



RVator's Log

Newsletter of the Twin Cities RV Builder's Group

March 2007

In this issue...

They Keep on Comin'	...2
The Pre-Inspection	...4
Tip Time	...5
Inspiration	...6

* * * * *

Upcoming Events

March 24, 2007:

Minnesota Wing March Meeting.

Dick Nordquist's hangar at Lino Lakes Airpark.

Pete Howell presents a talk on High Intensity Lights for the RV-9A (or any RV for that matter) and a showing of the award winning film "One Six Right" plus a Q&A session, coffee, juice and other goodies. See back page for details

* * * * *

**Minnesota Wing
Van's Air Force
www.mnwing.org**

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

Sec/Treas: Jim Lenzmeier, 651-633-8488, jlenzmer@msn.com

any more. Gee, he was 24 already. Where had the time gone? After the usual twisting and turning to get squeezed in and buckled up, we crank up and launch into a cold Minnesota sky. Thirty minutes later we meet up with Alex, Bernie, and Ken and gather around the table. Coffee is poured and orders taken.

Shop Notes

-Doug

The Kid in Back

Last Saturday, several of our local RV pilots motored over to Eau Claire for our usual pancakes and yak fest. Al Gore would be aghast at our blatant disregard for global warming as we spew our burnt hydrocarbons over western Wisconsin in this wanton pursuit of the four-dollar pancake. But, unbeknownst to him, we solve many of the world's problems over our breakfast discussions. As yet no one has asked for our solutions, but we can only hope. Number one son Craig was my passenger this time and it was a pleasure to have him along. It has been far too long since we went flying. Having just graduated from UW-River Falls, he is now pretty much out in the world and on own. He was over for dinner the other night and I mentioned we were making our usual EAU trip on Saturday and he said he'd like to come if the rear seat were open. I jumped at the suggestion.



Both of my kids grew up around airplanes and airplane projects. Craig made his first ride as a passenger when he was just a week old. I even put him to work as a toddler sanding the dope on my Champ project (child labor law violation??) Later we bought a Cessna 180 as our family airplane he and younger son Dale spent many an hour tucked into their car seats in the back. They were dragged to airshows and fly-ins plus many family trips to Michigan to visit relatives. I gave Craig his first "official" flying lesson when he was seven and dutifully bought him a logbook and recorded each flight. We had a Citabria for several years and he accumulated about 40 hours of dual in that airplane until he soloed the day after he turned 16.

But the flying bug had not bit as hard as I might have hoped. He flew a few hours of solo time and then drifted away to other interests. Our flights together became very few and far between. In fact I think it had been well over a year since we had gone flying. Of late, he had vaguely mentioned that maybe someday he might like to start lessons again someday. Maybe the flying bug was just lying dormant. Maybe a run to Eau Claire with the rest of the RV guys might spark that interest again.

Craig had made a couple of these trips before but he was always "the kid in the backseat." As we squeezed into the RV, it began to dawn on me that the "kid-in-back" was not quite the kid

As the conversation ramps up, I think for a minute of my circle of friends. Neighbors, co-workers, relatives, church friends. All from different backgrounds with a wide diversity of interests. Every time we get together, I marvel at this multiplicity of RV friends. Alex has hundreds of hours on his RV-6A and has flown all over the country. He relates his latest business trip to Israel and his work on exotic medical gizmos that will probably keep me alive in my old age. Bernie has a -7A in his garage and is currently "stuck" flying his av-gas thirsty Bonanza to our gatherings. He laments some of his personnel issues at the cable TV channel he manages out in LA and wishes he had more time to work on the RV project. Ken has just flown RV #2 (an RV-4) and is pretty mum about the top-secret military project he is working on at a secret base in Nevada (I think it has something to do with interrogating aliens with long arms and oversize heads). Craig is quietly taking in all this "adult" conversation so far removed from his last 4 years living the life of a college student and occasional ski bum (I mean ski enthusiast!) He probably thinks all my RV buddies are a bunch of boring old codgers.

We've blown most of the morning so it's time to head home. We pay our bills and walk out to our cold-soaked RVs sitting on the ramp. Craig and I follow Alex taxiing out to the active. He takes off ahead of us, holding it down so he can pull up into a breathtaking climb and show the new tower controllers just how an RV performs. It's hard to resist so I do the same (of course never really pulling up all that steep, but we still peak the VSI at 3000 fpm). I let Craig fly back and he banks left and right enjoying the superb handling of the RV-4. It's a little more sporty than the Citabria but his stick and rudder skills are still there. As we enter the pattern at Lake Elmo, he says when he gets settled down someday, maybe he would like to start lessons again. "And, oh Dad. By the way, you have some really interesting friends." My RV grin is ear-to-ear!

They Just Keep on Comin'!!

No doubt you are well aware that there are now over 5000 RVs flying all over the world. I used to think that RVs were unusual little airplanes, but they are beginning to get as common as Fords (well almost!). We welcome these three brand new RVs to our ranks of completed aircraft.

Ken Beene, Burnsville, MN

Ken has been working on his latest RV for several years. His previous machine was (and is) a well traveled RV-6A which he has been flying for some time. But Ken is a serious builder and he needed to satisfy the building urge even though he was more than satisfied with his -6A.

He made his first flight in December. His comments from an email shortly after his first flight:

"My first thought was -- "I set the airport elevation incorrectly into the altimeter". By the time I turned crosswind, I was passing through 3000 ft. I actually tuned in the AWOS to check my altimeter setting

I have 5 hours on it now. Have been sealing the air leaks and adjusting the rudder trim. It took several adjustments to the MT governor to get the prop to the right speed. Hartzell calls for a max of 2700 RPM for takeoff then to pull it back to 2600. The first flight I got only 2300 RPM. I changed the governor and got 2900! Finally got it to go to 2680 on the 3rd adjustment.



Visibility is great.

Cockpit is tight for me, but once in, it is OK.

I have too much forward CG with just me on-board (O-360 with Hartzell blended airfoil constant speed prop). I am 2" back of the forward limit. This causes more pitch force than I am accustomed to in my RV-6A. I actually have to pull on the stick with some force in at 60-degree turn.

There are two critical points in every aerial flight—its beginning and its end. — Alexander Graham Bell, 1906

Empty weight is 1025 with only minimum panel. Too much paint! I am using some makeshift seats that are uncomfortable. I get my new seats from DJ at the end of January (he has 'em now)

I don't have anything calibrated yet. Today I did a three way GPS run at 8500", 2600 RPM and 26.5" and got 207 MPH TAS in a 42 MPH wind out of 258 degrees (185 IAS). My RV-6A does 192 MPH at this altitude."



* * * * *

Bob Miller, Casselton, ND

Bob is a retired NWA pilot and has been hard at work on his second career as a RV builder and now pilot. His RV-8 recently flew near Fargo, His report:

December 9, 2006

"At 3:05 this afternoon, under sunny Dakota skies, RV-8, N127M made the transition from project, to airplane at the Casselton Regional Airport.



Following takeoff we climbed rapidly, and leveled off at 5,000 feet. All temps and pressures remained solidly in the green,

with the IO-390 humming like a fire breathing sewing machine.

The most remarkable thing about the climb out was the aileron trim. There was absolutely no tendency to roll one way or the other; in fact, the trim indicator remained exactly centered throughout the entire flight. After reading many reports of heavy wings from other RV first flights, I expected that some adjustment in this area might be necessary. Not so.

Once at altitude we conducted handling tests at various airspeeds and flap settings. All were completely normal. We had briefed Trent, Ralph and some of the CAP guys who were there, that we would probably be making a few "practice" landings before attempting an actual full stop. As it turned out, the handling characteristics were so benign this was not necessary. At the end of the flight we simply made a couple medium speed passes and landed. This airplane is a delight to fly.

And, the best news of all, as the sun sets, both pilot and aircraft remain capable of further flight without modification or repairs!"

Blue side up,
Bob Miller

Larry Dodge, River Falls, WI

Larry is one of our "seasoned" builders having started his RV-6 11 years ago. But his patience has been rewarded...

"First flight of RV-6 N16LD was 11/7/06. Tom Irlbeck conducted the first flight and Tim Mahoney was the DAR. Tom Irlbeck also gave me several hours of instruction. Both of these fellows are top notch. N16LD has a new O-360 Lycoming for power and the prop is a metal Sensenich 72FM8S9-1-85. Empty weight with paint, basic panel and avionics is 1029 lb.

I painted it myself with WWII colors using Randolph Enamel aircraft paint. True airspeed at 75% is 160 knots without gear and wheel fairings. The 40 hours test period was conducted in WI and then I flew the aircraft 7.5 hours to FL for the winter. All went well with no squawks except for a misbehaving fuel pressure sender. Avionics are an ICOM comm, Garmin transponder, and a PS Engineering intercom. Instruments are standard 6 pack steam gages. An EIS engine information system is also installed. Navigation is via a Garmin 296. I am currently working on the gear leg and wheel fairings. I plan to add an autopilot and IFR navigation capability.

Instrument flying is an unnatural act probably punishable by God. – Gordon Baxter



My thanks to Tom Packard for bucking rivets, to my wife Kathleen for moral support and putting up with airplane parts all over the house, and to Van's for a great aircraft.”

The Pre-Inspection

-Doug

Many years ago (so it seems), I would often look at my RV-4 project and wonder would it ever be completed. All the parts and pieces scattered over garage, basement, and closets seemed to have taken roots and was as much a part of our household as the washer and dryer. I would keep slowly working on it heeding the advise of those who have gone before. I distinctly remember these words of encouragement from Bill Benedict: “Doug, just keep doing a little every day, and someday it will dawn on you that there is no more to do.” And he was right. Eventually my list of “to-dos” was whittled down to one page. I reveled in checking off each one of those items until finally the list was clean. It was time to fly.

Way back when the Wright Brothers were active in the EAA, it was required to have an FAA inspector sign off various stages of construction. For a long time now, the FAA/DAR only gets involved at the very end of the building process. Aircraft construction is now pretty much a self-policing process. The EAA has helped with their Technical Counselor program and just about each EAA chapter has a designed expert to help you through the building process.

For years we have stressed many times over to take advantage of the collective RV expertise among the Minnesota Wing. Please, please, please latch on to a local RV “mentor” with experience. Have him or her stop by several times during your building process. You NEED a second (or third or fourth) set of eyeballs to inspect your project often. It is confidence building (most of the time!) and saves you a lot of time by avoiding sliding off into the wrong direction. Finally, at some point in time you begin to see light at the end of the

tunnel and thoughts of flying your pride and joy is on the agenda. I would suggest when your “to do” list gets down to just a few minor items, its time for the ‘Pre-Inspection.’

We've got several seasoned “old-timers” that not only are available to conduct the Pre-Inspection but enjoy doing so. If I must name names, I'll suggest Tom Berge, Alex Peterson, Paul Irlbeck (Wabash, MN) and yours truly. The format is simple: give me a call and I'll set things up. Have your RV all open with cowling and covers off and seats out with preferably the floorboards removed. You want all the innards as visible as possible. Be ready to take notes for your squawk list and maybe even have your digital camera available to take some photos. Have an open mind and don't be surprised if your builder's pride is challenged. Believe me you, your family, the FAA, and all your fellow RV pilots want your airplane to be as safe and maintenance free as possible.



Jim Lenzmeier, Larry Mills, Tom Berge, Pete Howell

Larry Mills has been working on his RV-6 for eight years and he really is seeing the light at the end of the tunnel. It was time for the Pre-Inspection so last Saturday we met him at his hangar at Anoka County Airport. The usual suspects showed up: Tom Berge, Alex Peterson, Jim Lenzmeier, Pete Howell, and me to record the event.

Tom Berge is typically the star of the show on these excursions. He has inspected many, many RVs and wastes no time in starting a very slow and methodical inspection. He usually starts at the engine and with a flashlight and a practiced eye, quickly focuses on the good and the not so good.

So what is he looking for? Generally sound aircraft building and maintenance standards. Things like proper security of wires, hose, jam nuts, etc. Anything that may rub and chafe in

The exhilaration of flying is too keen, the pleasure too great, for it to be neglected as a sport. — Orville Wright

the next hundred hours (remember you cannot imagine how much these engines dance around on their mounts). Safety items such as proper fire sleeve installed on fuel lines.



Larry is chasing Tom with his clipboard. The important thing is to swallow one's pride and accept the fact that your handiwork may be challenged. As your mother would say, "It's for your own good!" I kind of know how Larry feels during this process. We take a tremendous amount of pride in our projects and have literally lived and breathed the RV construction process for years. So it is a little uncomfortable having someone get a little picky with your pride and joy. But we all want a safe airplane.



Hmmm, he's still smiling. That's a good sign!

Tom moves around the airplane checking fittings, nuts, bolt, and anything else that comes to mind. Does he have aileron stops installed? (yes). How about 2 threads showing on all

lock nuts? Van's instructions and other publications outline all the basic standards that we strive for but it is amazingly easy to overlook things when we are caught up in such a big project.

Jim, Alex, and Pete follow around and look and look as well. Everything of note is discussed, questioned, any possible remedies are considered to anything that is not quite up to speed. Larry's workmanship is excellent and the list of squawks is actually mostly just minor items that can be fixed quite easily. No real showstoppers are discovered. Around noon we have done just about all the damage we can do to Larry's ego (just kidding!) and it is time to head out into another Minnesota snowstorm. We leave Larry with his clipboard and he is already heading for the toolbox. The day is still young

Tip Time: Aileron/Alignment

-from the RV-List years ago

The original post from Are Barstad:

"After seeing hundreds of RV's I have noticed that many of them have the aileron trailing edge lined up with the flap trailing edge. What is more rare to see is an aileron aligned with the wing tip and the flaps. Is there something I can do to be proactive in getting this lined up? I hate to find out first when installing the tip that I could have done something simple that now is too late. For the few of you who do have a close-to-perfect line, how did you do this?"

Response from Don Wentz:

Are, as one of those WITH good alignment, I can give you my advice (BTW, many local builders pooh-poohed this advice, and came back to me later and commented that they should have listened - sigh):

1 - Basically, DON'T install the wing tips until the wings are on the fuse.

2 - Install the wings and set the incidence.

3 - Install the flaps and ailerons and align them to the fuse and each other, as best you can, taking into consideration the balance between 'perfect aerodynamic alignment' and 'cosmetic necessity'. I can tell you from experience that having just a few degrees of 'down flap' will cost significant airspeed, easily demonstrated by 'slightly' deploying electric flaps at cruise speed.

4 - Once wing incidence, flap, and aileron alignment/location

The machine does not isolate man from the great problems of nature but plunges him more deeply into them.
— Antoine de Saint Exupéry,

are set, AND THEN install the wing tips, aligning the trailing edge. There is a surprising amount of flex and movement available in the location of the trailing edges of the tips, allowing for good alignment. Just be sure they are where you want them when you drill.

5 - Be very wary of listening to those who say "due to airfoil shape and where that dictates alignment of the flaps/ailerons, there is only 'one' location for them, using the airfoil template" (this is where the local builders got stuck). IF we ALL built our control surfaces PERFECTLY STRAIGHT, that would be true. However, there are many opportunities to get twist in the wings and the surfaces (probably less true now with all the pre-punching, but in 'the old days' you had to locate EVERYTHING yourself, even the plumb-bob alignment holes in the spars).

One of my wings was perfectly straight, the other had 3/16" 'twist' tip to tip. Although barely noticeable, my ailerons also have a very slight twist, caused by using a table that was NOT as flat as I thought. Had I used the airfoil template to locate and install the tips off of the fuse, I would not have been able to achieve alignment. But by aligning all of that post incidence, I was able to fudge and average-out the imperfections and have a 'straight' appearance to it all. i.e. if you have a tip-to-tip twist of 1/8" combined in flap and aileron, you could set the inboard end of the flap 1/16" 'up' and the outboard end of the aileron 1/16" 'down', averaging-out the twist over the length of the wing, and maintaining trailing-edge alignment. You then install the tip to match.

6 - Again, be very careful, as mis-alignments WILL cause drag. However, my stock, old one-piece wheel pant RV-6 tip-up is consistently fast when flying with other RVs, so it can be done.

Inspiration

-Scott Jackson, Vancouver, BC

It's fun to share the joy of a new RV pilot. I saved this note from Scott Jackson that was posted on the RV-List in 2002 as it is so indicative of one's thoughts having just flown his RV for the first time. I'm sure you'll be able to relate...

After six-and-a-half years of winter-time building, two moves, one-and-a-half years in storage, about fifty-thousand Canadian dollars, and several final hours spent working up normal and emergency checklists and practicing a bailout routine, I am both pleased ("strike that, Moneypenny; make that thrilled") as well as disappointed to announce that RV-6 #24613 has left the nest as of 16Aug02.

To invent an airplane is nothing. To build one is something. To fly is everything.— Otto Lilienthal

Into a light wind, the "Imitutor" surged down the runway and leapt into the clear, evening sky, giving real meaning to the word airBORNE for me. For forty minutes, while being put through the maneuvers recommended in "Flight Testing Homebuilt Aircraft", we scribed gentle circles over the tidal flats downwind of the into-wind runway as I became acquainted with the vibration and control feel during clean and partial-flap turns and stalls. A practice go-around was followed by a surprisingly gentle touchdown and straightforward rollout.

Sitting on a piece of foamy cut from the kids' sleeping bag underlay, which they haven't yet discovered, I felt trussed like a Christmas turkey in Nomex suit and gloves, leather boots, life vest (the runway ends at the dike holding back the Pacific Ocean), parachute and an old, Gentex helmet on which I kept the tinted visor down; ostensibly to give additional protection from a bird strike with one of the steady streams of seagulls returning to the ocean from the city dump after supper. Fortunately so no one could see I needed my half-frame glasses just to see the instruments.

The workshop is now cold, dark and quiet. The silhouette of the fuselage is faintly visible on the floor, outlined by paint overspray. You'd have to look through the layer of drilled-off rivet heads and punched-out tails, sharp little coils of aluminum looking like shiny curly fries, short lengths of wiring insulation, heat shrink and plastic tubing that look enough like macaroni to keep fooling our terrier, fine aluminum powder from the Scotchbrite wheel and white curlies and powder from cutting and fitting the canopy, brown stripes of masking tape and the twin, green stripes of riveting tape. I know it wouldn't hurt to look around for the broom, but I felt the shop had atmosphere.

I'd like to personally thank the wise people who invented plastic-covered aluminum sheet, oops rivets, blind rivets, brad-point drills, rivet-spacing fans, Unibits, HVLP and Scotchbrite wheels. Also those patient folks on the RV-List who take the time to explain the stupidest questions for the rest of us. And controller Rick, who graciously sent all other traffic at Canada's third-busiest airport to the crosswind runway and kept them all away from me. On the other hand, if I ever come across the masochists who thought up Proseal, fiberglass, Phillips-head screws or fly cutters... well you can guess...

To list the people instrumental in this experience, I would have to start with Peter Jarman. This is his entire fault for giving me a key to his 180hp RV-4 after I helped him wire and finish it. It only took a few flights before I had a serious case of, "I want one!" He loaned me all his building tools over half-a-decade ago, and made numerous, hour-long trips to the shop

on his unmuffled Harley. The neighbors must've thought we were drug dealers. He phoned frequently, not even saying Hi, just starting with,

"What

are you doing on your airplane today?" Whenever he sensed I was flagging, we would go somewhere in his -4. Coming from a military family, I respond best to butt-kicking, and he's verbally kicked mine for six years. Thanks, Peter. Sorry about breaking the trigger off your rivet gun.

Many others also helped and the wall by the shop phone is covered with their phone numbers. Jim Asprey was our inspector as well as building his own -6. He eased the pain of the mandatory \$642 fee for the final inspection by spending over four hours on, in and under it so I at least felt like I was getting something for the money. Brian Carr has built seven of these and had an answer for every dumb question. Milt Sadoway would interrupt building his Rocket whenever I needed help. Tedd McHenry skipped supper on short notice to act as follow-on vehicle on the move to the airport. August P. was kind enough to let me abuse his -6 in a rehearsal of the test flight and several circuits just hours before it happened for real.

Oldest child, and our only son, Gregory, helped rivet the empennage but discovered girls when the wings arrived. Oldest daughter Vanessa, who can't wait to learn to fly, spent one evening in the tail cone lying on a carpet remnant with a trouble light, ear defenders and an assortment of bucking bars on her tummy. We made great progress riveting on the turtle deck until her Mom discovered Vanessa's bed was empty at 2300 on a school night and shut us down.

They, along with younger daughters, Elisabeth and Samantha, completely covered the fuselage in Sharpie-pen art, some of it quite touching, most of it gross. There was so many hangings, stabbings, vomiting, flatulence, and toilet humor that I started to worry I'd failed as a father. When I peeled the plastic off, I saved some of it for the shop walls. All four tried not to make me feel guilty as they individually trekked through the darkness and puddles to the shop for help with their homework or to wish me a good night. In appreciation of their help and recognition of the price they too paid, the registration is C-GSEV.

And last, but certainly not the least, is my long-suffering better half, Jaye. We met when I was finishing my first homebuilt, a Pitts S1, so she's no stranger to airplane parts in the dining room and behind the living-room couch, plans on the night table and parts catalogues beside the tub. Despite having a big family to raise and a big home to look after, she always dropped whatever she was doing to appear in the shop within minutes of a call for another pair of hands. And, as I control income and she looks after the outgo, Jaye always managed to

Caution: Cape does not enable user to fly.— Batman costume warning label, Wal-Mart, 1995.

find the money for the seemingly endless stream of four-figure purchases aircraft require. The children all seem to have

clothes and shoes. They don't look malnourished. I'm not really sure I WANT to know how she did it. My building experience was quite a journey of discovery. In the beginning, way back at drilling the aluminum straps to the horizontal stabilizer rear spar, I was so worried about wrecking it. My learning curve wasn't a curve at all. It was a vertical line. But, confidence comes fast. By the end, I felt like there wasn't any problem I could not solve or screw-up I could not fix. The three biggest that come to mind are closing the garage door on an aileron (oh well, I wasn't too happy with it anyways), riveting the gear leg fairing hinges to the engine cowling halves and not discovering the error until, having spent half a day looking for the hinges and always coming across heavier hinge of the correct length, the light went on; and cutting away the aft fuselage side skin on the wrong side of a stringer. I still can't believe I did that.

Cars fit back in the garage. The outside of the house and the yard are slowly having less of a depressing effect upon local real-estate values. Our twenty-four year-old beater of a Suburban labors out to the old, WWII hangar at Boundary Bay laden with flying kit, tools, parts, plans and an air compressor.

And every time I walk into that hangar with a list of adjustments to make and a couple of minor snags to tend to, I see this creation poised there on its swept-back gear, looking like it's going transonic just at rest, resplendent - no, glowing - in white-and-red Imron paint with sixty's-era RCAF Tutor markings. The big, red spinner points up with attitude as if sniffing the air before leaping into it. And I invariably think – "Hell, I'll work on it later. Let's throw the 'chute and helmet into it, push it out and call for the fuel bowser." It's easier than I thought to overlook all the paint runs, smiles and dings, chewed up screw heads and waves in the skin panels.

Oh yeah - you're probably wondering why I'm disappointed. Well, I didn't get "The Grin." When the prop stopped and I rolled the canopy back and raised my visor, my expression could best be described as stunned. I was astonished that it actually worked. Everything worked, from the homemade annunciator panel, the WAG of offset for the vertical stab to the dual-throttle system I dreamed up. The full-size B8 stick grips from Wicks and the mil-surplus F-86 throttle grip feel so good I'm reluctant to let go to adjust the DG, altimeter or comm.

So, it's been said before - and I've looked forward to saying this - but, keep pounding those rivets! I know at times it seems like it will never be finished, especially towards the end; and air tools seems to be lubricated with blood, sweat and tears. I know it seems to gobble money as fast as Froot Loops

disappear into a teenager's mouth. Trust me, you will not be disappointed. It will be worth it. Oh, man, is it worth it!

Say, I think I feel a grin comin' on.....

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

First Class

***Minnesota Wing
March 2007 Club Meeting***

**Sat. March 24, 2007, 10:00 am
Dick Nordquist's Hangar
275 Palomino Lane, Lino Lakes, MN**

You know the feeling. You're driving your '63 Dodge Dart late at night and are blinded by some yuppie in their BMW with those obnoxious high intensity Xenon headlights. Wouldn't you like them in your RV?? Pete Howell (doing his best Al Gore-inspired PowerPoint presentation) will show the way. If you have any RV-related questions, we'll have our usual Q&A session. Then...

How about something a little different? We will present a "private" showing of the award-winning documentary "**One Six Right**". If you have not seen this film, you are in for a treat. If you have, sit back and have another cup of coffee and enjoy it again. "One Six Right" is a tribute to the romance of aviation through the telling of the history of the Van Nuys airport. Breathtaking photography will get you all fired up for the spring flying season!!

Coffee, juice, and the usual low-cal culinary delights!!

Driving directions:

Take I-35W north and exit on County Road 23 (exit #36). Cross over 35W and turn left on Apollo Drive (just past the gas station). Turn right at the stop sign on to Lilac Street. Turn right on Palomino Lane to 275.

Phones: Dick's hangar: 651-783-8859 or his cell at 651 895-4545, Doug's cell: 651-398-1184

SEE YA THERE!!!!

And feel free to bring a guest!!