RVator's Log

Newsletter of the Twin Cities RV Builder's Group

December 2013

In this issue…

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Upcoming Events

January 11: - Member Appreciation Lunch with special guest speaker Mike Reid from LikeLink III

Noon at Key Air, Anoka County Airport.

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Minnesota Wing
Van's Air Force

Pres: Doug Weiler, 651-398-1184, dcw@mnwing.org

Sec/Treas: Jim Lenzmeier, 651-633-8488, jimdilenzmeier@gmail.com

Shop Notes

The last few years of my airline career at NWA were about as good as it gets. I had about given up the idea of moving to a captain slot since quality of life was driving my "happiness quotient". Having weekends and holidays off and spending time with the family was becoming more important than chasing the bucks in the left seat of a DC-9. It would have been cool to be the boss, but moving back down to the bottom of the captain's list in MSP didn't hold a lot of interest for me. Being a senior first officer on the Boeing 757 was good duty. It was everyone's favorite airplane (maybe not for passengers but for pilots it was a powerful machine that was just fun to fly). It handled well, relatively easy to land, and had pretty good schedules. Enjoying my precious seniority, I flew a lot of west coast turns (day-trips) and avoided the hotel life. Flying across the western U.S. to cities like LA, San Fran, Portland, and Seattle, traffic was usually light and the scenery spectacular. At the top of my retirement bucket list was to build my RV-7 and someday fly it to California and back.

So this September, realizing that we were not getting any younger (strange how that works), Jean and I decided to make the trip. We had originally planned a big circle to Oregon, down through California, eastward through Arizona and back. But, since only one of us is retired, we had about a week to do this, so we modified the "big" trip and settled for a semi-big trip to northern California, south to the wine country and back.

One of our goals was to visit the Redwood forest north of Eureka, California and see some of the biggest trees in the world. So we picked the Arcata, California airport as our goal. I started doing a little research on this location and found out that Arcata is one of the foggiest airports in the country. It was used in WWII for low visibility landing research. Tracking the weather every morning before our trip, I discover that a 500-foot ceiling is cause for rejoicing. RVRs hovering around 1200 feet seem to be the norm. Hmm… might have to have a plan B but we'll get to that in a minute.

This will be our longest light airplane trip ever. Plus we'll be going over some serious high terrain. In a 757, that doesn't warrant a second thought. But what about our "toy" airplane? First of all, even though we would file IFR for the entire trip, there was no way I was going to flying across the mountains in wind and weather. So… we were planning on good VFR or we'd stay on the ground. Second, I concluded that you just need to fly high out west. It looked like 12,000 and up might be needed quite often. Guess we needed some oxygen for that!

Fortunately, Jim Lenzmeier had his O2 system for sale, which he had only used a couple times. I bought it and installed the bottle right behind the seats. A couple weeks before our intended departure date, I topped the tank, untangled all the tubes, hung the little nose cannula thingy around my neck and headed out for a little altitude test. Climbing out north of New Richmond, I set the autopilot for a 800 fpm right of climb, kept the mixture full rich and throttle wide open to keep the motor cool and set sail for the RV "flight

levels". 22DW motored its way up easy as pie and I leveled off at 16,500. A long line of oxygen molecules were flowing and I tooled around for 10 minutes marveling at the fact that the -7 was trueing out at 157 knots and burning 6 gph. I think this will work!

Our mountain flying experience was pretty limited. We did fly our first RV-4 to Jackson Hole, WY, which turned out to be a non-event (perfect weather does help). I got out an old sectional chart and looked for a route that avoided most of the super high stuff. We decided we'd break the trip west into a day and a half. We thought we'd spend the night in Ogden, Utah, which would be about 6 hours of flying. We planned a stop in Pierre, SD and Casper, WY (about 2 ½ hour legs seems about right… can't get up and stretch very easily). The next day we would cross the Nevada desert to Redding, CA.

RV travel champion Pete Howell loaned us his super-duper personal locator beacon (it's lonely out in the desert). I made up a simple survival and first aid kit plus we planned on taking a couple quarts of water as well.

Departure day dawned clear all the way to Utah. There was only about a 10-knot headwind. How can this we? We launched at sunup and enjoyed a smooth and routine flight to Pierre. This is a good stop. Mustang Aviation is a nice FBO and we refueled and were off again in less than 30 minutes. Motoring across the Badlands, the terrain was slowly beginning to rise. By the time we landed in Casper, it was beginning to warm up and the bumps were minor. The last leg to Ogden was best planed for 12,000 feet. We managed to untangle the oxygen tubes and soon we were getting used to having the nasal cannulas in place. A little uncomfortable at first but not all that bad.

Just one of many amazing pieces of art at the Kemp Jet Center

About 50 miles east of the Wasatch Mountains we started to get hammered in the heat of the thermals. The scattered to broken clouds were well above us so we just had to gut it out. Still only about 10 knots of head wind but it was not much fun. It was about 1 pm local and the Ogden airport was a welcome sight. Time to call it a day.

We planned to stay at Kemp Jet Center, which I just chose at random. This was probably the fanciest FBO I had ever seen. Three monstrous hangars, a beautiful terminal with cool artwork everywhere. We rolled the RV into a huge hangar, which we shared with one other bizjet. Lot's of vacant space. We generally like to get the RV inside when we are traveling. It's worth the peace of mind to have it out of the sun and potential rain. When we landed I noticed a pretty long streak of oil on the belly, which had me worried. Never had any oil leaks before so I took off the top cowl to check things out. I really couldn't find anything major except for some drips coming out of one of the oil cooler fittings. I decided I'd keep a watch on it and live with the streaks until we got home.

Our master plan was to leave at sunrise in the morning to get across the desert before it got hot and rough. The day dawned clear again and very little wind. We launched about 0730 again on an IFR flight plan filed for 12,000. Our rest stop was planned to be Winnemucca, NV, about 2:15 down the way. We had settled in nicely about an hour after takeoff with a 155-knot ground speed and smooth as glass. I was looking at something on my iPad when Jean yelled "Lookout!" I looked up to see something silver 12 o'clock ahead, grabbed the stick to do some sort of evasive maneuver and recognized a small Mylar helium balloon zip under the right wing. Wow.. so what is the chance of hitting a toy balloon at 12,000 feet over the middle of no-where Nevada? Hopefully this would be the last of any excitement for the trip.

We were 30 minutes out of Winnemucca when we flew into the smoke drifting northeast from the Yosemite wildfire, which was the big news of the week. The airport was giving 10 miles visibility, but we couldn't see the ground at all. I decided to ask for the GPS approach landing south so we could at least find the airport. Oddly when we were about 5 miles out, we descended under the smoke and broke out in the clear.

A quick turn at Winnemucca and we were airborne again climbing through the smoke westward to Redding, CA. About 30 more minutes of flight time and we broke out of the smoke into clear and a million conditions. My kind of flying! ATC asked if we could make 14,000 for radar coverage. By now I was convinced 22DW was happy as a clam at high altitude so we dialed in a little higher flow rate on the O2 bottle and motored up another 2000 feet.

Soon the ancient volcanoes of Lassen National Park were in view and we crossed the last ridgeline about 20 miles east of Redding at 14,000. "Cleared for the visual runway 36" came the words from Redding approach. With a field elevation of 150 msl, we were WAY high so I swung far to the south and zigzagged our way down trying not to shock cool the engine. Finally, touchdown in California after 9:45 of flight time and 1345 nm. And we didn't see one TSA agent!

Ever hear of the "Burning Man Art Festival"? Here it is from 14,000' over the Black Rock Desert in western Nevada. 60,000 "artists" expressing themselves in the middle of nowhere!

We stayed a couple days at a nice B&B in Redding and toured around the town. The owner of the B&B said that Redding is second only to Yuma, AZ as the sunniest city in the U.S. And it gets hot. Even in mid September it was 103-105 in the afternoon. As I said, our final destination was Trinidad, CA, about 10 miles north of the Arcata airport. During summer and early fall, the marine layer hangs along the California coast making for some serious fog conditions. Looking at the satellite photos each day, it generally only extends inland about a mile and usually breaks up by noon. So the morning of our departure we drive back to the airport and I check the weather to find a ceiling of 100 feet and 1/8 of a mile. Hmm… KACA has an ILS and LPV GPS approach down to 200 feet and ½ mile, but I had decided to limit myself to a 500-foot ceiling (I know I have all sorts of cool goodies in the -7, but it's still a toy airplane). We hang out until about 2 pm and it is still below ILS minimums. Well, let's just drive. So we secured the airplane with the FBO for 3 more days and hit the road.

Volcanic cinder cone at Lassen National Park

The drive was about 3 hours and even as much as I hate driving, this is probably one of the more spectacular roads in the country. Beautiful mountains and valleys following the Trinity River, famous for white-water rafting and serious trout fishing. Just as we finally got to the coast, the fog was breaking up but all in all, the drive was fun.

We spent 3 days and 2 nights at the Lost Whale Inn, by far the nicest B&B we have stayed in. A beautiful place right on the ocean, great food, whales and sea lions out in the bay, and great conversation with fellow travelers. We spent a day tracking down the largest trees in the world, which are about 20 miles north of the inn. Somewhere in this area is the tallest Redwood on the planet at 376 feet!! The loca-

tion is a secret but the "little" ones you can visit are still pretty impressive at 300 feet plus and 20 feet in diameter!

Two days later, we departed the Lost Whale (in the fog of course) and drove back to Redding. After packing up the RV we departed around noon for the one-hour flight south to Santa Rosa, CA in the heart of the wine country. Still perfect weather, warm and sunny although there were showers off over the mountains to the east. At Santa Rosa, we hangared the bird with Kaiser Aviation, got the car and headed north to Healdsburg, CA, home of a zillion wineries, fancy restaurants and delightful old California hippies with WAY too much money!

After years of flying all over the country and living in hundred of hotels, I hope to never see the inside of a Sheraton or Hilton again. Our B&B outside of Healdsburg was perfect. Owned by a friendly couple that bought the property before the area became trendy, today it is probably worth millions. We spent one afternoon checking out a couple wineries in the Sonoma Valley. Buy a glass of wine, walk down to the river, kick back under a tree and pass the afternoon. Heaven on earth!!

The downside is sooner or later; it's time to head for home. Santa Rosa often has fog in the morning so again we were amazed to drive into the airport before dawn to find it clear. The airplane was fueled and ready (this is a REALLY high class FBO and yet it only cost $20 a night for the hangar!) The original plan was to spend a day at Lake Tahoe (Truckee, CA) but that would depend on the smoke from the Yosemite fire. We filed direct Reno and then to Battle Mountain, NV. If the smoke was gone we'd land in Truckee for another day. We'll wait and see.

I did a careful weight and balance as we had a LOT of stuff on the back (5 bottles of wine didn't help!). Still about an inch forward of the aft CG, but it was pretty pitch sensitive on climb out. Santa Rosa is only 127 feet above sea level and I filed for 13,000 to cross the Sierra Nevada. I dialed in a slow 600 fpm rate of climb, kept full throttle and full rich mixture (a Tom Berge-ism that keeps the engine cool) and we slowly started the long climb. Crossing above the Donner Pass, I kept I-80 in sight off to our left as we flew over some seriously rough terrain. Truckee was engulfed in smoke and we could barely see Lake Tahoe. We decided to press on. Smooth as glass with a quartering tailwind of about 30 kts, I worried about turbulence but the ride was perfect. Once past the Reno airport, I breathed easier… lot's of dirt roads in the desert to land on.

Eastbound across the Sierras at 13,000. A smoky Lake Tahoe to the south.

A quick stop in Battle Mountain and we pressed on for our overnight stop in Logan, UT. The smoke further east was just about gone and we were asked to climb to 15,000 again for radar coverage. 22DW was truing out at 157 knots and burning 6.5 gph. Jean was now a true believer in going high. She hates bumps and so to I.

The last day again dawned clear and we departed at sunup for Hot Springs, SD (home of Larry Vetterman). Got to talk with Larry a bit as we got fuel. He was busy preparing for the Badlands RV fly-in, which was to start the next day. The last leg of the day was direct to Sioux Falls where we planned to visit #2 son Dale and his wife Kendra. Here we encountered the only weather of the trip having to deviate around some showers but a non-event with the XM weather display. A great visit with the kids overnight and then back home in the morning.

All told, we had a great time and we logged over 18 hours of flying time. Other then our minor oil leak, the airplane ran perfect. Yep, the RV is a great traveling machine. The west coast is just a day and a half away. Don't push the weather and winds, have oxygen on

board, take your time and enjoy the capability of these wonderful flying machine. Next summer, we're planning a trip to Maine. Can't wait!!

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MN Wing newsline

-Doug

Not a lot as been going on that I am aware of these past couple months. **Bernie Weiss** does report that his RV-9 just went to the paint shop in Hibbing. It should be all beautiful in time for Christmas.

Tom Berge has worn out the gyros in his -7A. A new Aspen system is on order and should brighten up that panel.

Bob Pittelkow's share of the RV-7A partnership at FCM is still for sale. It sounds like a great way for someone to get into an RV for a very good price. Contact him at rpittelkow@comcast.net.

Electrical Systems Gone Wild

-Tom Berge

Recently, while in the process of installing an autopilot in an RV9A, I had a shocking surprise while using a nibbler to cut a slot into the sub panel. The buzzing pain surging through my hand and arm was a sure sign of the nibbler hitting a live wire and the direct short to ground was rather unpleasant especially since I had trouble letting go of the nibbler. I didn't think 12 volts could hurt, but I'm here to say, yes, it does. I found myself with a headache and an arm that, at least temporarily, was not quite working the way it should be along with an irritation at finding a live circuit on an airplane with the master turned off!

I retrieved my meter and started looking for the offending wire and found it on the master switch. The way this RV was wired is the alternator field power was first brought into a single throw, double pole master switch, and then to the alternator field switch with the presumption being if the master is turned off, the field wire to the alternator goes dead as well. OK, I'll buy into that reasoning. But why was the terminal hot while the master switch was off? To top it off, the terminal was still hot after I shorted it to ground! Tell me, what do you suppose this particular circuit was missing?

I have not had the time to completely decode the electrical system on this RV as of yet, but this much I do know. There is a hot buss that is driving an always hot flap motor, power adapter plug and I presume the alternator field circuit as well as power for an essential buss. I knew there was a hot bus on this RV, but did not know to what extent. What really fries my brain, literally, is the circuit, as far as I can tell, is protected by a 14-16 gauge fuse. Yes, I said 14-16 gauge fuse because without an actual fuse or circuit breaker, upon shorting, the feed wire becomes the fuse and will merrily burn everything in close proximity until the electrical connection is severed or the battery runs out of juice. This type of system fault CANNOT be shut down! Sound like something you want to be flying behind? No? Me neither.

So let's talk a bit about electrical systems. I've seen all sorts of very complex installations set up with main busses, emergency busses, essential busses, and even the occasional City bus. Why? What's the thought process behind having a commercial jet electrical system in our simple little airplanes? I understand if a builder enjoys adding immense complexity, weight and build time to their projects, but what about the rest of you? I'm a big fan of the KISS concept. Keep It Simple Stupid. I have a main buss, period. I have taken great care to make sure my main feed line coming through the firewall is well protected and is not bundled with every other wire coming through the firewall. If I can keep the main feed from chaffing, then I feel the chances of a dead short are very low. After over 3000 hours in two RV's spread over 22 years of flying, so far so good.

The main feed comes to my fuse block power post, and then a smaller gauge wire continues to my circuit breaker switches, which effectively is an extension of the main buss. I do not have an avionics buss, though I sure wish at times I had one. An avionics buss would simply be another fuse block or circuit breaker array with a switch/relay between it and the main power feed making it an extension of the main buss. My next RV will have one if I ever build another. With this system, I have yet to lose my electrical system for any reason. Yes, I've suffered alternator failures, but the battery kept things going until I could get on the ground. I've never had a master contactor fail, though in saying so, perhaps in the not too distant future Murphy will oblige. If my system does fail by shorting, at least I can shut it down by switching off the master.

Electrical system designs should be simple and easy to understand. The most difficult part of the electrical system is doing a neat job of routing the wires to avoid the rat's nest look of most RV's I see. Spend lots of time trying to figure out where and how those ever increasing bundles of wire will be routed.

Make sure the bundles are well supported and tied at closer as opposed to wider intervals to keep the wires from moving around. I like to use Adel clamps, starting out with small clamps and switching out with larger clamps as the bundles grow in size. Use lots of zip ties from the beginning to keep the bundles tight as new wires are added. I would estimate that I used about 1000 zip ties with most being cut off as the wire bundle grew. If a hot wire is required for a clock or power plug, protect the wire at the battery with a breaker or fuse.

We have lots of single point failures in our planes. Think engine. Think pilot. Think control system. You get the picture. For each additional buss you add to your project, there is additional complexity, not only in construction and additional weight, but also in remembering how to operate it. Keeping your system very simple will produce a very robust system. Take the time to do an excellent installation, keeping in mind that failed connections and wire chaffing are probably the highest risk you will face.

If you still don't see the light, here's a quick story. A number of years back a story was relayed to me about a crash involving either a Mustang 2 or a T-18, I forget which, that had a rudder cable chaff through the battery cable insulation which shorted and promptly cut the rudder cable while in flight. The landing for this tail-wheel experimental did not go well. So crimp your connectors well, produce tidy wire bundles and make sure nothing touches the wires that could wear through the insulation. Simple systems fail less often than complex systems. If so much fails at one time that I can no longer fly the airplane, I guess God wants me and I'll go quietly.

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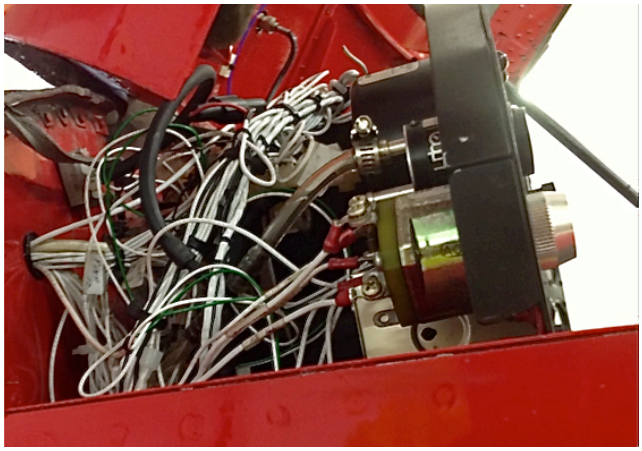
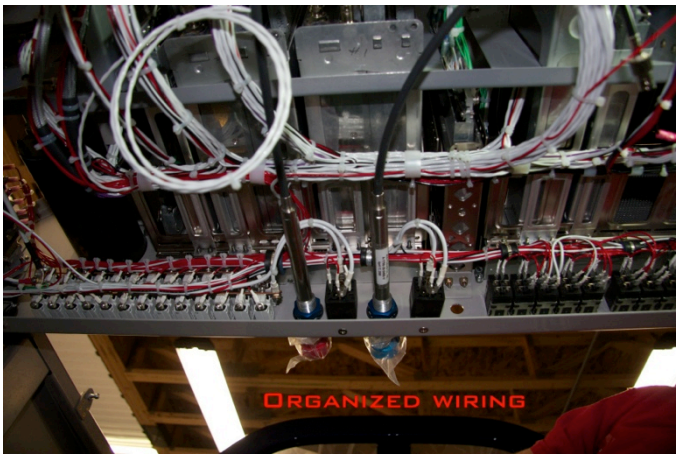


Take a close look. A mature rat's nest!



Some planning, patience, lots of ty-raps and your panel can look like this.

Mogas Confessions

-Pete Howell

Hello, my name is Pete Howell and I admit I burned mogas all summer. Crazy, maybe? - it is not for everyone, but for a little more work, there are hundred of dollars to be saved, and your engine might just be happier, too!

What is "mogas"? For our purposes, mogas is pure premium unleaded gasoline, with NO ethanol added. We are lucky to have it available at many airports and service stations here in Minnesota. This gas is typically labeled as 91 AKI (Anti Knock Index) octane motor fuel. Mogas is formulated to a strict standard, ASTM 4814, and is FAA approved, with many thousands of mogas STCs in use for store-bought airplanes in the US. Mogas is very tightly regulated and is some of the cleanest burning fuel in the world.

Why would anyone want to burn anything other than aviation fuel? Well, the current aviation fuel we use, 100LL is an expensive compromise and actually may be endangered. Despite the name, it has quite a bit of lead (very nasty stuff) in it, and the environmental lobby is working hard to eliminate it, so it may be gone at some point. Additionally, there is only one source for the lead additive in our Avgas, a plant in England, so supply is not guaranteed. Finally, unless you have a fire-breathing IO-550 (Bernie…) your typical low/mid compression Lycoming-style 4 banger really does not need the lead or higher octane! In fact, the lead tends to gunk up the plugs and forms sludge in your oil….

All of the above are good reasons to look into mogas, but the best is one most pilots can really identify with – saving mon-

ey. Here are the results of my "summer of mogas" and as the numbers show, my frugal Mom would approve! Since early spring, I have used all mogas in my right tank and a 50/50 mixture in my left tank (using the left tank for takeoff, climb, and landing). Let's run some numbers:

Hours flown	100	
GPH	6	
100LL Price	$5.40	
Mogas Price	$4.25	
	Fuel Cost	Savings
100LL Cost	$3,240	
50% mogas	$2,895	$345
75 % mogas	$2,723	$518
Mogas cost	$2550	$690

Got your attention now??

That's all great Pete, but how does it work? It works pretty well! Here is my latest speed/economy running on pure mogas (as fast or a touch faster than my 100LL runs) :

152 KTAS, WOT, 22in MP, 2270 RPM, 8400 ft density alt, 6.0 GPH - that's 175 mph or over 29 mpg - better than my car!

Point 1		Vwind	Vtrue
Vg	Track	(kts)	(kts)
155	0	19.3	152.2
171	90	19.0	152.6
147	180	18.5	152.1
134	270	18.8	152.5
	Avg	18.9	152.3
		std dev	0.3

I have observed no difference my in CHTs or EGTs, and the plugs are certainly cleaner when inspected. The biggest difference (and drawback) actually is the smell - and it really does smell.

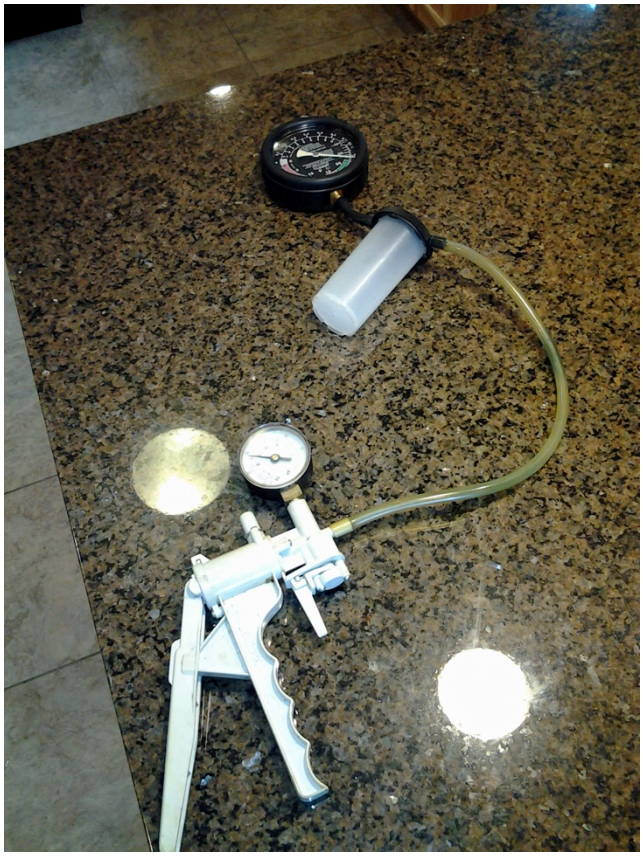
It's not all milk and honey, some caveats on mogas apply – the gas you use MUST be alcohol free. Alcohol causes really bad things - lots of stuff to read about (mechanical and political) on the interwebs related to this, so I won't go into it. The good news, as I mentioned earlier - you can find lots of places that sell the good stuff right here:

www.pure-gas.org or

www.flyunleaded.com

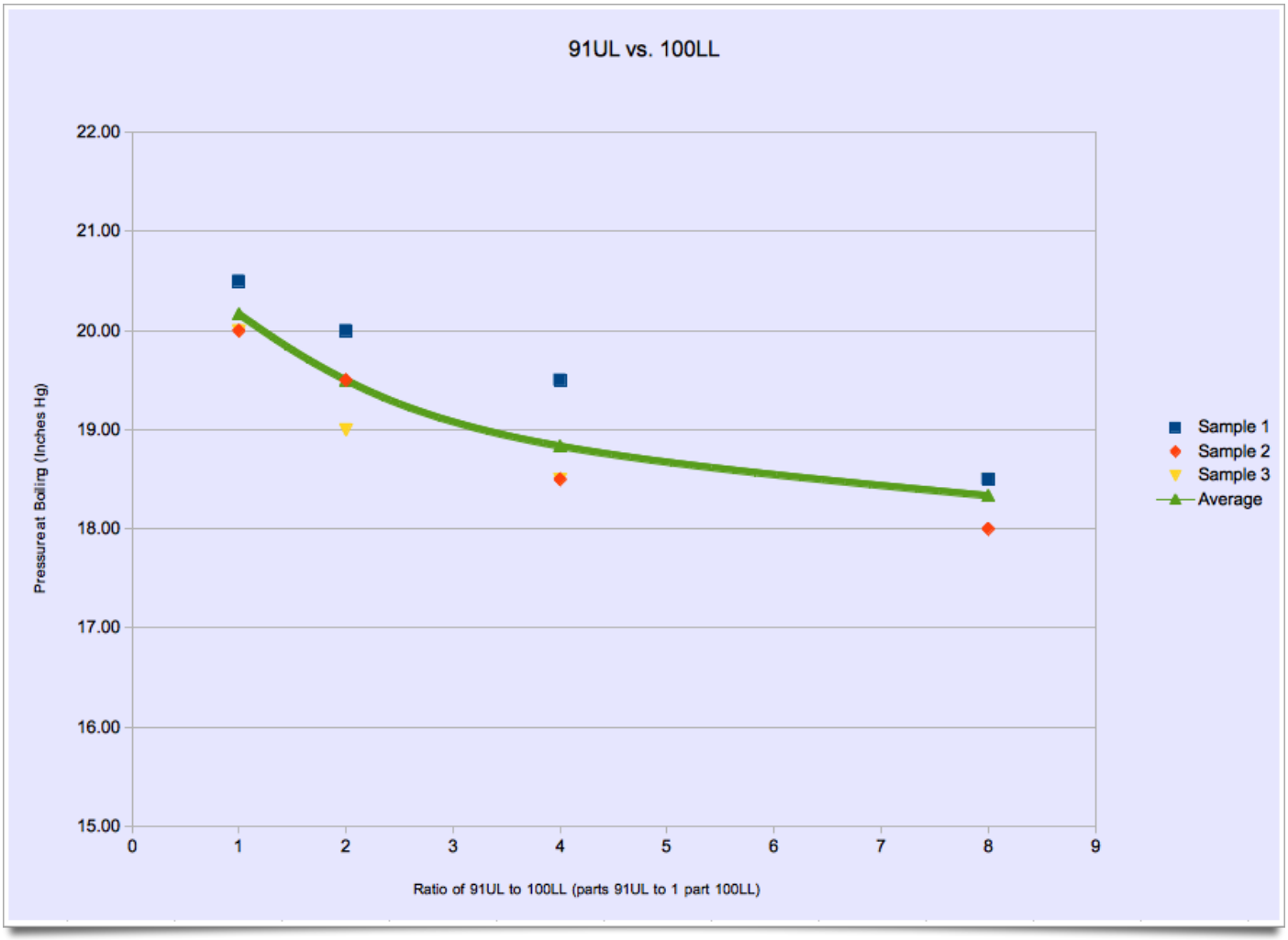
You should test for alcohol just to be sure - this video shows you how:

http://www.595.eaachapter.org/apps/videos/videos/show/16280625



One final consideration with mogas is that in the winter time, they make it more volatile, for easier starting in the cold. This is done by formulating the gas with a higher Reid Vapor Pressure (the "gasoline recipe" is changed). This can be an issue if you use this winter gas on a hot day as it can cause vapor lock. Reid Vapor Pressure has a specific way to be measured, but I cobbled up with a gizmo that will give you a relative rating of 100LL vs. mogas for vapor pressure. Local whiz kid and RV-6 driver Brad Benson even found that you can reduce the vapor pressure of mogas by mixing in some 100LL. This is why I run a mix in my left tank!

http://www.vansairforce.com/community/showthread.php?t=101954



(chart by Brad Benson)

My only issue with vapor lock was on a warm, early spring day with winter formula mogas in the right tank. The plane sat in the warm sun on the ramp at Madison all day, and when I switched over to mogas after climbout, the engine stumbled a bit until I hit the aux pump and switched back to the 100LL/mogas mix - then engine ran just fine. After cruising in cool air for 20 min, I switched to mogas and and she purred like the grumpy overgrown kitten all Lycomings are. The summer gas is much more 100LL-like in vapor pressure - I had mogas in one tank for our trip to Moab, UT this summer where we cruised above 12,500ft and saw 110 deg F temps on the ground - we had no issues.

The easiest way to use mogas is to pull up to the pump at one of the airports here in America's favorite twin cities. As of this writing, you can get a gallon of mogas at KSGS for $4.49 and at KANE for $4.28. That is a savings of 60-75 cents per gallon over 100LL. If you want to do a bit more work, you can find "corn-juice" free premium at gas stations around the metro for 3.69. Add in a 5 cent per gallon coupon and a"5% cash back" gas credit card and you have great airplane gas for..... $3.46 per gallon. However, check to make sure your airport allows bringing fuel in to gas up your plane(many do not). If you do self-fuel, consider a grounding setup and how you will transport fuel. It would also be wise to filter the fuel for water and trash.

As you can probably tell, I am a big fan of mogas. It is not for everyone, and I am not an expert, so do your own research. However, I think you will find a lot to like. Brad Benson flies out of KSGS and has good luck with mogas in his IO-360 powered RV-6 as well.

If you have any questions - I am always game to talk plane at fly.rv9a@gmail.com

A bit about my setup. Andi and I have a decidedly NOT fancy, but very fun RV-9A that has proven to be economical and appliance-like in its utility. It must be boring as well, because Andi is often asleep before we get airborne. It has a 160HP O-320, with a Hartzell, a carb, and a P-Mag/E-Mag combo - 1150 hours and trips all over the USA. We run it LOP and fly it every chance we get!!

Got gas??

Ed. Note: Speaking of gas (either "mo-" or "av-"), just how much do you have? Or do you really know. It is still astonishing how many fuel related accidents there are in GA. I would like to think the RV community is way ahead of the game with just about every RV equipped with a VERY accurate fuel computer. Yet we read about such accidents nearly every day. Bernie Weiss sent me this brief reminder from the FAA. Please consider these words of wisdom and keep plenty of those liquified hydrocarbons in your tanks!!

FAA Safety Team | Safer Skies Through Education

How Much Fuel Do You Have?
Notice Number: NOTC5020

Fuel Starvation and Exhaustion are still causal factors in many General Aviation Accidents. Fortunately, a large selection of fuel totalizing and monitoring options are available to help you prevent these very preventable accidents. But, technology only helps when pilots apply it consistently and correctly. Follow these three simple steps to avoid becoming a fuel accident statistic:

-Whether you're "sticking the tanks" or relying on cutting edge fuel management software, know how much fuel you have on board before each takeoff. If you have a fuel management system on-board, make sure you program it with accurate information before Every Flight.

-Know how much fuel you plan to burn and how much fuel you're burning. If you don't have on-board equipment to answer this question, calculate your fuel burn before each flight and confirm your calculations each time you refuel. Comparing your actual fuel burn to your calculated fuel burn will give you confidence in your fuel planning and you can often uncover fuel leaks or other small problems before they become big ones.

-Finally, make a commitment to join the many pilots that have a personal minimum not to land with less than one hour's fuel in the tanks. This will exceed any regulatory reserve fuel requirements and you'll never be anxious about pushing your fuel.

For more information contact Kevin Clover, FAA AFS-850.
kevin.l.clover@faa.gov

Dues are due!!!

Yep, 2014 is right around the corner, which means it is time to renew your membership to stay in good standing. Attached to the newsletter is our 2014 Membership Application and renewal form. PLEASE, PLEASE, PLEASE print out the form and mail with your check to our faithful treasurer, Jim Lenzemier. Address is on the form.

Minnesota Wing – Van's Air Force
65 15th Ave. SW
New Brighton, MN 55112-3454

First Class

Twin Cities RV Builders "Post-Holiday" luncheon

Saturday, January 11, 2014, noon

Key Air, Anoka County Airport (KANE), Blaine, MN

We've decided to do something a little different to kick off 2014. First, we pushed back our December meeting to January to avoid the holiday rush. Second, we'll gather at Key Air for a member appreciation lunch which means "FREE FOOD" (that word "free" always gets a pilot's attention!!). We will need a pretty firm head count so go to website at www.mnwing.org to register for the event.

Our guest speaker will be Mike Reid, ANE base manager for LifeLink III, one of the largest air medical transportation services in Minnesota. Mike (who is also a RV builder and pilot) will talk about the life of a medivac helicopter pilot and the role LifeLink III plays in providing critical transportation services to Twin Cities' area hospitals. A tour of their helicopters and fixed-wing aircraft is planned as well. You'll find this a fascinating talk and come to appreciate the deciation and expertise of these aviation professionals.

Directions:

From Hwy 65, Central Ave in Blaine, go east on 105th Ave NE, past the Blaine Soccer Complex to Radisson Rd NE. Turn right and go about ½ mile to a right turn on North Airport Rd NE which leads to Key Air. Enter at the main terminal building on the left. Fly-ins are welcome also. Plenty of room on their ramp.

If lost, please call Doug at 651-398-1184 or Key Air at 763-780-2802

Again…. We do need to know how many folks are planning to attend so please register at www.mnwing.org!!

Minnesota Wing Membership Application – 2014

Check one: Renewal ☐ New Member ☐ Date_____

Personal Data:

Name: _____

Address: _____

City, State. Zip: _____

Phone: home _____ work _____

Email: _____

Employer: _____ Occupation _____

Other aircraft owned: _____ Other aircraft built: _____

Project Data:

Interested in RV aircraft but have not yet purchased plans or a kit: [ ]
Purchased plans but have not started construction: [ ]
Aircraft: (RV-3, 4, 6, 6A, 8, 8A, 7, 7A, 9A, 10, 12, 14): _____

Builder number _____ N Number _____

Project start date: _____ Shop location: _____

Project status (tail, wings, fuselage, finishing kit, flying) _____

Most recent component completed: _____

Powerplant: Horsepower: _____ TSMOH _____

Where did you obtain this engine? _____

Propeller: Manufacturer, diam, pitch: _____

Options installed or intended to be installed:

Avionics: _____

Instruments _____

Other options _____

Interior primer: _____ exterior paint: _____

If aircraft is completed, date of first flight: _____

Total time to date: _____

Recommended suppliers:

Avionics _____
Instruments _____
Hardware _____
Tools _____
Paint _____
Upholstery _____
Other _____

Comments/remarks/other project data (ideas for newsletter articles, builder's tips, meetings, guest speakers, RV Forum comments or suggestions)

_____

_____

Would you be interested in hosting a meeting in the future? _____

NOTE: The *RVator's Log* is published quarterly on www.mnwing.org. You will be sent an email notice announcing the posting of each issue, which you can download. If do not have Internet access and prefer a hard copy mailed to you, please indicate:

_____ CHECK HERE IF YOU PREFER THE NEWSLETTER MAILED TO YOU.

DUES: $15 per year

Please return application and a $15 check made out to "Minnesota Wing, Van's Air Force":

Jim Lenzmeier, treasurer
65 15th Ave SW
New Brighton, MN 55112
651-633-8488, email: jimdilenzmeier@gmail.com