Issue 01.03 **March 2001**

HOME WING

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

First Flight for Bob Neuner!

Photos by Kevin Lane, see inside for details.

Events Calendar

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

MONTHLY MEETING:

(2nd Thursday every month, various locations, 7:00 pm)

Place: Robert Boring's RV-6A project
18321 SE Griese Road
Gresham, OR
Date: Thursday, March 8th, 2001
Time: 7:00 pm
Phone: 503-661-7627

The February meeting will be at Robert Boring's place where he is currently working on the Finish Kit stage of his RV-6A. Robert is also the new President of EAA Chapter 902.

DRIVING DIRECTIONS:

From Portland:

- East on I-84, take the 182nd street exit.
- South on 182nd, crossing Halsey, Glisan, Stark, Division and Powell, and continue on past the McDonald's on the left, the Safeway on the right, and across a curved bridge.
- 182nd becomes 190th. Go up the hill past the fire station. Upon cresting the hill, watch for Giese Road.
- Turn right on Giese road, then about 1/2 mile to a large metal barn on the right. Turn into either driveway.

From Oregon City area:

- I-205 North, exit at Foster Ave
- East 2-3 miles to Jenne Road, turn left on Jenne.
- Go 1 block, turn right on McKinley.
- Up the hill to the top, turn right on 182nd, left on Giese, 1/2 mile to large metal barn on the right, turn into either driveway.

Future meeting schedule:

Apr: Jeff Jasinsky's RV-8 project (tentative)
May: t.b.d.
June: Northwest RV fly-in, location t.b.d.
July: Phil Spingola's RV-6 project (tentative)

EAA CHAPTER 105 Pancake Breakfast:

First Saturday of every month at Twin Oaks Airpark, 8:00 am, $5.00 (always lot's of RVs to look at too!)
This month: 3/3/2001

EAA CHAPTER 105 Monthly Meeting:

Third Thursday of every month at the EAA 105 hangar/ clubhouse, Twin Oaks Airpark, 7:00 pm. See www.eaa105.org for details
This month: 3/15/2001

EAA CHAPTER 902 Monthly Meeting:

Second Wednesday of every month at the Mulino Airport in the OPA building. For info call Bob Boring at 503-661-7627
This month: 3/14/2001

Subscriptions Due

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On the Cover:

Any time a Home Winger makes his first flight it's news around here. This month's cover features shots of Home Winger Bob Neuner taking to the skies for the first time on February 6th. Kevin Lane reports: *"Bob "Bucket of Blood" Neuner flew today from HIO. "It just leaped off the ground" "I'm real happy with the engine, it runs smoother than the factory planes, you'd think it was a six cylinder" says the exuberant Bob.*

Congratulations Bob!

February Meeting Recap

Ray Fogg was our February host. In the way of milestones, Bob Neuner told us about his first flight made just two days earlier. He was sporting a major RV grin! Randall informed the group that he has narrowed the search for our new wing jacks and should be ordering them this month. He found a solution that should fit all RVs except the RV-3 (too low). We briefly discussed the EAA's Tech Counselor and Flight Advisor programs. Apparently Chapter 105 has only one flight advisor, Dave Lewis Sr., while the Tech Counselor ranks are growing nicely (they are listed in the back of this newsletter).

We discussed the Jackpot race trip briefly and then got into Ray's project. Ray started in November of 1997, but hasn't worked consistently due to moving twice and various family events. He's back at it now though and is about half done with his RV-8 wings. Faced with ordering his fuselage kit soon, he's presently trying to decide between the –8 and –8A.

Thanks to Ray for his hospitality!

...Randy

Wig-Wag Widget Now In Production

By Bob Haan

Six of us were standing at Twin Oaks Airport after an EAA meeting and noticed a plane approaching. We noticed this plane because its leading edge lights were alternately flashing or wigwagging. This started a discussion that we should install a wigwag to make ourselves more visible, but a few minutes later concluded that we would not do this because it would be one more delay of our first flight.

We continued to watched this plane approach for about three or four minutes a shocking thing happened when a second plane appeared between us and the first plane when it banked and turned ninety degrees to enter downwind. For three or four minutes none of us had seen this plane. If we had been flying towards these planes, there could have been a collision! This experience convinced us to spend the time to investigate adding a wigwag function to our leading edge lights.

The first thing I tried was an automotive flasher often called a Galls flasher. It cost $40 and used less reliable mechanical relays. It was difficult to install especially if one wanted to have separate + 12V fuses or circuit breakers for each leading edge light.

Based on the experience with the Galls flasher we designed a solid state controller that would wigwag the leading edge lights. It worked so well, and so many other builders expressed an interest in it, that we decided to put it in production. Here are some of the features and benefits of our new WigWag Solid State Controller:

1. Improved safety by being seen and noticed. We have set the wigwag flash rate longer then automotive flashers so that the bulbs come up to full brightness. This means that you will be seen from a greater distance. The police car behind you with a fast flash rate does not need to be seen from miles away. The WigWag pattern will improve being recognized because we have all been conditioned to notice movement and the flash at one wing tip followed by the flash at the other wing tip creates ap-

(Continued on page 4)

parent motion. This is most important when approaching another plane head on where without the wigwag pattern there is no apparent motion.

2. Additional reliability. The WigWag has two 12 Volt power inputs that are redundant. Two fuses or circuit breakers are connected to the WigWag; one for the right light and one for the left light. If one of the circuits to one of these bulbs fails and blows its circuit breaker or fuse, the WigWag controller continues to function and the other bulb remains operational. It would be sad to have two leading edge lights installed and land in the dark because the flasher circuit in the plane was not redundant.
3. Simple installation. Ten wires are connected to the master bus, ground, the leading edge lights, the switchs and optionally to 2 LEDs that indicate that a bulb has failed. The WigWag is mounted in a 2 by 2 by 5 1/4 inch aluminum case. Four #8 mounting holes are provided.
4. Reduced cost. Bulbs last longer requiring less maintenance time because the WigWag includes a bulb filament warmer. Warm filaments are more ductile and less likely to break. Also, warm filaments reduce in-rush current which increases bulb life.
5. More reduced cost. The WigWag is controlled by switches that turn on functions by conducting only milli-amps to ground. As a result, simple inexpensive switches can be used. This also means that you can operate the WigWag Solid State Controller with the same style switches used on the rest of your panel.

By comparison, to replicate this functionality you would need the following:

- Two switches that can carry large currents, S700-2-10, $20 each = $40.
- A flash function, typically a Galls Flasher, FS-033, for $49.99 or
- an LM555 timer circuit costing about $10 and 2 relays, S704-1 ($10 each) about $30.
- Plus a prototyping circuit board and other misc components - $10 to $15.

As you can see, our new WWSSC saves money, lowers parts count, and improves reliability.

If you'd like to find out more you can view an Adobe Acrobat data sheet and additional pictures at: www.easystreet.com/~bhaan/. The WigWag Solid State Controller is now available with four to six week delivery for $90 and $6 shipping and handling. To place an order send a check to Bob Haan at 14270 SW Koven Court, Tigard, OR 97224.

...Bob

Fandango in an RV-4: Part 3

By Mike McGee

Venezuela

We launched from Grenada and like the last leg were headed a little west of south. Our farthest point east had been over flying Martinique. Again as a flight of two with the C-182 759JK we were doing half as much radio work. One of the things we were concerned about was the weather as we approached a continent again. No longer would we be able to hug the water or go around the clouds piled up over an island. Scattered to broken skies prevailed though for the day's flights. As we approached each of our landings it opened up to few clouds with high temperatures and high humidity.

From Grenada the next piece of land was Peninsula de Paria, about 80 nm. From here we could see Trinidad off in the haze to the east. Just prior to this we had reported in at the Piarco-Maquetia control boundary and switched our brains from Francais to Espanol. Crossing the Gulf of Paria, another 40 nm, we were now back over solid river delta if not solid ground. One of the things I had thought about while we were planning this trip was the density of the Venezuelan forest. If we had gone down in the Caribbean, all we had to do was float for a few hours before someone found us and picked us up. Here over the jungle, if we had a successful landing, the "finding us" part would be a long shot.

On this leg we discovered an airport just inside Venezuela that was using the same frequency we were using for inter-plane communications. We were using 130.55, what we understood was a normal inter-plane frequency. This made for a bit of confusion at first contact. While we were talking with each other between planes someone at the airport started talking back, mostly in Spanish. We soon figured out that Pedernales

Airport used 130.55 and we cut back on our radio chatter until we were out of range.

Our first landing in Venezuela was at Ciudad Guayana, an airport of entry. Here we received a warm welcome from the local aero club. They have their own club house on the airport and had a long table set up with food and drink to replenish our own fuel tanks after we had filled the planes. They had made arrangements for the customs and immigration people to take care of all our paperwork while we were having lunch.

When we taxied from the fuel pumps to the club house the little yellow plane once again got most of the attention. As they were waving the rest of the planes down the line for parking they motioned for us to park up front. We soon had a crowd around us as we unfolded ourselves from the plane. Before we left we had taken a couple dozen pictures with the locals standing

next to the plane including "baby pictures" and interviews with two local television stations. They were not used to seeing this caliber of airplane on the ramp and it was a treat being able to show off a little.

We saddled up and launched for our farthest point south. This time Jim and I departed as a flight of two. If flying formation with a G-182 didn't seem like slow flight, climbing out with one certainly was. We turned right, on heading for Canaima, and followed the Rio Caroni into the Venezuelan interior. The picture of the

river on the chart was not what we were seeing on the ground. A recently built dam had turned the river into a very long and wide lake. After we had been over this for a while we concluded that we should have left our flotation gear on. In a little over an hour we pulled into the pattern at Canaima. The highlands (Tepuis) looming in the background were spectacular. They looked like huge granite islands rising out of a sea of jungle. We rolled down the 6000-foot runway and parked next to our small squadron. Our hosts from "Jungle Rudy's" greeted us with the bus that would take us to our home for the next three days.

We boarded the "tourist carriers" and slowly made our way up the road. We could have walked it much faster as the road was rough enough to bounce the bus

even at a crawl. Half way to Jungle Rudy's we were put on boats that were a dugout canoe modified with seats and outboard motors. They piled all 32 of us into two boats and took us a mile up river to camp, our luggage showed up later.

Stepping off of the boat was like walking out of the

wilds and stumbling onto a little resort in the jungle. It turned out that we weren't going to be roughing it for a few days. We were met with rum punches and surrounded by quaint little cottages complete with a patio lounge where we could order our favorite poison. The grounds were immaculately kept; they had a generator for lights in the evening and cold running water in every room. (We were at 6-1/2 degrees north latitude. Hot running water was not part of the package). We settled in, our luggage showed up and after a chance to explore the camp, dinner was ready.

After dinner we made plans for seeing the local sights over the next two days. Half of us would head for Angel Falls the next day, the other half would go to Sapo Falls, and on the second day we would swap trips.

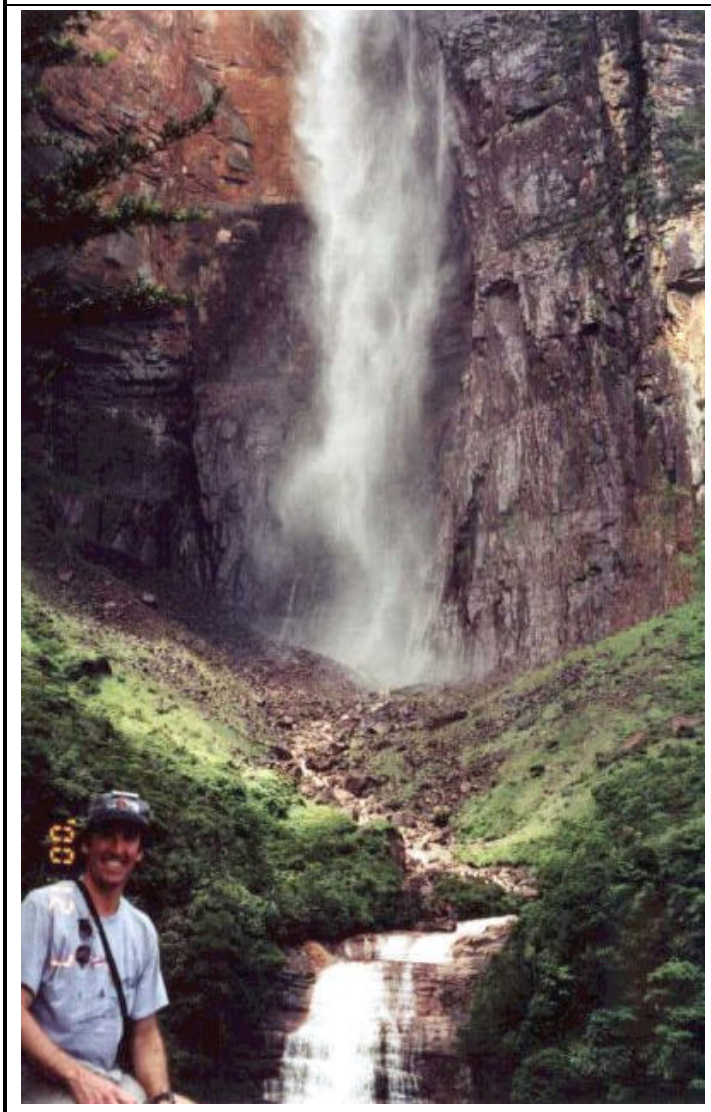
Angel Falls

Up at 4:30 the next day we had to get on the river early in order to make it back by dark. We had 57 miles of riding in the boats up river to get to the trailhead that led us to Angel Falls. It was dark for the first half-hour going up river and the sun rose as we were making a portage around some rapids. We had to get out and walk to make the boats light enough to get over the rough spots

in the river. After a mile walk that helped us wake up we were back in the boat. On the trip the weather would change at a moment's notice. It would be raining on us and we would round a bend in the river and the sun would be out. The riverbanks are mostly jungle, broken occasionally by small clearings with some huts where some of the locals live and a couple of picnic areas for the tourists. After another hour going up stream, we stopped at one of the picnic areas for breakfast. Our hosts had packed a ready to eat meal and soon we were back on the river.

Our boat drivers were something to watch, one in the back running the outboard and one setting on the nose with a paddle to help steer. These boats are about 25 feet long and four feet wide, these guys could make it turn on a dime with a full load of tourists. As we got farther up river the rocks got bigger and the passages got narrower.

Looking up at the Tepuis you could see how the landscape was formed by huge slabs of granite coming off the cliffs and stopping in the riverbeds. The geology of the area is a marvel to look at. It resembles the rim rocks of Central Oregon only on an order of magnitude larger scale. As the river snaked its way through these canyons we saw dozens of waterfalls each hundreds of feet high. It is interesting to contrast the features of the landscape in a region where there is no freezing conditions every year. In the colder latitudes the "rubble" from the cliffs is much smaller due to water freezing in the cracks and breaking it into smaller pieces. I am told that almost a century ago an author named Arthur Conan Doyle visited this region and wrote the novel "The Lost World". I can certainly share his perspective; it looks like the land that time forgot. The features are massive and you almost wouldn't be surprised to see a dinosaur come crashing out of the jungle or a Pterodactyl swoop in from overhead.



After a total of four hours on the river we stopped at the trailhead and hopped off the boat. You could see angel falls in the distance. The clouds were competing for the view and we waited a while to try and get some good pictures. Jim Graham got a few great shots just as the clouds parted and we started heading up the trail through the jungle. We were headed for a viewpoint and wouldn't make it all the way to the base of the falls. This would have necessitated an overnight at the camp at the base of the falls. If I make it back to here someday I will plan on the overnight trip if for no other reason than to swim in the pool at the base of the falls.

After hiking and climbing for a little more than an hour we came out on a small rock ledge where the trees parted and we had a full up view of the tallest waterfall on one of the oldest strata on the planet. We were close enough that you couldn't get the whole thing in the camera frame. Next time (again, next time) I'm upgrading the camera equipment for the trip! It was amazing to lay there on the rocks and watch the water dance as it fell over three thousand feet. Some of the wind currents had sheets of water going back up the huge channel that the falls had carved out over millions of years. Most of the water that came over the top didn't even make it to the bottom. It was turning into mist and evaporating as it fell. This was a micro weather system all to itself.

Soon our guide was rounding us up and we were headed back down. Once again the schedule had to be met and after about 45 minutes descending the trail we were back at the boat. A short trip down river brought us to another picnic area where we would have one of the best meals of the whole trip. While we were hiking the boat pilots had been busy preparing a lunch of fresh spit roasted chicken, tomato and onion salad and fresh fruit that was fit for a king. We ate until we had to stop, then walked around and took more pictures.

Some of the folks that had been on the boat ride up had not made the hike to the viewpoint, but had stayed at the picnic area where we had lunch. It was a good spot to view the falls from a distance and get a good picture. There was actually a clearing for a helicopter land-

ing area about a hundred yards away. It was supposedly an emergency landing spot for the sight seeing flights. We heard stories of pilots who are the local search and rescue gang. They've been on a lot of search missions but rarely will they find anyone who has penetrated the jungle canopy. The falls are named for a pilot, Jimmy Angel, who in 1937 landed his Norseman on the top of Auyan Tepui, the source of Angel Falls. He was an explorer/dare devil who was looking for more of the spectacular falls that are typical of the region and as the story goes, on a dare he landed. The plane unfortunately got stuck in the mud and didn't end up in a condition to take off again. It took him eleven days to get back to civilization. There were pictures of the plane with some local explorers who found it in a scrapbook back at Jungle Rudy's. Like every other plane that has gone down in the jungle, it's still there.

With our tanks full we headed back down the river. The scenery never got old as we followed the canyon winding its way through the jungle. Interestingly there were very few birds. This region has very few fruit bearing trees so there is little food for birds here. We did see some amazing butterflies that were about the size of a small plate and neon blue in color. As they flew through the trees you would see this flashing neon blue along the banks of the river.

Halfway down our guides stopped so we could take a dip in a waterfall that drops into the river. It is called the Pool of Happiness by the locals and is one of those places you can crawl into the falls itself and be pounded by the water while you're swimming. We then continued our trip down the river and made it back to camp about an hour before sundown.

The next day we went on the Sapo Falls trip, which was a much less strenuous adventure. After another boat ride we were hiking again. This time our trek took us on a trail UNDER the falls where we got quite soaked. Down to a secluded beach where we went swimming again before heading back to camp. After lunch we took another ride into Canaima where we did our requisite souvenir shopping at a couple of local shops

Our last night at Jungle Rudy's we once again had our pre flight briefing and then sat down to another great meal. We all traded stories about the hikes we had taken over the last two days and planned our flights over the Tepuis on our way back north. We were at the far end of our route and it seemed like we were going to be leaving too soon.

The next morning we packed up and after a final meal got in the boats and headed back to the Canaima airport. When we took off some of us headed for the Tepuis for one last look at Angel Falls. I was hoping fly formation with someone to get a shot of the RV-4 against the falls but we had departed without getting it in the plan. As it was we were going to be pressed for time to get all the way to Martinique before dark since night VFR is not allowed in the Caribbean. The leg to Ciudad Guayana was quick and once again the aero club were great hosts greeting us with lunch and assistance from the customs and immigration people.

Next episode, North to Martinique.

...Mike

Tips From The Toolmeister

Engine Components NW

I'd like to remind everyone what a great resource ECN is. They are an engine parts and machine shop for rebuilding a/c engines. ECN was nice enough to host a meeting a year or so ago at Troutdale airport. We had a complete tour of all the shop, with a few demo's, one on balancing components. They are a great resource for engine parts and pieces. ECN will have all the components necessary to build your own engine (minus accessories) in the very near future. You can purchase all parts and assemble them yourself around 10 to 11,000 If you have the tool and know how this would be a great deal. I'll keep everyone posted when I hear more.

Restaurant Tip

Last week I went to the coast and of course had to go to the airport , even though we drove (3 people won't fit in an RV) Randall had mentioned the new restaurant at Astoria in a meeting so I checked it out. WOW!!!! super nice people, Dave and Laura Sharp are the owner operators. A few samples from the menu, Country biscuits w gravy $2.50, 2 eggs any style $1.00, clam chowder in a bread bowl $3.00. I spoke with Dave about a group of us flying in this summer for an early dinner and he's more than willing to set up a buffet, steak dinner or barbecue, basically whatever a group would like to have. Price of coarse dependent on what we order. Roughly he thought a New York steak, baked potato, and salad around $12.50 dependent on steak prices. Sounds like fun to me.

...Brent Ohlgren

Warranties

By Randall Henderson

I never used to pay much attention to warranties. Usually when I buy a product, the choice comes down to the one that has the features I want. But after the failure of some expensive items in my RV-6 instrument panel within the first 100 hours in service, I can tell you I'm going to be looking a lot harder at the warranty policies on any future purchases.

I've experienced failures in both new and used/overhauled items. The warranties for these items ranged from 90 days from date of purchase on a used/overhauled directional gyro, to 1 year from date of purchase for a new Mitchell tachometer. These problems have opened my eyes to the value of a good warranty, not to mention the value of new versus used/overhauled.

The length of the warranty is one consideration, but for us homebuilders, the warranty activation start date can be even more important. Many manufacturers' warranty periods start at the time of retail purchase. Your new Garmin radio may have a full year warranty, but that won't do you much good when it can be a year or more between the time of purchase/installation and the time the thing first gets used in flight. Fortunately, some manufacturers recognize this and start their warranties at the time first placed in service. Unfortunately, many still do not.

It is important to recognize that some items have shelf life issues. Gyro bearings can lose their lubrication and "go flat" if not spun up within a certain length of time. Strobes have capacitors that can fail if not energized periodically. Engines and constant speed propellers have limits based on lubrication. Even so, the more reputable manufacturers have "time placed in service" warranty starting periods that are predicated on the unit being placed in service within the recommended shelf-life.

I was well aware of the shelf-life limitations, and was careful to follow the manufacturer's recommendations these cases. Even so, I suffered the failure of several items. As I stated above, the failures included a directional gyro and tachometer. Mid-Continent Instruments, where the (overhauled) DG came from, was no help at all with their "90 days from date of purchase" warranty, and I had to eat that and buy a new gyro after less than 100 hours in service on the O/H one. Mitchell, who made my tach, was better about it. The thing broke twice and I did have to deal with shipping costs and downtime, but at least they made good on it even though the unit was out of warranty (more than 1 year from date of purchase).

I'm currently in the market for a second radio, so with my newfound warranty sensitivity, I checked on three avionics manufacturers' warranty policies — Garmin, UPS Aviation Technologies, and Bendix-King. Of the three, UPS comes out on top. They not only have the longest warranty period (28 months), they also have a "time placed in service" activation. Bendix-King is second, with a 2 year warranty. This starts on purchase date, but if you get it from Vans you can take delivery of trays and wiring and hold off on the actual unit (and warranty activation) until closer to the first flight. Garmin is the worst, with a 1 year warranty, starting from the time of purchase. This fact alone has made me rethink putting a Garmin in my panel.

In speaking to all of these manufacturers, I told them that my decision on future purchases will be weighted heavily on length of warranty and "time

placed in service" starting point. I encourage others to do the same. They need to realize that a large and growing part of their business comes from homebulders, and the ones that recognize this in their warranty policy will be the most likely to get our business. If they try to give you some line about how their warranty is "industry standard" (like Mid-Continent did to me), you can tell them that Electronics International, Sigma-Tek, RC-Allen, Matronics, UPS, Whelen, Lycoming, and Hartzell all have "time placed into service" starting points (albeit some with necessary shelf-life clauses). If enough of us do this, maybe the folks at places like Mid-Continent and Garmin will get the message and change their policies to more accurately effect the needs of their customer base.

As you might expect, I've learned several lessons from the above experience. the first is (of course), take the warranty into account when deciding which brand to buy, especially if used or overhauled. Second, there's value in buying new, beyond just the shiny case. The warranty will probably be better, and the support from the factory will likely be much better as well. Third, stick with reputable, domestic brand names. It may cost more up front, but will probably cost less and cause fewer headaches in the long run.

In case anyone is interested, here's a list of the failed items.

1. Directional Gyro, Sigma-Tek, overhauled by Mid-Continent Instruments. This is the one that cost me -- the 90 day (since purchase) warranty was long gone and Mid-Continent wouldn't budge, so I ate the cost of that ($350) and bought a new one.
2. Turn Coordinator, Chinese Import, new from Vans. Couldn't determine the manufacturer or importer so I was technically out of luck, but I talked Vans into letting me swap with the one in their demo display panel, which works so far.
3. Tachometer, Mitchell, new from Aircraft Spruce. Hour meter failed twice, both times after the warranty period had expired (1 year since date of purchase) but Mitchell made good both times, so they get points for that at least.
4. Transponder, King KT-76A, used/overhauled by Avionics Systems. Was intermittent from the start, and after several trips to the shop over the course of a year, they swapped it with another used one. It was a hassle, but they had a reasonable warranty considering that it was used (6 months), and they honored it.

...Randall

Aviation Risk Sound Bites

By Charles Rice

Is flying safer than the drive to the airport? Are you tempting fate every time you yell 'Clear'? I personally feel safer in a C150 than I do driving Scholl's Ferry toward Twin Oaks with an oncoming traffic closing speed of over 100 mph. A poorly timed sneeze, radio station change, or Firestone ATX could end it all in a blink. Then I wonder if I am suffering from 'It can't happen to me' syndrome, and then I wonder if the ridiculous perceptions of my non-pilot acquaintances really are all that ridiculous.

So a while back I got on the web, and I looked at statistics regarding flying, driving, and a couple other life events, in an attempt to relate the highly publicized incremental risk of flying to the less sensational risks in every day life.

Keep in mind all these stats are talking about the mythical 'average' person. Many traffic accidents are caused by foolish youth doing foolish things. I am all done with that part of my driving career, so my risk is not as high as that of an 18 year old with a few beers in him bombing around with 5 buddies on Saturday at midnight. But, if we always manage our fuel carefully when flying, we have also just zeroed out the chances for the leading cause of engine failure. I also ignored age bias in the comparisons. Probably bike accidents are skewed toward younger kids, and heart failure toward older kids. But, my target is marginally valid sound bites, not an outline for a master's thesis in Public Health. The point is, on an individual by individual basis, statistical generalizations are not applicable. But, as a general rule of thumb, these might be somewhat valid.

The logic behind the comparisons is this; if you are an average person living in the US, you are automatically entered into a lotto for bad things that might befall you in a given year. If you are a pilot as well, you are eligible for a small list of additional possibilities. The crux of the (irrational) argument against flying is 'Why accept this huge incremental risk just for fun?' My response from now on is likely to be, 'You have been brainwashed by the media, and you clearly have no idea how small that incremental risk is.' Then I will start throwing sound bites around like a presidential candidate. And at the end, I'll ask the person when they would like to go flying, to see if my approach worked.

The sources and numbers behind them are in the table, and most should be prefaced with "In a given year..."

- A pilot is 3,300 times more likely to be involved in a traffic accident than in an aviation accident.

- A pilot is 67 times more likely to be killed in a traffic accident than in an aviation accident.
- It is 8 times more likely that a pilot will be killed while a pedestrian than while flying.
- It is 1.2 times more likely that a pilot will be killed while riding a bicycle than while in a plane.
- If you are good friends with 49 other average pilots who all fly 40 hours a year, the entire group could expect one fatal aviation accident every 36.7 years.
- It is 1,175 times more likely that a pilot will die of some type of heart disease than die in an aviation accident.
- It is 875 times more likely that a pilot will die of cancer than die in an aviation accident.
- It is 7.5 times more likely that a pilot will choke to death on a piece of food than be killed in a plane crash.

Assuming a constant rate of accidents (that is, ignoring spikes at New Years, Labor Day, etc):

- More people will be killed in traffic accidents by 11am on January 6 than will be killed all year in general aviation accidents.
- Or, to keep pace with traffic fatalities, a tragedy like the JFK Jr accident would have to occur 38 times every single day. That is, every 37 minutes, every day, all year.
- Or, if every person in a fatal car accident made the evening news, there would be more than 113 such news stories every day.

Here would be where I would editorialize about being such a top-notch safe pilot. But, I feel like I am always one half-baked decision away from feeling really stupid (best case) to being a stat in the table (worst case), and that doesn't drive me to think of myself as a 'safe pilot'. Until I reach 'I-am-a-safe-pilot Nirvana', I hope that my pursuit of trying to become a safe pilot will cause me to be a safer pilot on the way.

All statistics are for 1998, and for the US. Sources were the National Highway Traffic Safety Administration, the National Transportation Safety Board (ntsb.gov) and the Center For Disease Control (cdc.gov)

...Charles

Traffic Accidents	6,335,000
Traffic Fatalities	41,471
Aviation Accidents	1,909
Aviation Fatalities	617
Pedestrian Fatalities	5,220
Bicycle Fatalities	761
Deaths from choking on food	4,660
Deaths from cancer	539,577
Deaths from heart disease	726,974
Deaths per 100k flight hours	1.36

Tech Tips

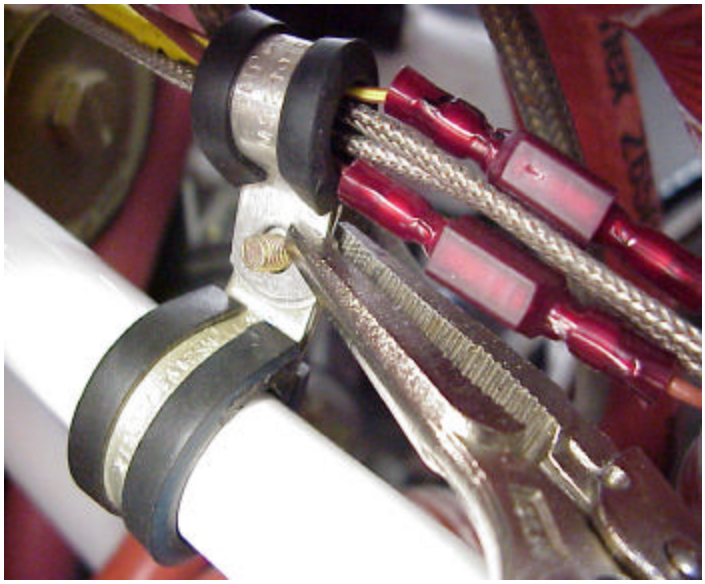
Adel Clamp Installation

By Randy Lervold

In doing all the final wiring and plumbing in my fwf area, I've been installing lots of Adel clamps (aka MS21919 cushioned clamps) lately. Holding these buggers together while you try to put a #8 screw or AN3 bolt through, and then thread the nut on, can be an exercise in futility. I really must give credit for this solution to Randall Henderson, but I'm repeating it here because it's been so darned helpful. The solution? Get yourself a pair of small pointed-nose vice grips and clamp everything together first. This holds it nice and secure while you insert your screws, washers, and nuts at your leisure. You do need to be a bit careful about marring the aluminum clamp body, but you will get the hang of it quickly.

The tool is made by Vice Grip and can be bought anywhere tools are sold. I bought mine at good 'ol Harbor Freight tools, item #1166, $8.99.

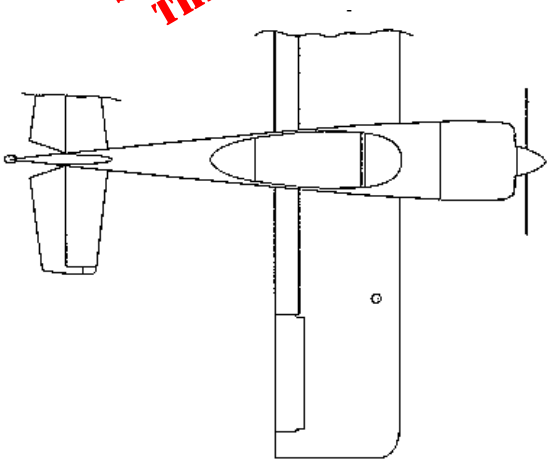
...Randy



Flying Activities

Coordinator: Randall Henderson

SUSPENDED FOR THE WINTER.



EAA Technical Counselors

Listed below are our Chapter 105 Tech Counselors:

Randall Henderson
503-297-5045, randallh@home.com

Dave Lewis, Sr.
503-690-8237

Don Wentz
503-543-2298, jwentz@columbia-center.org

Bill Truax
360-582-0558, goonybrd@olypen.com

EAA Technical counselors wanted! There are more and more new builders these days, and the Technical Counselors we have could use some more help. If you've finished an RV, or hold an A&P rating, or are otherwise qualified under the EAA Technical Counselor guidelines, please consider signing up for the program, and adding your name to the list of EAA Technical Counselors available to the Home Wing and local EAA chapters.

CLASSIFIEDS…

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.

FOR SALE

Engines for sales—Two IO-320-B1A fuel injected 160 hp engines from twin:

- 1,322 SMOH, $9,900
- 455 SMOH, $11,900

Both Dynafocal II. Contact Bill Drake 360-687-1698 or Al Strickfaden 360-687-3119, 3/01

For sale - D Square 3 1/8" Accelerometer -4.5 to +12G reconditioned in 1994 and used in a Cessna 182 for kicks -- it's like the proverbial old lady's car --- hardly used. $175 contact John Warren at 360-263-7848, 3/01

Salvage Sale — Wagabond, damaged in off-field landing. O-320-A2C with 400 hours since new. Prop was turning and was bent, engine was not putting out any power. Don't know the cause of the engine failure. Entire airplane as where is $13,000. Panel is full and all instruments are in place, radio is a Mark 12 . $1k spent on new spring gear and axles included. Recover quite a bit of your investment by parting out the remainder of the project and get a good engine core. Contact Allen Potts Lakeside MT 406-844-3464, 6/01

Home for sale — LaCenter View Air strip. It would be nice to have another RV on the field. Its a 3 Bdrm ranch on 3.1 acres. The 1700' grass strip serves a total of six lots. Asking price is $189,500. It's located 6 miles NE of the town of LaCenter and is noted on the Seattle sectional. John Warren 360-263-7848 for info (resident, not realtor), 3/01

Duckworks Landing Lights - Retro-fittable, light, easy installation. Kits start at $69, discount for Home Wingers. Don Wentz, 503-696-7185

BACK ISSUES are available at $2.00 each including postage for hardcopy. Limited availability, contact newsletter editor. Adobe Acrobat versions free to members.

WANTED

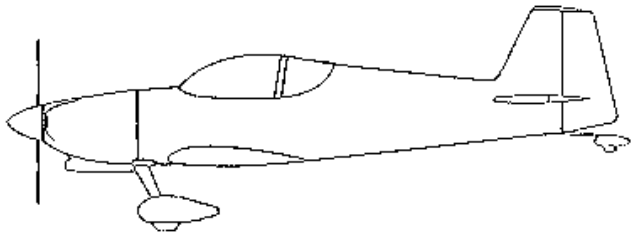
?

Use 'em!

Members are encouraged to take advantage of the classified section. Since it's free why not take a stab at unloading that unused airplane stuff. Besides, it's kind of interesting to look at all the odds 'n ends for sale.

Please note that the date at the end of each ad is the expiration date. They run for three months and then are dropped unless you want them renewed by notifying me.

...Randy



Newsletter Delivery

Our member database continues to hover around the 150 mark (presently 148). Newsletter delivery is split 68 mail, 80 e-mail. I'd like to encourage those still receiving b/w snail mail to switch to e-mail delivery. Some of the benefits include…

- **Faster delivery:** you receive the newsletter 2-3 days ahead of snail mail.
- **Full COLOR:** with the increasing use of photos this adds another dimension you don't want to miss.
- **Storage flexibility:** you can print it on your own printer, or leave it stored electronically, or both.

If you're interested but unsure let me send you a test copy. Just send me an e-mail (randy@rv-8.com) and I'll send you a test copy.

Lastly, I would encourage ALL members to make sure I have your e-mail address even if you don't get your newsletter that way. I occasionally send out e-mail to all on important notices.

Thanks!

...Randy

THE TOOL EXCHANGE

The Home Wing owns a selection of tools for use by its members. The Toolmeister is: **Brent Ohlgren, 503-288-8197, obrento@aracnet.com**. Please observe our Tool Policy:

Home Wing Tool Policy

- Everything goes through Brent — do not give the tool to another member.
- Brent will keep an accurate sign-out sheet for each item so he knows where it is at all times.
- Brent will inspect all tools upon their return. If there is any damage he will ask you to pay for the repair (with the threat of public humiliation if you fail to be a grown-up).

The ability to have use of these expensive tools is a real membership benefit, let's respect the group's assets.

Home Wing Tools
HVLP paint sprayer, turbine type. Includes gun and air turbine.
Hole template for instrument panel.
Wire crimping tool & die
Brake lining rivet set.
Tune-up & annual kit (compression checker, mag timing light, timing dial, mag adjustment tool, plug gapper, high voltage cable tester, and plug vibrator cleaner.
Aircraft scales — allows you to accurately weigh your beast and also determine CG.
Oil filter cutter—custom make by Stan V.

In addition to the Home Wing's tools, certain benevolent members have tools they may be willing to loan. Let the editor know if you have jigs, tools, or shop space to loan, exchange, or otherwise provide — at no cost — or if you are looking for something specific to borrow.

Tools For Loan		
Item	*Owner/lender*	*Phone / e-mail*
Custom cutting wheel mandrel (for cutting your canopy)	Stan VanGrunsven	
Prop tach (calibrate your tach)	Mike McGee	503-534-1219, jmpcrftr@teleport.com
Engine stand	Don Wentz	503-696-7185
Surveyor's transit level (handy way to level wing and fuselage jigs	Bill Kenny	503-590-8011
Back riveting contraption (large, counterweighted bucking bar and suspension system and offset back rivet sets	Bob Neuner	503-771-6361
Lead crucible (for melting lead for elevator counterweights)	Doug Stenger	503-324-6993
Table saw taper jig (for tapering wing spar flange strips)	Carl Weston	503-649-8830
48" pan break located at hanger PLS D-10 at Troutdale if an RV builder needs some metal bent.	Kevin Lane	503-233-1818, n3773@mciworld.com
Aircraft tire bead breaker, for tire removal	Kevin Lane	503-233-1818, n3773@mciworld.com
Special letter drill used to ream rear spar bolts/ straight reamer for rear spar/	Kevin Lane	503-233-1818, n3773@mciworld.com
Lasar T-300 magneto timing tool.	Randy Lervold	360-817-9091, randy@rv-8.com
Precision Steel Fuselage Jig for RV-6/6A	Bill Drake	360-687-1698, rv6134WD@uswest.net,

Home Wing info:

A non-profit volunteer organization dedicated to building and flying Van's RV Series Aircraft

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Home Wing web site ..... www.edt.com/homewing
Webmaster..... Randall Henderson randallh@home.com

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: _____ Home phone: _____
Address: _____ Work phone: _____
City, State, Zip: _____ E-Mail: _____

Project:	**Status:**	**Newsletter**	
RV-3 ❑	Not started ❑	**Distribution:**	**Payment:**
RV-4 ❑	Empennage ❑	E-mail (pdf) ❑	Check ❑
RV-6 ❑	Wings ❑	Mail ❑	Cash ❑
RV-6A ❑	Fuselage ❑		Info change only ❑
RV-8 ❑	Finish kit ❑	**EAA Chapter:** _____	
RV-8A ❑	Flying ❑		
RV-9A ❑			