

Aircraft Builder's Conference Saturday, August 19 at Aurora airport. Sponsored by Aircraft Spruce & Specialty Co., EAA, and Kitplanes Magazine. \$300 gift certificate for Best Homebuilt flown in. Registration required. 1-800-824-1930.

Van's Homecoming September 1-4



Fourth Annual Northwest RV Fly-In

by Don Wentz & Randall Henderson

(Don) Well, it's 8am, low ugly clouds cover Scappoose Airport, rain dampens the ground and our spirits. We are sure no one will be able to show-up and we'll be stuck with a bunch of food and T-Shirts. But, what's that? Do I hear an airplane engine above the clouds? Suddenly, an RV-4 drops down from where the edge of the cloud must be and flies down the runway. I recognize it as one based at Twin Oaks, the owner is building a new RV-6. But, rather than land, he blasts back above the cloud and is gone.

This gives us hope, so I grab a helper who had never been in an RV, and we jump in my -6 to go check out the conditions. It turns out that there is plenty of flying room in the area, just that low gray mess sitting at about 1000 feet right over Scappoose! Now I see Randall in the Champ making it in, and begin to hear other A/C approaching, asking about the active runway. I blast over to Hillsboro and back, hoping a few more will venture out.

(Randall) The Fourth Annual Northwest RV Fly-In was a success!

Especially considering the weather. Actually it wasn't nearly as bad as the reports had predicted. I flew in from HIO at 8:30am to start setting up, and other than a solid bank of clouds hanging low over the hills between HIO and Scappoose, the local weather wasn't too bad. Most of the low clouds were gone by 10:00, and although there was overcast at 6000 and a few

light rain showers, the gig went pretty well. Rain and muck did move in by 4:00pm but by that time most people had left.

There were around 25 RVs there, plus nearly that many spam cans, and a lot more people who drove in. Van's contingent flew in in formation, with Van flying the RV-6B, Bill Benedict in the RV-6T, and Andy Hanna in the RV-4. Mike Seager brought Van's RV-6, Jerry VanGrunsvan flew in in his RV-4, and Ken Scott brought his RV-6.

And of course Don Wentz was there with his immaculate RV-6. In fact his plane seemed to be everywhere -- it was the model for this year's T-shirt! He told me he took all kinds of ribbing for that, and no one would believe him when he told them he didn't have anything to

do with it. Well, I can vouch for him there. I took some photos of it a while back and designed the shirt around one of them, but I never told him about it, and in fact he didn't even see one until I showed up with them the day of the fly-in.

(Don) Well, as usual, I was being tugged every which way (tell me about Landing Lights, fix the pop machine, serve the ice cream, take someone for a ride, where's the coffee, who'd you pay to get your RV on that T-shirt, etc.). I put on the requisite 'Hot Pink hat' so I am visible and the day goes by in a blur. It was nice to have so many folks ask me to give rides to their friends/relatives, but with the marginal weather and all the other 'duties' I just wasn't able to. The only ride outside of Young Eagles was to Dan Benua's wife Sun, who, after initial trepidation, really enjoyed it, which is good since they are well into a -6A project! Due to the increasingly bad weather, Jeanne Henderson had to pass on a ride, which was something of a relief for her.

(Randall) Rats!

(Randall) Other people/planes that I recognized were Kefton Black "Blackie" (RV-4), Jerry Springer (RV-6), Norm Rainey (RV-6A), Steve Johansen (RV-6A), Evert Eyres (RV-6), Jake Thiessen (RV-4), and Hank Anderson ("ribbon paint scheme" RV-6)

Since it was national EAA Young Eagles day, there were a lot of rides given, mostly by Van and crew. Yes, Van himself was actually giving rides, something you don't see very often these days. I gave a couple of rides in the Citabria, and got a kick out of one kid who was reluctant to go up in "that old tub".

He wanted to get into one of those sleek looking RVs, and I couldn't really blame him, but once I got him up there and let him take the stick and get a feel for the thing he was tickled pink. He even asked me for another ride after we got down.

(Don) Again, Van was great in providing aircraft/pilots for demo and YE rides. I expect that about 15 YEs got rides, including the church kids that helped us



and some Boy Scouts that one of the Baxter boys brought out. Somehow 2 of the church kids got 'aced-out' of a ride, so I'll fix them up later. Many thanks to the YE pilots, Mike Seager (Van's RV-6), Randall Henderson (Champ), Bill Benedict (Van's RV-6B), Jake Thiessen (RV-4), Van, Don Wentz (RV-6) and to our new Chapter 105 YE Coordinator, Joel

Haugen (and his helper for the day Brent Baxter).

(Randall) Van's had a tent set up, selling gift items and handing out brochures. Judy VanGrunsvan shared the tent and was selling her "RV Flight Bag" wares. And of course there was a "Fly-in T-shirt" table, selling the "Official" Northwest RV Fly-in T-Shirts. (Take note: I have LOTS of XLs left, plus a couple of S and XXLs. Sorry, no Ls or Ms left, but I could get another order together if I can get 50 people who want them. Give me a call). I'd like to mention here that at the quantities involved, there is only a couple of bucks profit per shirt, and that's only if we sell them all. And all the proceeds go into the builder's group fund. So please don't ask me for a discount.

(Don) We had lots of good volunteer help this year, with some great helpers that were there at 8 am and stayed right to the last load on my pickup and trailer. I think the aircraft parking and T-shirt sales were well staffed for the most part. I would like to thank all who showed-up and had a good time in spite of the gloomy weather (I saw lots of happy, smiling faces wandering amongst the RVs, even during the rain showers!), all who brought-out their RVs and other fly-ins, and close by saying that it was a really good time, but next year it WON'T be scheduled on the same day as the Rose Festival parade, a guaranteed rain date!

Sun-N-Fun Trip -- Part 2

Randall Henderson

When we last saw our intrepid adventurer, he was left stranded by a heartless Bill Benedict at Lakeland Airport with no food, water, or place to stay, two days before the start of the fly-in.

It was 1:30 in the afternoon, and cloudy, and it would be dark at 8:15, so I didn't hold out much hope that Bill would make it up to Virginia, where he was to pick up Mike Seager, and back before tomorrow. So I started making phone calls and was lucky enough to get myself a car and early check-in at the hotel. Good thing too, because about 6:30 my cell phone rang (I *knew* that thing would come in handy some day) and it was Bill, saying he was just getting ready to leave Virginia, no way would he be able to make it back tonight.

The next day I got up and out to the airport by about 9:30 and no one was there yet, so I wandered around the booths that were set up already and eventually Bill and Mike Seager showed up. Van arrived a little later in the RV-4, and when asked about his trip his reply was characteristically understated: "It went fine, just a little problem or two." Upon further questioning he told us his radio, Loran and starter had all failed by the time he was half way across the country.

Shortly thereafter the trailer arrived hauling the crate of stuff for the booth. This was a fuselage kit type crate, shipped down earlier to the house of a builder local to the Lakeland area who is kind enough to store stuff for the fly-in and provide a staging point for shipments like this.

We opened the crate and I was amazed at what came out of it. In addition to all the display parts, manuals, plans sets, T-Shirts, hats, pins, videos, credit card reader, and assorted office supplies, there was also a shelf, countertop, end-piece, brackets, bolts and everything else required to turn the shipping crate into a 36" high, 12' long counter, with pretty blue cloth stretched across the front and plastic on the top. Apparently Bill designed the "counter" and planned what was to go in the crate, including just about everything needed for a seven day show.

This was Saturday, and although the show didn't officially open until the next day, customers were milling around before we even had a chance to get things set up. Ever the salesman, Bill was taking orders and pulling plans, manuals and T-Shirts out of the boxes as soon as we dug out the money box.

By this time there were four of us there -- Van, Bill, Mike Seager and me, and we were just waiting for one more to complete the crew: Andy Hanna, who was last seen about a week earlier heading south for the Caribbean in the Yellow RV-6B. As the day wore on and the sun got low in the sky Van started looking more and more like a father who had lent the keys to the Mercedes to his teenage son. Finally just as it began to get dark, word came in that Andy was

weathered in in Palm Beach and would try to get in on Sunday. Big sigh of relief -- the plane was unhurt! Oh yeah, and Andy was OK too.

Thus began a long, hot, dusty week of WORK at Sun-N-Fun. I soon found out that Bill wasn't kidding when he told me I'd have to earn my keep for the trip. The first few days were so busy that I barely got out of the tent -- there was a constant stream of people in there, from those who'd never heard of an RV ("Mom, what's an RV?" "It's a motor home honey.") to others wanting to ask questions about engine installation or tell us stories of the last trip in their finished RV. The white RV hats were VERY popular, but I eventually figured out that a lot of people were buying them just because at \$5 they were the cheapest hats at the show, and it was HOT out there.

Andy, Bill and Mike all traded off going out to Winter Haven airport to give demo rides, and I kept offering to spell them, but they declined. Back at the booth, there were always two or three of us there answering questions, selling plans, manuals and gift items, and trying to keep people from stepping on the flap or kicking the canopy fairing as they climbed in (often without asking) to the yellow RV-6B, which was stationed right next to the tent. At first I didn't do much about this as no one else seemed too concerned about it, and after all it wasn't *my* airplane, but eventually it dawned on me that after all, this was the plane that I would be flying in back across the country. After that I got out there in a hurry if I saw someone clamoring up on the wing uninvited and tactfully but firmly show them how to get in, on the side with the step.

Tuesday evening was the RV banquet at the Lakeland Civic center, and over 150 people showed up. On the drive out there Van kept talking about how at the previous banquet he had introduced Andy without warning and they were all having a good laugh about how he had gotten all red faced and stuttery. They all kept looking at me with evil grins and I realized there might be a warning here, and that I might be tonight's victim. So I began hurriedly organizing some amusing anecdotes in my head. Fortunately the trip had already been filled with interesting experiences and by the time we got to the banquet and Van started throwing us one-by-one to the wolves, I wasn't too ill-prepared. I don't really remember much of what I said, something about my fledgling "cottage industry" with the Van's Air Force stuff, plus some whining about how they made me WORK for the privilege of riding down in their airplane. But at least I wasn't singled out, as Van called us all for a turn in the spotlight.

By Wednesday things had calmed down enough that I was able to go out and look around for a while. There were a LOT of booths and planes, though not nearly so many as I understand Oshkosh to have. Among the things that caught my eye were an Allison

450hp turbine powered Glasair in military gray, the "Green Machine" modified P51 with 3 bladed counter-rotating props, that neat little Glastar, and plenty more. I had heard there were over 150 RVs counted on the flight line, but by the time I got out there to have a look there couldn't have been more than a dozen!

At one point I was wandering down the flight line and suddenly came face to face with an airshow performer, his name, "Randy Henderson" embroidered on his flight suit. He saw my name tag and said "Randall Henderson?! Hey, I've got a brother named Randall!" And he was serious! He flew a Christen Eagle I believe, but I never caught his act.

During the week I got to meet a lot of people who I'd previously only known by name, including Skip Heard, who heads up the Nigerian Air Force RV project, his wife Cindy, Bob & Judy Avery of Avery Tool Fame, Bud & DJ Lauristen of Cleveland Aircraft Tools, General Killey, Commander 1st Air Force, Alan & Diana Tolle, John & Mary King, Russian test pilot Yakov Sabodin ("I see you at Oshkosh -- take you to Acey-Deucey!"), Homebuilding guru Tony Bingelis, and EAA founding family member Tom Poberezny. Tom and I spoke at length about issues concerning the homebuilt movement. (Hi, I'm Tom Poberezny. Is Van around?" "Yeah, he's right over there." "Thanks!")

Airshow activity went on all week, but I didn't get to see much of it -- mostly I just heard lots of loud engines roaring overhead as I dealt with customers. But there were a few highlights:

- The B2 Stealth Bomber, making a single, quiet, low pass, and as he went by a HUGE row of pyrotechnics were set off on the ground beneath him
- The Helio Courier doing it's helicopter impersonation; a few more knots of headwind and he would've been flying *backward*
- The F-16 blasting by at high speed and pulling up into several climbing rolls, then suddenly coming wings level as he spots a Cessna 172 tooling across the sky a couple of thousand feet above and ahead of him. He slowed down, dropped the flaps, and escorted the wayward Skyhawk out of the area before resuming his routine.

Saturday eventually dragged around, a hot day like all the others. But this was teardown day, and people were starting to pack up. We stayed open until 3:00, then started to take things apart. Promptly at 5:00pm the gates were opened to vehicles, and the trucks, vans and cars rolled in to start carrying everything away. We had most of the stuff packed back into the crates by then, and Andy and I had our stuff stowed in the yellow RV-6B. I was still helping Bill and Mike stow stuff in crates when I looked around and saw Andy pulling the plane down the ramp! I hurried to

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catch up, and helped him pull it the couple of hundred yards to the runup area. We got in and lined up behind three other planes, and took off without even saying good-bye to the others.

We made it as far as Montgomery, Alabama that first leg, landing behind a Delta 737. We checked into the airport Holiday Inn, which was the lap of luxury compared to that dump we had stayed at in Lakeland (take note: do NOT stay at the "Crossroads Motel").

The next morning we didn't make it out of there until 9:00am. A far cry from Bill and his standard 6:30am wakeup call, but the previous week seemed to have caught up with both of us anyway. I flew the first leg and was having serious trouble staying awake. I thought of asking Andy to spell me but his head was lolled over and a line of drool was running down his chin, so I scrapped that idea. He eventually came to life and pulled a couple of Snickers bars out of his pack, and I discovered there really *is* something to that blood sugar thing!

The weather wasn't bad for the first couple of hours, but we eventually encountered clouds and soon found ourselves over an overcast layer, with a few holes here and there to tease us into continuing. Eventually the clouds got too high and we decided we'd better get down below, and we scoped at the few remaining holes, looking for one big enough to let down in. After my flight out with Bill I thought it would be a piece of cake, but what I didn't realize was that with a fixed pitch prop things are a little different. After making several passes at likely looking holes, I followed Andy's direction and got set up as if to land: flaps out, slowed up, hanging on the prop, then just as we got to the edge of the hole, cut power and let it sink on through. Not quite the same as diving through with that "speed brake" constant speed prop, but it did the job.

We fueled up at Conway, Arkansas, and got weather from a helpful briefer, who indicated that there was indeed weather over the Rockies and east, but that we should be able to make it if we stayed south, towards Rawlins, Wyoming. We proceeded onward under lowering ceilings to Goodland, Colorado, where we again stopped for fuel and met a local RV builder who had flown in after us in a Cessna. There was a restaurant on-field, and they were closing up early since it was Easter Sunday, but Andy was able to sweet-talk them out of a couple of grilled cheese sandwiches.

We got another briefing, from a briefer with a completely different attitude -- to hear him tell it we never should have made it as far as we did and no question of trying to push on. Yeah right. The local RV-er told us we could stay at his place if we needed to, but we decided to "go have a look". I took the leg, and for the next hour or two ceilings were low but passable, and we were laughing and joking to each other: "Oooh -- maybe we'd better go back to Goodland-- this is just

soooo bad -- ha ha ha ha ha ha!" You can probably guess what happened next -- the ceilings abruptly got lower, the ridges got higher, we started encountering snow showers, and we began to have to weave and dodge and backtrack to stay in the clear and at a "safe" altitude.

The weather and terrain kept pushing us farther south, and Andy kept telling me "I think we should get back to the highway", and I replied "but the clouds don't know where the highway is, why would it be any better over there?". But he turned out to be right -- not only was it safer to stay over the road, but the only clear way through ended up being right on the highway, over the ridge, past Rawlins, through a couple of light snow showers, on to Medicine Bow, and over to Bear Lake, Idaho. As we flew over the lake and into the pattern of the small airstrip there, Andy looked over at me and said "Hey, we made it through the Rockies!" We exchanged high fives, and proceeded to land at the remote strip and fill up with gas.

Andy took the last leg, and the weather steadily improved as we headed over the lowering mountains Northwest over Burley and up towards Boise. By this time the sun was getting low in the sky, and it didn't look like we'd make it much past Boise before sun-down. We had both been hoping to make it the rest of the way back in one day, but although the weather was steadily improving neither of us was too comfortable trying to make it back over the remaining mountains in the dark. So we agreed we'd have to land in Boise, but about 20 miles out Andy said "Hey, where's Sun Valley from here anyway?" I perked up and started fumbling with the map, and lo and behold, it was about 50 miles back and to the North. "I'll bet we can make it in there before dark" says I, and Andy pulled up into a wingover and we were on our way.

The approach to Hailey Idaho airport was spectacular, with the last pink glow of the sun reflecting off a fresh covering of snow on the mountains. The cold, brisk air felt wonderful as we debarked the plane, after all those hot days in the Florida sun.

We stayed at the Airport Motel, easy walking distance from the airport, and I highly recommend it. They even have a "crew car" that they let us use to drive into town. Which we did, for dinner, and were both anticipating a fun night out, but about half way through dinner the 12 hours of flying finally caught up with both of us, and we were barely able to drag ourselves back to the hotel and fall into bed.

Monday morning we "slept in" again until 8:00, then bundled up (it was 19 degrees out) and drove the "crew car" into Hailey and found a great little breakfast place, name of "Java On Main." The delicious breakfast there, along with the microbrew beer the evening before really made us realize that we were almost home.

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Departure from Hailey was as beautiful as was the arrival the evening before, and we climbed out through a snow filled valley that was going our direction. Andy was kind enough to let me take this last leg, but dumb enough to show me how to do a roll. While I had ridden through plenty of them before, this was the first time I'd actually tried one myself. I practiced a few, and was surprised at how easy it was. Then he made the mistake of removing the right stick to give himself more leg room. I waited a while until he was off-guard, then dropped the nose for some speed, pulled back just like he'd shown me, and hauled it over. Yahoooooo!

While it was beautiful in Idaho, rain and low clouds had moved into western Oregon, so we dipped underneath the overcast at Hood River and headed up the gorge. Rain showers intensified as we approached Hillsboro, and we actually had to use US 26 as our guide to find the strip. I hardly noticed the rain though, all I could think about was "hey, I'm going to get to land an RV at Van's strip!" It was a thrill, and I was even pretty pleased with my landing there. A fitting end to a great trip. Thanks Bill, Van, and Andy!



Schrock Fly-in

Don Wentz

I have heard a lot about how great this fly-in is. Great hosts, pretty setting, lunch, airplanes, flour bombing contests (when's the last time you saw one of those?). Well, I finally experienced it this year.

Although I was late getting there and had to settle for a few scraps of lunch, I did have time to enter in the flying contests. I had never done flour bombing in anything, let alone an RV-6, but I thought what the heck, why not try it? The hard part was figuring out how to drop the bomb. We ended-up running a string out the flap rod hole and my 'bombardier' held the string. I couldn't approach low and slow like most of the bombers, so we began the run at 800' above the release height, at about 100mph. I cut the throttle, pushed over to about a 45 degree 'dive' so I could line-up on the barrel target at about mid field. When I yelled "bombs-away", the bombardier let go the string, I pulled-up, gave it full throttle and away we went. For our first try, we were within 6' of center, but overshot by 50, which wasn't a winner, but still lots of fun. The winner was a straight-tail 172 that certainly broke the 'hard deck' of 200 feet AGL, while Rion came-in 3rd in the Champ (Champ co-owner Randall was out in the weeds with us).

There were also short take-off/spot landing contests, neither of which I was even close on. I think the short take-off winner was a Super Cub, while spot landing was a fly-off between a Citabria and a Cub. It was a LOT of fun watching/participating in the contests. The weather was gorgeous, and I didn't feel

too nervous taking-off, bombing, and landing while the whole attendance (over 200) was watching. Good thing too, as my takeoff and landing were NOT very good. The only other time I have seen such contests was at my very first EAA fly-in out at Hubbard, probably 10 years ago, before I even knew what EAA was! I have very good memories of that day, including my very first RVs ever - RV-4s, and Van in the RV-5.

But back to the Schrock Fly-in. The Schrock's seem like grand folks, members of the Eugene EAA chapter along with the likes of Hank Anderson. They are building an RV-6 there on the farm where the strip is, just southeast of CVO. I really didn't get to visit with them that day, them being the hosts and all, but did get a chance to chat at the recent RVators Fly-in at Scappoose. The attendance included a variety of AC, many Cubs, a Stearman, Citabria's, several Cessna models (140, 150, 170, 172, 182, even a 206), a few RVs, Steve Harris and family in the Tri-Pacer, Stits Sky Coupe, Bonanzas, Van's motor glider, you name it.

The crowd was also a lot more family oriented than the usual fly-in with it's hard-core aircraft enthusiasts. There were lots of wives and kids on hand to enjoy the activities in the park-like setting.

I am already looking forward to next year's, and a chance to improve my accuracy and standings in the bombing. Hard to imagine a better day in a nicer setting with great folks and lots of airplanes!



Builder's Tips ...Thanks to all who share them with us!

Dimpling vs. Countersinking: the OFFICIAL Story

One of the questions I often hear (and have asked myself) since I started building is "should I dimple or countersink?" Lately people seem to be gravitating towards the view that countersinking .032, while possibly prettier than dimpling (that is if you do it right), is pushing the limits of "acceptable practice". Well FINALLY someone has come up with some hard data on the issue -- Gil Alexander, internet rv-list subscriber and information hound, dug up the MIL-SPEC on the subject:

I knew that could get some real facts and data to go along with this discussion: MIL-HDBK-5F - *Metallic Materials and Elements for Aerospace Vehicle Structures*. This is a design guidebook of material strengths and fastener strengths that is approved by the Army, Navy, Air Force and the FAA.

All of these figures are valid for 2024-T3 material, and probably would not be valid for other grades of Aluminum.

Shear strength of 3/32 MS20426AD (AN426AD3) flush rivets (values are ultimate strength in lbs.)

Sheet thickness	Dimpled	Countersunk
0.032	217	178
0.040	217	193
0.063	217	216

This shows an 18% loss of strength for every countersunk rivet in 0.032, and an 11% loss in 0.040 material. The Handbook also has a warning that in 0.032 material, this is a "knife edge condition" and is undesirable, and *not* approved.

For those of us substituting 1/8 rivets at the floor-pan/firewall joint, the equivalent shear strength of a 1/8 dimpled rivet in 0.040 material is 388 lbs., a 79% increase over 3/32 dimpled rivets.

Following is the equivalent data for YIELD strength (in this case, defined as a permanent set of 0.005 inch)

YIELD strength of 3/32 MS20426AD (AN426AD3) flush rivets in 2024-T3 (values in lbs.)

Sheet thickness	Dimpled	Countersunk
0.032	209	132
0.040	209	153
0.063	209	213

This is actually a worse % loss than the ultimate loads, giving a 33% loss in 0.032, and a 27% loss in 0.040. The previous table's figures are for ultimate strength (failure), while the above are those loads that would cause a small permanent set.

YIELD strength of 1/8 MS20426AD (AN426AD4) flush rivets in 2024-T3 (values in lbs.)

Sheet thickness	Dimpled	Countersunk
0.040	367	231 (*)
0.063	506	321

(*) this is a "knife edge condition", and not approved.

So to answer the original question, basically, we homebuilders are not following approved practices in this area, and we are seeing the effects.

... keep those loads in limits ... Gil Alexander

Leading Edge Fishing Rod Holder

When I dream of flying my RV-4, the most common destination is Baja California Sur, where I used to fish in my single days. I'm in the final stages of my wings, and decided to install a means for transporting my heavy duty saltwater fishing rods. The 4 5/8" diameter lightening holes in the leading edge ribs seemed a likely candidate, and here is what I came up with.

Buy a 4' x 8' x .020 sheet of polystyrene at your local plastics supply store (correspondingly shorter for the RV-6), roll it into a tube about 3 1/2" in diameter, tape it at the very end of each end, and slide it into the leading edge. Push it out until it hits or would hit the outboard tank rib. Take off the tape, and voila', it springs out into a tight, secure tube. Cut a piece of 2" foam rubber to tightly fit the tank end and push it in. Now put your fishing rods in and step back and admire your work. I still have to work out some sort of secure but removable cap on the outboard end, and

will need to install a hatch in the wing-tip, but the installation described above took less than an hour. The 18" x 74" tube by itself weighs 17.40 ounces, or a little over a pound. Be sure to put the tube on the opposite wing from the pitot tube. On my aircraft, the dual Duckworks landing light and pitot tube are in the left wing, and the rod holder in the right. Hopefully, they are still balanced. Now if I can just keep the munitions hardpoints equalized.... -- J. Rion Bourgeois



Project Status

We haven't heard from Gary Standley (prototype RV-3 restoration ramrod) in a while. Progress is being made though. He sent me following report:

RV3 progressing. Ron Poe and Laird Smith have been quite regular lately. The fuselage is off the jig, front side skins riveted on, upright with the engine mount on. "Dangerous" returned the vertical fin, rudder, ailerons, flap ... all primered up real nice. Also, the canopy frame sans broken bubble. I clecoed the horizontal stab and vert stab to the fuse and set the canopy windshield frame on and it looks neat. Working on the interior, getting ready to do stuff there. I have most all the old paint off the tailcone. Next big thing is the "odd" wing. I have it back from Jim Anglin as he doesn't have time to work on it. Of course, I have just got current, after 8 years of non-flying so am trying to fly as much as I can afford. As always, work days are 1st and 3rd Wednesday, 7pm-10pm, and 2nd and 4th Saturday 10am-4pm -- but call first to confirm (591-9040).

RV-4 builder **Steve Harris** says: "Last weekend we put the engine mount, gear legs, and wheels/tires on and rolled it out of the garage on its own legs!"

Bob Neuner, who finished his RV-6 wings a while back but has since been dormant for a while, finally picked up a fuselage kit and has nearly completed the firewall. Good to see you back on track Bob! (Anyone with an RV-6 fuselage jig up for grabs, give him a call -- 771-6361h, 626-5262w)



New Members & Guests

New member Jim Caufield is an RV-4 builder who's just moved to Beaverton. Jim told me "I've got a job, bought a house, so now it's time to take care of the other essentials - I need to join an RV builders group!"

We also had several people at the last meeting who were in town for Van's RV College.

Actually, there were many more guests, and several new members who introduced themselves, I'm just too lame about keeping track of who they are. Any volunteers to take minutes and at least get names of new members/guests for me? Please give me a call - ed.



The Tool Exchange

This section is devoted to listing any tools, jigs, shop space, specialized machines, etc. that are available for loan, or "group property" that is available to pass on to the next builder. Please give me a call (Randall Henderson, 297-5045) to let me know if you have jigs, tools, shop space, etc. to loan, exchange, or otherwise provide, 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. Items for rent or sell should still go in the "Don't Want Ads".

Surveyor's transit level -- makes fast, accurate work of leveling your wing spars in the jigs. Bill Kenny, 590-8011

Back Riveting Contraption -- large, counterweighted 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

Wing Jigs (2). Bob Neuner 771-6361

Two airfoil templates, useful for mounting the flaps and ailerons on RV-6 wings. Will bring to meeting. Frank Justice 590-3991



Don't Want Ads....

Let us know what you got but don't want, or vice-versa. Ads are FREE.

RV FLIGHT BAG is having a 25% OFF CLEARANCE SALE on everything in the catalog excluding earrings and RV models. Contact Judy VanGrunsvan at 33770 NW Bagley Rd Hillsboro OR 97124-8303 or call (503) 648-3464.

David Clark H10-30 headset with mic. No volume control. Work good. \$90 - Gary -- (503) 591-9040.

I have a used Warneke prop for a Lycoming O-320, 160 HP. It includes prop extension and all the accessories. It is 71"D x 72" P, and worked good on my -6. If any builders need a prop for their project, it would be ideal and less money than new. It has been flying for 3 yrs. and 300 hrs. with no problems. Jim Anglin 642-2797.

O-320 D2G 2024 SMOH by Western Cylinder Ocerhaul, Inc. Hollow crank, can be modified to C/S prop. Chrome cylinders using 1qt in 14 hrs. Will fit RV-4, -6, -6A. \$5500.00. Dave or Bill (503) 829-6379.

40 #8 closed end nutplates for fuel tank access covers - \$44 (my cost). Note that the rivet spacing is different than the standard nutplates supplied with the kits, so if you have already drilled your access plate-reinforcing ring-root ribs like I did, you will have to fabricate new ones to use these nut plates. Also: two brand new old style (steel pot) Stewart-Warner fuel gauge sending units -\$20 for the pair. Rion Bourgeois, 579-8800, 646-8763.

Two not-quite new, old-style (steel pot) Stewart-Warner fuel sending units -- \$10 for the pair. The arms have been bent to fit the RV-6 fuel tank, but they're otherwise unused.

Avionics Work, \$20/hr. Experienced, will work with you. Tim Steele 452-2575

Heated Pitot-tube (Piper blade style), missing heater element, \$35. Brent Anderson 646-6380

3-month old Ilmorrow 920, GPS-North American Continent database. Wally Anderson 623-2328 work, 342-5240 home

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

Looking for any of the following: good quality floor mounted band saw, bending brake, sheet metal shear. Or just let me know if you've seen a good deal somewhere on one of these items. Randall Henderson 297-5045.

Before you order a rivet set for your gun, check out Wacky Willy's, they have all shapes and sizes, new surplus, for \$5 each. Also squeezer sets but beware! The shanks are "industrial size" and won't fit most of our squeezers. Also jewelers file sets (handy for deburring tight corners, etc.) for \$5. The number for their west side store is 642-5111.

