

HOME WING



**NEWSLETTER OF THE HOME WING OF VAN'S AIR FORCE -
BUILDERS AND FLIERS OF VAN'S RV SERIES AIRCRAFT**

**SEPTEMBER 1998
ISSUE 98.9**

EDITOR'S HANGAR

Fellow Home Wingers, we have had high honor bestowed upon us. Our lowly monthly newsletter has been reviewed by Sam Buchanan, and a positive review it is! For those of you unfamiliar with this name, Sam has created what is arguably the best RV builder's site on the web. Even if you don't have web access I encourage you to go over to someone's house who does and check out his website, especially if you're building an RV-6, which he is. It's a wealth of information and inspiration.

Sam has done several product reviews now of popular RV tools etc., and he recently reviewed our newsletter, no kidding. I've printed his review inside. I'll take credit for putting all the data together, but it is you who provide the substance for making it worthy of most of the comments Sam makes.

This is a perfect segue for my occasional pitch for material. I talk to builders all the time who are a wealth of tips and tricks. Of course I always respond "how about writing a quick article about that?" Most of you don't consider yourself writers and so don't know where to start. Please, don't let that stop you. Sit down any any computer with Microsoft Word and just start writing just like you were talking. I am quite happy to edit and spell check. What I can't do is create all of the unique and valuable ideas that you've accumulated the hard way over the years. Please, write, get it down on paper and send it in!

Since this column sometimes suffices as my own forum to ramble about my own project I'll tell you the latest... I've wimped out on my tanks. Yup, I saw mention on the RV List of a guy in Scappoose who builds tanks and supposedly does a darned good job. Turns out he's also listed in the back of the new Van's Accessory Catalog. His name is Don London and his company is called Aviacomp.

My ProSeal, or should I say polysulphide-based B2 grade sealant, phobia and my desire to keep the project rolling both motivated me to wimp out on doing my tanks. I have to admit I was a little reluctant to relinquish control of any part of my plane to another's hands, but his reputation is apparently sterling. I'll let you know how it turns out, they should be done a week or so before I write the next issue.

See you at the Homecoming!

...Randy Lervold



EVENTS CALENDAR



Meeting coordinator:
Frank Justice, 503-590-3991,
frank_k_justice@ccm.ssd.intel.com.

AUGUST MEETING RECAP

The August Home Wing meeting was held at Pacific Coast Avionics at the Aurora, Oregon airport. Thanks, Dewey, for the hospitality!

We had lots of fly-in members this time due to the great weather as well as the airport location. Van and Scott McDaniels flew the RV-8A down and Ken Scott followed them in his two-tone RV-6. Why two-tone? See the story of his plane and the Impala in the July issue. You do keep your back issues don't you?

New members were introduced and group business was discussed, and Dewey showed us yet another customer RV-6 panel just completed. I believe the tab was \$32k... pretty impressive! Randall was seen however removing parts from the back — I hope the owner doesn't notice. Dewey emphasized that his shop is prepared to assist builders in any part of their panel construction, not just a total turn-key solution. They have complete CAD facilities and can have your panel laser-cut and finished with a number of options.

Perhaps the most notable item on the agenda however was from Van himself. Just the day before the meeting they had completed the static test of an amateur built RV-8 wing. Following was the statement Van reviewed for us and that also appears on their web site:

"On Aug. 12, 1998 an amateur built RV-8 wing structure successfully passed a rigorous static load test. A complete load analysis was developed by an independent, FAA certified, Designated Engineering Representative (DER). The wing was inspected by a Designated Airworthiness Representative (DAR), initially to verify structural compliance with RV-8 construction drawings. Then during and after the testing, for structural deformation.

The test was conducted under the direct supervision of the DER to the standards required of an acrobatic, FAR Part 23 certified aircraft. The structure was tested at condition A and condition D, the two conditions that the DER found to be critical for this aircraft. The wing structure was loaded to, and successfully withstood with no objectionable deformation, simulated flight design limit loads of 6Gs positive. The wing structure was then loaded to 150% of the limit load, under both conditions, and withstood these loads for the required 3 seconds and did not fail. Both the DER and DAR personnel noted that the deformation sustained was minimal.

Van's Aircraft has commissioned a DER for a Flutter Analysis and GVT (Ground Vibration Test). While in-flight flutter testing has been successfully accomplished, and the visual and microscopic lab analysis of the RV-8 (N58RV) airframe wreckage showed no evidence of flutter, all possibilities are being investigated."

...Randy

MONTHLY MEETING:

2nd Thursday of every month at various locations, 7:00 pm.

This month: 9/10/98

The September meeting will be at Randall Henderson's house. Randall is building an RV-6, sliding canopy version, and is currently working on his engine hook-up and instrument panel.

To get there from Portland and points east, take the Sunset Highway (US 26) West, and take the Canyon Road (Hwy 8) exit which is just after the Sylvan overpass. About a block past the first signal light on Canyon Road is Benz Park Drive on the right. Turn right there, then left on Benz Park Court. The address is 7233 SW Benz Park Court.

If coming from Beaverton, take Canyon Road eastbound. Once the car dealerships and other businesses peter out, go about 3/4 mi and start looking for Benz Park Drive on the left. Turn left on Benz Park Drive, then right on Benz Park Court. Address is 7233 SW Benz Park Court.

And if you're coming from Hillsboro or Beaverton on Sunset (eastbound), just take the Sylvan exit, loop around like you're going to go back westbound on Sunset, take the Canyon Road exit, and follow the directions above as if you're coming from Portland.



EAA CHAPTER 105 PANCAKE BREAKFAST:

First Saturday of every month at Twin Oaks Airpark, 8:00 am, \$4.00 (always lots of RVs to look at too!)

This month: 9/5/98

EAA CHAPTER 105 MONTHLY MEETING:

Third Thursday of every month at the EAA 105 hangar/clubhouse, Twin Oaks Airpark, 7:00 pm

This month: 9/17/98

RV Journal Product Review

The Home Wing Newsletter

What is it?: Newsletter of the Home Wing of Van's Air Force/Builders and Fliers of RV Aircraft

Where do you get it?: by subscription:

[Randy Lervold](#), 5228 NW 14th Circle, Camas, WA 98607

What does it cost?: \$10.00/year for more or less monthly issues

Number of pages: eight, photo-illustrated

Cheers: A really cool resource for RV builders and pilots; a steal at ten bucks a year; well written by individuals close to the Van's factory.

Jeers: Only published once a month...

Most RV enthusiasts are familiar with the excellent newsletter published bimonthly by the elves in Van's world headquarters. Included in each issue is news about the latest RV models and technical tidbits and advisories by the factory guys as well as regular builders. However, if a bimonthly fix of RV info leaves you, well, *yearning* for more frequent edification, then the Home Wing Newsletter may be just what your RV-addiction-wracked psyche is craving.

The publication is printed in an 8.5x11 inch format with eight pages more or less crammed with the kind of hardcore RV stuff that only a builder or pilot can truly appreciate. Even though the newsletter is produced on a copy machine, the photos are adequate in quality. [Randy Lervold](#), the current editor, selects info on a wide range of topics to satisfy the newbie builder, the savvy pilot, and those of us in between. Also included are news and event items relevant to those in the upper northwest (well.....with an RV the upper northwest is not *totally* out of reach from Alabama...). The [Home Wing](#) is blessed with many well-known RV icons among its membership, and they frequently contribute articles to the newsletter.

In a recent issue, the following topics were treated: Editorial, Harness Options, Event Calendar, flying report, Classified Ads, and the Tool Exchange. The tool exchange is a really neat feature for the Home Wing members whereby they can checkout seldom-used tools instead of having to purchase them for infrequent use.

The Home Wing Newsletter is a steal at ten measly bucks a year. Where else can you tap into some of the veteran RV builders/pilot's experiences for this price? The rag is well edited, mailed more or less on a regular schedule, and fills an important gap in the info available from Van's and sites such as "The RV Journal". [E-mail Randy](#) if you need more info; he will be happy to tell you how to get a subscription started to the Home Wing Newsletter. If you are a new builder, tell Randy you read about the Newsletter in "The RV Journal" and he will send you a complimentary copy!

Highly Recommended!

Sam Buchanan

WHAT I WOULD/WOULDN'T DO ON MY NEXT RV

Installment #2 (of ?)
by Don Wentz

Tailwheel.

I originally had the non-full swivel tailwheel. It was all that was available at the time, but last summer I flew over to Paul Unrein's wonderful shop/hangar on Parkside Airpark. We took the hacksaw and whacked-off the end of the spring at the top of the curve. We then ground the spring carefully and installed the new tailwheel assembly.

Of course, that would all be easier if you did it by removing the spring and having it turned, or installing the new spring in a new airframe. Downside? The full-swivel tailwheel is about 1.5 lbs heavier than the old style. That's a LOT at the tail. I was able to drill about 12 oz of that out, and think I could get 2-4 more, without weakening it. The Upside is that the RV is now SO much easier to move around. Just push it any way you want. I also installed the tailwheel fairing, and really like the finished look it adds, even though it's taking a beating. Even a little scraped-up, I like the looks of it. My concerns about the tailwheel releasing during crosswind operations were tested during some hairy landings on our Oshkosh trip last year. I definitely recommend using it on new or existing taildragger RVs.

Weight.

Speaking of weight, it seems the more RVs I see, the more stuff you see crammed into them. Some are so heavy, they violate the aerobatic limit with full fuel, before the pilot even climbs in. These pilots will never know what it's like to fly a 'real' RV. As with any airplane, weight is your enemy and it affects the flying characteristics significantly. Don't believe me? Well, if you don't have any time in your RV yet, you probably *don't* believe me, which is natural I guess. The more hours I get the more I can feel subtle differences in my RV. Like, how it's so much harder to get the nose up and hold it for a smooth landing with full fuel and a passenger, versus by myself with half fuel. The landing speed increases noticeably.

Don't think that extra weight will affect your cruise speed? Wrongo! A local RV pilot took a co-pilot on a trip last year, along with way too much baggage. The RV was significantly

heavier than I had ever seen it. Now, I have flown with this RV many times, and he would outclimb me on takeoff (C/S vs Fixed prop) and would always be right there in cruise speeds. This trip he actually had to ask us to slow down and wait for him (which I'm sure he HATED doing).

The real catalyst for this discussion was my first few flights with my new constant speed prop. My RV felt so nose heavy, just pulling the nose up a little for a roll required noticeably more effort. I figure the increased weight of the CS prop and governor, oil line, and extra oil is 70 pounds. My wood prop and extension was <20 pounds, so I added 50 pounds of weight! That's a lot. My original weight was 1,050 pounds, now it is 1,130!!! Yikes (for reference, that is more than the 200hp RV-8A!). So, in addition to 50 pounds of prop, I've gained 30 in other places. In a future installment I'll go down the list of

changes over the last 4 years and see if we can find some of that weight. Ken's RV-6 with a metal prop is over 100 pounds lighter! In overall feel, that is very noticeable.

Bottom line, my RV-6 is now qualifying as a 'fat' one. I don't like that. It's not likely I can do anything about it now, although we'll discuss the



The Duck and Mr.s. Duck in their "fat RV-6" somewhere over Montana.

options/opportunities there as well. Was the prop worth all the extra weight and \$\$? Well, initially I didn't think so. However, as I learn to use it and get used to the 'heavy' feel of the elevator, maybe that will change. I'll explore that more later too.

If you're building an RV, CAREFULLY look at your mission. I mistakenly thought I would be criss-crossing the country, learning IFR, doing lots of that type of flying. Guess what? Cross country is way at the bottom of my list of mission profiles (in an RV 200 miles or less is NOT cross country!). Why? Well, if you're a working stiff with a family, you don't have the time and flexibility to do lots of cross country. More of your flying time is the local, fun flying type that the RV is so well suited to. So, I burdened my RV with lots of pounds and dollars of equipment that I don't use. For the occasional trip to Oshkosh, I don't need a load of IFR gear, nor an IFR rating. My flying hours are hard to come by and I don't want to spend them in training, I want to spend them flying around, doing light aerobatics, breakfast with the crew, etc. I think that flying an RV allows a whole type of flying that we couldn't do in the

factory builds. I recall training, practicing landings, etc., as the most fun I could have in a rented plane, therefore continuing through ratings and transitioning to more complex, cross country suited AC was a natural progression. Now I see the whole flying thing differently - it's just for fun, travel is secondary.

Items I would delete from my next RV.

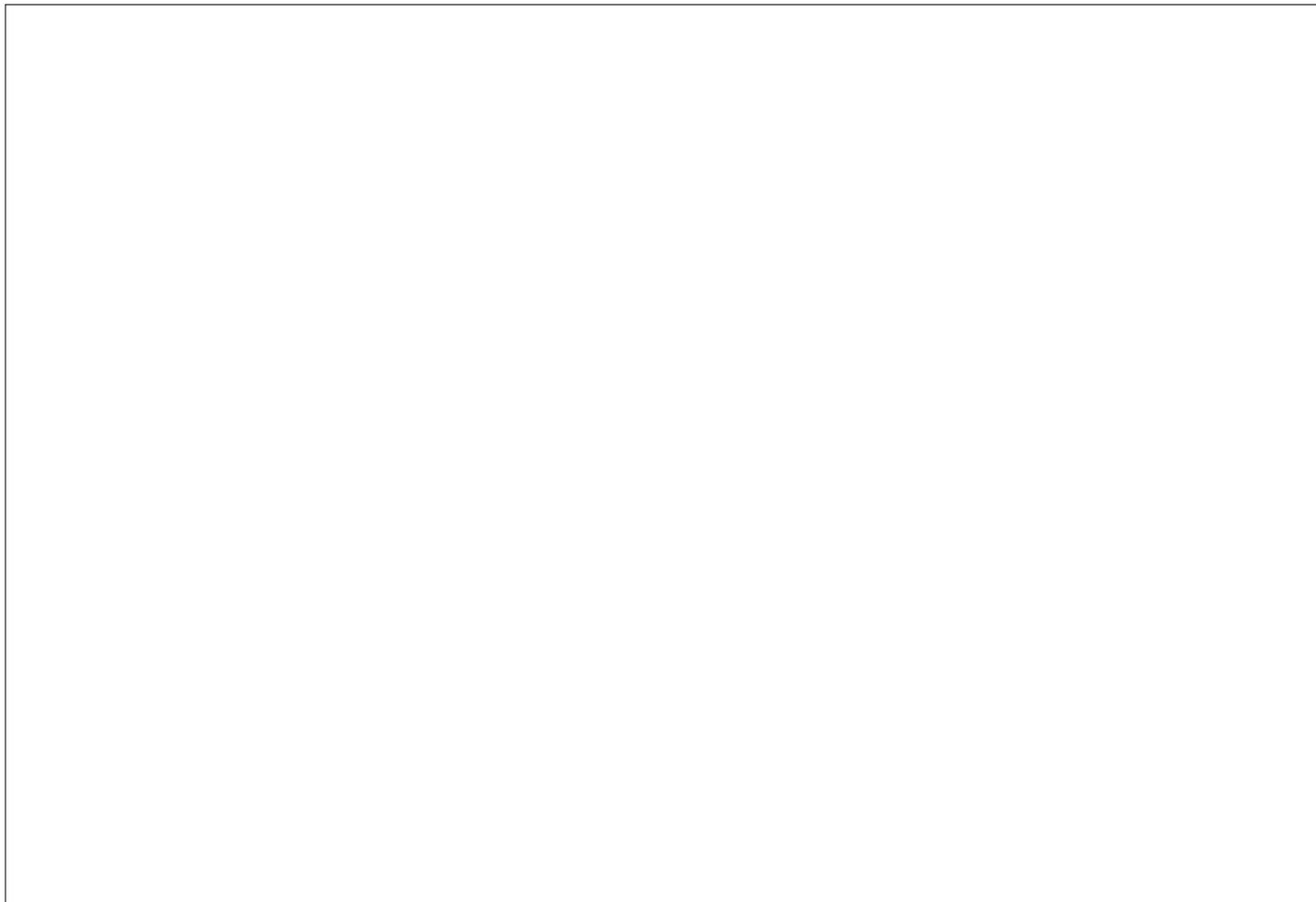
- KX-125 NAV/COM. I paid \$1,695, now they are \$2,000, plus you need that goofy cat whiskers antenna out there. I'd rather have one of the new slim Icom or King COM only radios for \$800-1,000. That and a decent hand-held GPS (mounted and wired) is all I need.
- Vacuum pump, filters, regulator, hoses, direction and attitude gyros. Here is probably 15lbs of weight and easily \$1,000 of stuff that I haven't used in the 530 hrs of flying my RV-6. But all the planes I trained-in had them, so I assumed I needed them in my RV.
- Paint - I would consider not using a clear-coat paint. Clear coat can be thick and heavy, not to mention expensive. I would also be much more careful about WHAT I painted

inside. All of the panels that are covered by carpet, insulation, sound-deadening (talk about weight!), etc, need primer only, not a thick coat of colored paint.

That is just a quick list of some large items. We'll dig deeper later.

So, very carefully, honestly determine what you plan to do with your RV. The crew at Van's fly all over the country in basic VFR equipped airplanes. For many of us, that's all that will be needed. You can save weight and dollars and building time. For many others, the 'sport' side of the RV will not be primary, and loading it up with avionics and IFR equipment may make sense. That is *certainly* a valid way to go about it, as long as you understand the tradeoffs up front (you can't have both). Otherwise, you may be like me wishing you had saved the weight and \$\$ up front. Just something to think about.

...*The Duck*



LORAN LIVES!

For all of you with a perfectly functioning Loran in your panels, fear not. The Department of Transportation has now announced that it has reversed its decision to pull the plug on loran in the year 2000 and will keep the system alive until 2008.

There just happens to be an ad for a perfectly good Narco loran in the classifieds, check it out. (I know this a terribly self-serving announcement, it's mine, but it's a really good deal for someone!)

...Randy

BUILDER'S TIPS

LYCOMING "LONG TERM STORAGE"

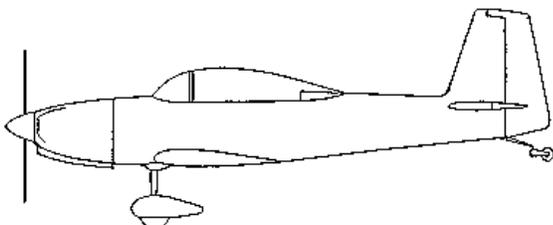
by *Randall Henderson*

If you order an engine "drop-shipped" directly from Lycoming instead of from Van's stock, and you expect to put it on your plane soon, you can save yourself \$200 by NOT specifying the "long term storage" option. I ordered mine with this option because I thought it meant I'd get the dessicant plugs and preservative oil. Turns out the dessicant plugs are not included in any case and the preservative oil is in there either way. The option is mainly just for a vacum sealed plastic bag around the engine and expando-foam in the crate, which I promptly cut open and threw away when I got it since I was ready to put it on the plane right away. Dessicant plugs can be got from ACS for \$2.50 ea.

I don't blame Vans for this (although I think it would be nice if they'd add an explanation of what the option is in the catalog). I just made a wrong assumption about what long-term storage was, and it cost me \$200. Hopefully this information will save someone else from making the same mistake.

Note that ALL engines ordered from Van's stock DO have this option since they can sit on the shelf a while if they go there first. So if you order from stock you should expect to pay this in any case (says so in the catalog).

Randall Henderson, RV-6 (engine/finish)
<http://www.edt.com/homewing>
randall@edt.com



CRANKSHAFT PLUGS

by *Dan Benua*

Builders mounting a constant speed propeller on one of Van's new engines, or any engine that was previously set up for a fixed pitch prop, will find that they need to remove a plug from the end of the crankshaft. Removing the plug allows oil from the governor to flow into the prop hub.

My first thought was to just puncture the plug with a sharp punch, screw in a sheetmetal screw, and yank it out with pliers. I thought that punching the plug would prevent metal chips from getting inside my crankshaft.

No way! The plug is at least .063 thick and made of pretty good steel. Also, the idea of beating on the end of the crank with a very large hammer was very un-appealing. You really want to make sure it pulls out straight and that you don't bang up the end of the crank trying to lever it out.

I ended up drilling a 5/16" hole in the center and tapping it for a 3/8" bolt. If you are careful, nearly all the drill chips end up on the outside of the plug. Next I cut and drilled a 3" square of 1/2" plywood, put a 3/8" bolt through it and threaded it into the tapped hole in the plug. Turning the bolt with a wrench easily pulled the plug to the end of the crank where it could be popped out by pulling the edges of the plywood.

A fair amount of preservative oil burped out of the crank when the plug came out, so be ready to catch it or you'll have a puddle on the floor like I did! Any chips from the drilling and tapping that ended up inside the plug should be washed out when this happens.

So you ask, why did I remove the crank plug now? I'm about to mount the propeller, and it is possible that I might not remove it again. If I do, I can tape over the crank end to protect it. I just thought it would be a shame to have to remove the prop again just to take that plug out.

Dan Benua, RV-6A

RV HOMECOMING

Reminder!

Don't forget, the annual RV Homecoming Fly-In is scheduled for the Labor Day weekend again this year—Saturday Sept. 5th thru Monday Sept. 7th. An informal agenda is as follows:

- Arrivals: All day Saturday.
- Shop Tours: Saturday
- Evening Buffet: Saturday, 5 PM.
- Breakfast/lunch fly-outs: Sunday.
- Banquet: Sunday, 6PM.
- Hangar Flying, Swapping BS: Anytime.

Full details were published last months and are available on the Van's web site.

TOOLAHOLIC

TORQUE WRENCHES

Here's a tool that isn't on Van's "required tools" list, but really ought to be in every RV builder's tool kit. It is true that for most of the airframe all you're torquing are those 3/16" airframe bolts, but you'd be surprised how little torque that 25 in-lbs is that is specified for them. If you don't use a torque wrench to at least get a feel for it, it's likely you are over-torquing them. And once you get into the firewall forward stuff, well, do you really want to take a chance that you under-or over-torqued some critical component, like the case bolts, propeller, or engine mount? I don't.

What you want for this type of airframe work is something that reads in inch-pounds, and starts pretty low (those AN-3 bolts don't need much y'know). The one I got has a 25-250 in-lb range, enough to cover most anything you're going to torque on your RV.

For anyone who hasn't looked into torque wrenches, there are basically two types -- ratcheting or "micrometer" type, and internal or external flex, or "pointer" type. The flex wrenches utilize a thin rod attached at the "business" end of the wrench that is free and tapered to a point at the opposite end, and the torque is measured by the needle deflection against a dial at the pointer end.

The pointer type is less expensive but also generally more accurate, due to the simplicity of their design. The needle just measures the amount of flex of the handle, and this is pretty easy to calibrate, so if you get a decent quality one, it's hard to go wrong.

Micrometer, or "click" type wrenches on the other hand are generally less accurate, and I have read some reports that say that they are at best +- 3%, and at worst, up to 50% off! Even so, the mic wrench is a whole lot more convenient. First off, you don't have that big scale getting in the way. Then there's the ratcheting feature, which makes things a lot easier since you can use it to run down the nut just like a regular socket wrench and not have to stop and switch to the torque wrench to do the final torquing.

I looked carefully at the various types and finally settled on a nice SK ratcheting type wrench from Lucille's Tools in Hillsboro. You can't really go wrong with SK; they are the "choice of the experts" for auto mechanics, and after looking at the \$25 "brand X" offerings at auto parts stores, as well as the ACE brand at Falk Hardware, I decided I wasn't about to trust my expensive hardware, not to mention my own rear end, to one of those things. (most of the offerings at the auto parts stores don't have the correct range anyway.)

The wrench I got is part number 74026, \$77 from Lucille's Tools in Hillsboro (648-1762, 517 S 1st Ave, Hillsboro, OR). Avery has a similar torque wrench made by ATD for \$75. I don't know anything about that one but if Avery sells it you can be pretty confident that it's a good quality tool.

While at Lucille's I also picked up a cheapo set of "crows feet" for 10 bucks (they even have "Taiwan" stamped on each piece, in lieu of a brand!). This is just a set of short end wrench

attachments for a 3/8" drive, that are made to be used with a ratchet or torque wrench. I haven't used these much but for \$10 they're nice to have around for those times when you can't use a socket but you want to measure the torque. The geometry of the thing will throw off the torque measurement, but it at least gives you a ballpark, which is better than you would have otherwise. If you wanted to get more fancy they also have a very nice high-quality set, but at over \$100 it's probably more than most of us need to spend on this kind of tool.

And with all this talk about torque, this is probably a good time to re-print the torque specs for AN bolts/fiber lock nuts. Here it is, from AC43.13-1A "Acceptable Methods, Techniques and Practices - Aircraft Inspection, Repair and Alteration"

AN bolt, AN365 nut (the usual RV combination)

#10 (AN3) 20-25 in.-lbs.
1/4 (AN4) 50-70 in.-lbs.

AN bolt, AN364 thin locknut

#10 (AN3) 12-15 in.-lbs.
1/4 (AN4) 30-40 in.-lbs.

If you use a high strength bolt (such as NAS1300 series) with AN365 locknut

#10 (AN3) 25-30 in.-lbs.
1/4 (AN4) 80-100 in.-lbs.

The all metal locknuts are usually rated the same as the AN365 fiber locknut.

Notes --

1. Torque for clean, dry threads - no lubrication.
2. You can use the manufacturer's recommendations (if you can find them!), measure the prevailing torque from the fiber locking ring, and add this torque to the recommended torque... OR ... you can use the figures from the table (quoted above) and just use them as a final torque.
3. Apply a smooth, even pull, if any jerking motion occurs, back off and re-torque.
4. Fiber lock nuts can be re-used any number of times, as long as the nut cannot be turned by finger pressure.
5. Do not use fiber locking nuts on bolts with a drilled cotter pin holes in sizes less than 5/16. At 5/16 and above, make sure no burrs exist around the drilled hole.
6. Self-locking nut/bolt combinations with NO cotter pin ARE OK for control systems as long as they clamp on an inner race of a bearing, and the bolt itself is not used as a pivot. This is the general RV control system arrangement, but there are exceptions.

...Randall Henderson

HOME WING**CLASSIFIEDS.....**

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

FOR SALE

RV6/6A Empennage - Completed, excellent workmanship. Buld by Grand Champion winner. Primed & ready to install, \$1,000 o.b.o After 6:30 pm PST, John Hsu 541-752-4475 7/98

RV-8 Fuselage Jig - \$100, call Von Alexander at 503-362-3177, 10/98

RV-8 Fuselage Jig - Built to factory specs. \$95, Richard Wood 503-640-9453, 10/98

Narco 841 Digital ADF - Tellow-tagged with warantee, antenna and all the wiring. Call Larry Dennis 503-655-9236, 10/98

Compressor - 3HP, 110V, 90PSI, belt drive with 20 gallon tank. Excellent condition, \$150. Dan Benua, 504-621-3323, 10/98

Misc Items - New baffle kit for an RV-6 O-320 still in Van's package \$140., New 1" Vacuum gage \$40., Used turn key ignition/start switch \$20., Used 3 1/8" United V/S gage 2000' \$65., Used 2 1/4" B&D RPM gage \$60. Plus shipping or come to the Saturday mornings breakfast at the Albany Airport Resturant. Denny (541)259-4500 harje@proaxis.com, 10/98

Wing tip lights - A pair of Three in one wing tip lites. Nav, Tail and Strobe, new.cost me \$350. Sell for \$250. for the pair. Denny harje@proaxis.com or (541)259-4500, 10/98

From the Minnesota Wing nltr:

Complete Firewall fwd off of Arrow. Includes FI IO-360 180hp and 76" Hartzell prop. Engine was removed from Arrow in 90, prop is 86hrs since overhaul but hasn't run since 92. Engine is 5400 tt, 2nd major was at 3900hrs, chrome cyls. Includes Bendix injector, 2 sumps, high pressure fuel pump, oil cooler/filter, Vacuum pump, Governor, etc. \$11,200 will deliver both. Chuck Holcombe, Minn, 612-652-2023. Chuck's health is not good, please don't call him unless you are seriously interested. I have talked to him, give me a call if you want. 696-7185 days.

IO-360-C1EG 200hp. 25 hrs SMOH, all acc. \$12,000. Warren Brecheisen, IA - 319-277-2118.

Hangar Sale! -

- New O-320 chrome wide deck cylinder assembly w/valves, \$500,
- Peltor headsets model AV7004, little use, \$150 ea.
- Magellan Skystar GPS, little use, \$250
- New throttle mixture bracket p/n VA149, \$7
- New aux elec. fuel pump p/n 40108, \$20
- RV-4 55" throttle cable p/n CT184-55, w/clevis fitting, \$25
- Slick 4250R mag, low time, \$125, drive gear \$50

- RV-6 Lauritsen canopy cover, \$100
 - Bendix mag p/n 10-163045-3 w/drive gear, good condition, \$150
 - New master relay p/n EX24115, \$10
 - Lycoming gear drive prestolite starter, 9 tooth pinion, offer.
 - RV-4 throttle quadrant p/n 428-1, 2 le3ver, \$30
- Butch Walters, 360-636-2483, 9/98

Van's Air force Apparel - Home Wing member discount, see at web site <http://www.edt.com/homewing/emblem.html>

- Limited edition VAF hats, gray crown with black bill.
- Four color 100% embroidered jacket patches.
- Van's Air Force jackets, MA-1 style, black w/red liner, VAF patches on shoulder and breast, pencil pocket, optional name patch.

Purchase all from Randall Henderson, 503-297-5045 or catch him at a meeting.

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

RV-ATION BOOKSTORE - 54+ books and videos specifically for the RV builder and pilot. Call or write for a FREE catalog; (970) 887-2207, PO Box 270, Tabernash, CO 80478. Or see our web page at www.rvbookstore.com Featured item: 18 YEARS OF THE RV-ATOR is now available

BACK ISSUES are available at \$2.00 each including postage. Limited availability, contact newsletter editor.

WANTED

Lycoming 0-360 - Looking for an O-360 for RV-8 project. Call Von Alexander at 503-362-3177 or e-mail at MAlexan533@aol.com

USE 'EM!

I'd like to encourage all you members 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

THE TOOL EXCHANGE

The Home Wing owns a selection of tools for use by its members. The Toolmeister is Brent Ohlgren, 503-288-8197. Call either Brent or the member who has the tools to arrange use. Please remember to ALWAYS let Brent know where these tools are.

ITEM
HVLP paint sprayer
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

(Whoever has the HVLP sprayer please call Brent, he doesn't know where it is.)

SUBSCRIPTIONS DUE

Look at the date under your address on the cover. THAT IS THE DATE YOUR \$10 IS DUE. Use the form at the back of this newsletter to subscribe or renew. If you are paid up but the date doesn't reflect this please send the editor an e-mail.

Other benevolent members also have tools they may be willing to loan. Let the editor know if you have jigs, tools, shop space, etc. to loan, exchange, or otherwise provide — at NO COST — or if you are looking for something specific to borrow. And whether your item is listed here or not, go ahead and bring it to the meeting.

ITEM	OWNER/LENDER	PHONE / E-MAIL
Custom cutting wheel mandrel (for cutting your canopy)	Stan VanGrunsven	
Prop tach (calibrate your tach)	Butch Walters	360-636-2483
Engine stand	Don Wentz	503-696-7185
Engine hoist	Norm Rainey	360-256-6192
Precision chemical scale (for measuring Pro Seal)	Brent Anderson	503-646-6380
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 jib (for tapering wing spar flange strips)	Carl Weston	503-649-8830



HOME WING NEWSLETTER SUBSCRIPTION/RENEWAL

Please fill out 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, date, payment method, and any other information that has changed. **Use this form for address changes too!**

Name: _____

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Payment (\$10/yr.)

Check

Cash

Info change only

E-mail: _____

Project:

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Empennage

RV-4

Wings

RV6

Fuselage

RV-6A

Finish kit

RV-8

Flying

RV-8A

Comments: _____
