

EAA Mount Rainier Chapter 326 Newsletter

Thun Field – December 2011

156

Christmas Party

Tuesday, December 13th, 6 PM
Kevin Behrent's Hangar, Thun Field

No gift exchange.
Bring the family.

This being a potluck and volunteer affair, there is no charge to attend. Kevin's hangar is #6, at the north end of the row of blue hangars on the left of the entrance drive.

Food: The Chapter will provide ham and turkey and soft drinks.

As for the potluck part, please bring:

Last name beginning with:

A-E bring a salad.

F-L bring a favorite dish.

M-Z bring a dessert.

Decorating and set up will be Sunday afternoon, Dec 11th, 3PM. Cleanup will be immediately afterward to include returning tables and chairs. That means a few trucks would be nice.

From the President

Merry Christmas to you all. With that said, another year comes to a close. Looking back on this year, we have had some great events and activities. Starting early in the year with the NW Aviation conference, on to a great Young Eagles event, a good set of summer events at Arlington and burger burn and now looking forward to the Christmas party. This is your chapter and you have all contributed greatly to the community and the chapter through your service and participation.

I'm looking forward to another year of flying and friendship. If you haven't been as involved as you might like, make a commitment to step up in 2012 as we could use all the hands we can get. Hopefully you are spending some good time with family and friends this holiday season and maybe getting a little work in on your project during the down times.

Thanks for everything you do for the chapter and here's to a great 2012.

Fly Safe!

Andy Karmy

From the Secretary

November 8th 2011

Andy called the meeting to order at 7 pm.

Visitors:

Duane and Amy Tanona are interested in a RV-6 or 7 and would like a hangar at Thun

Ben Watson (who is joining our chapter) flies a Long EZ and a Corby Starlet. (I had to look up the starlet and found it was designed by an Australian engineer in 1964 for competition. It is semi-aerobatic and is made of all-wood construction) And yes, it is a tail-dragger!

Charles Olin flies an RV-9 out of Shelton.

Deb Wallace - she is the new ferry and airport administrator for Pierce County.

Norm with the Treasury report:

Savings: \$989.51

Checking: \$4,074.49

Andy reminds everyone to update their information on the chapter website.

Ben Watson reminds everyone of the upcoming Angel Flight auction at the Clover Park hangar from 7:00 to 9:00pm on Dec. 9th. There will be jazz and blues artists playing for the event. If you have anything that resembles aircraft memorabilia you would like to donate for the auction Spencer's will accept the donation for Ben

Arlington campsites are now open and you may contact Kevin to reserve your spot

Our annual Christmas party is on Dec. 13th @ Kevin's hangar. There will be a pre-party set-up on the Sunday prior at 3:00pm if you would like to help with the decorating.

Projects:

Andy is doing Polyfiber work to fill in gaps from the old tabs after replacing the elevator trim tabs.

Curt is working on the wing-fold mechanism of his Onex.

Mark has the fuselage mainly done and is working the engine mount on the firewall.

Smitty was excited when talking of finishing his service hydraulics and watching the gear come up and the doors close.

Jim Triggs has been helping Conrad build a Sonex. Jim has been such a great mentor for Conrad who is now 18 or 19 years of age and is studying engineering that he is taking on another apprentice. Jim is now mentoring a 15 year old (who can identify any plane out there) and would like to build his own plane.

Bruce Hughes said his Long EZ is now airworthy after 18 years and is still sitting until Bruce gets airworthy. We're rooting for you Bruce.

Paul Westcott is working on his wiring to the firewall placement which is not easy unless you are a contortionist.

Steve says he is knee-deep in wiring.

Andy is working on his lights.

Tom Curran joined the flying club at the Narrows and has been flying a Cessna Skycatcher. Tom says he really likes it and it is fun to fly.

Tonight's safety topic: Andy spoke of fuel related accidents... 10% of all accidents are related to low fuel and 55% happen within one mile of an airport. There is not a high ratio of fatalities with the low fuel as most pilots are aware of the low fuel and are already looking for places to land just in case. The fuel flow gage is not always accurate and may not show fuel loss if the cap comes off in flight, if the cap is not put on properly, or if the cap is not put on at all.

Jim Triggs spoke of flying his F5-F in SEA and had plenty of fuel, but had to wait on three B-52's in order to land. He circled the pattern several times and then he was told he would have to land at another base due to the last B-52 had its brakes lock up blocking the runway. He told the tower he had to land there as he did not have enough fuel to go on. He ended up landing on the taxiway with barely enough fuel to make that landing. WOW!

Our guest speaker was Deb Wallace who is our new airport administrator for both Thun and Tacoma Narrows airport. Since Deb has taken over she was happy to see that the Tacoma Narrows restaurant has now reopened. Deb says she started off stripping paint from planes when she was 12-13 years of age. She has been to flight school three times, but has not gotten her license yet. Her husband, John was in the Air Force. Deb says Thun Field needs lots of love and wants to hear from all of us. She believes Thun should privatize the hangars and wants positive investment coming in for improvement later on. She is working on a master plan for 2012 to lengthen the runway at Tacoma Narrows, but in order for the FAA to help out she will need to narrow the width from 150 feet to 100 feet. Deb said that the FAA is supposed to be improving Thun Field's runway also. Deb would like to work on community relations to gain more positive support from folks living around the airport. She feels the community and leaders of Washington State do not understand aviation. Deb asked for the Washington Pilots Assoc. to get on the bandwagon to contact our state representatives so they may represent our aviation community. Dave Fritzsche suggested that some of our members could represent our chapter to contact our representatives to let them know you don't have to be rich to be a pilot (although I'm sure it helps) and that there are a whole lot of businesses around an airport which could benefit the community. Deb said she would like to make Thun Field business friendly and environmentally sustainable. Deb would like to make Thun a positive for the community.

You may contact Deb Wallace via email at

deb.wallace@co.pierce.wa.us

I wanted to personally thank all of the members of our chapter for the generous gift to Windmill Gardens when my mother passed away from colon cancer this year. I waited until they had their end-of-year sale and purchased a beautiful Japanese maple called the 'Orangeola' due to its brilliant fluorescent color in the fall. With the savings, I was able to purchase a lovely container for the tree. It sits outside our back door where Randy and I can see it each morning. What a beautiful reminder of our momma. Thank you again from the bottom of my heart.

Kerry Albritton

Secretary / Photographer

First Flight

Kevin Behrent

RV-9A

Nov 20th

It's been a very long journey dating back to 1997 if I read the invoice date on the empennage correctly. I spent a couple of years working solo on my empennage in my garage suffering through newbie stuff along with battling with some early issues that Van's had on their Horizontal skins making it very difficult or impossible to cleco or rivet the center nose rib without creating a ugly crater. I can always find those early kits because you won't find a rivet line for their nose ribs because they covered with about 1/8" of bondo to fill in the crater created by pulling the skin down.

I ordered the wings several months later when the kit was available. I had to store the wing kits and I had just acquired the Mooney and it needed to have a new engine and I wanted to completely rip out the panel and install a new 201 panel with brand new gizmos. I also added speed breaks. I also had a Sundowner at the time under lease back with Beechwest at Spanaway Airport. To keep costs under control, I did all the oil changes (monthly) and took all the panels and interior out every other month for its 100 hr inspection (annual) required. I was also very busy with my growing business.

When I finally had time to think about working on my wings, I decided I really couldn't do it in my garage due to lack of space and concern that my young kids would certainly put some dents in it as they had done my empennage. However, my hangar at Spanaway wasn't heated and I had only enough power to light a 15W bulb. Fortunately Bob Pailca approached me about whether I would be interested one of the new hangars he was planning on building. Of course I said yes and put my deposit down before it was even announced. Unfortunately, it took several years before the county gave Bob the green light and it took a little over a year to build. It also took awhile for me to get the hangar setup like I wanted in order to start back on the project.

Although it took a few more years to complete, Marv really started to help me when I got my fuselage kit. With his already flying, he decided he was going to keep kicking me until mine was flying. I must fully give Marv the credit for helping me get it

completed. His knowledge and skills took 98% of the head scratching and the trial & error out of the equation. Although when it came time to cut the canopy, he was nowhere to be found! I would definitely still be on fuselage without his help and support.

First of all, I must say that I told no one when I was going to fly the first flight other than Marv. However, it's amazing how people come out of the woodwork like cockroaches lined up for some entertainment!!

First Flight:

First flight took place Sunday morning, Nov 20 around 9am. Marv flew chase in his RV-4 with Mike Salmon in the rear seat taking inflight video. On the ground, my wife Angela and my youngest son Max were parked in the Van along the taxi way keeping warm while videoing the takeoff and landing. Inside the cockpit, I had my new Drift HD video camera installed to capture 170 degree view which included my right profile, the entire instrument panel, along with the co-pilot view out the canopy. I also was able to connect the mic on the camera to the headphone jack on the co-pilot side to capture the communications on the radio along with me talking to myself on the intercom. I was VERY careful on what I said, but wanted to try to document the flight since I knew I wasn't going to take notes!

It was really cold and temps were @ 33-34 degrees. I quickly learned that I needed to turn on/off the Eagle system 3 times to get enough prime to start. That is being fixed in their next software release! Once started, oil pressure was good and oil temps were slowly rising. I taxied out to 16 and I decided to close my oil door to get temps in the 80s before doing my run up. All systems were good and my oil temps hit 110 and I opened the oil door and signaled to Marv I was ready, so he launched first. I taxied into position and held until he turned downwind.

I got lined up on the centerline and began slowly applying power until I was sure I was tracking straight and then pushed full power while immediately pulling back a little in order to get the nose wheel a couple inches off the ground. Mike Seager beats this into our heads during transition training and reminds us that the nose gear is solely used for ground steering only and once that is no longer needed, get it off the ground to remove the weight!!! Okay, okay, I hear ya! I was showing 2700RPM and I was gaining speed fast.

The plane lifted off on it's own, very little back pressure was necessary. It tracked straight and little to no rudder was really needed once airborne. I climbed out @ 100 knots (really thought it was 100 mph) and watched the VSI hit 1,500 FPM. I turned crosswind at 1,500 ft and then turned downwind. I believe I was @ 2,500 ft by then. I had made no throttle/prop adjustments since takeoff so I pulled power back to 25" and was just turning back the prop when I was thrown forward into my seat belts as though I had just slammed on the brakes. A quick glance at my manifold pressure showed @ 9" and I had slowed down to 100 kts. I slowly push in power and my prop red-lined and for a brief moment I thought I saw 2820, and then stayed at 2700 rpm. I turned down the prop a couple more turns and reapplied power.

RPM were still at 2700 so I began to adjust the prop when again power suddenly went back to 9" and prop was going crazy, I added a little more power and kept my eyes on the airspeed which was still happy at 100kts. The plane was flying, I just couldn't put my finger on the cause of the sudden power changes. This may seem like a long period of time, but it all happened within 30 secs. I was still on downwind, climbing above 3,000 (alt is my friend!) and told Marv on the radio to switched to Alternate freq which we had previously agreed on 123.4. Marv was excited to hear how things were going, I was a little excited as well, but for different reasons. I told him the problem, which was difficult to describe. We chatted for a moment while turning crosswind, then upwind and he suggested using the friction lock to hold the power setting. I had applied the friction lock, but I'm use to the Mooney and it takes very little friction lock to hold the throttle position. My RV feels like it has more back pressure than I'm use to, but I didn't feel that at the time. I was thinking that the Eagle system may be doing something to the fuel or ignition to cause the power losses, it didn't actually occur to be that the throttle was being push out. So, every time I took my hand off the throttle to adjust the prop, the throttle was being pushed back to idle and the prop governor really didn't appreciate such drastic changes. So, I tightened the friction lock as if my life was depending on it and was finally able to adjust the prop down to 2500 rpm so I was now stable at 25"/2500rpm which was @ 83% HP if the HP calibration in the EFIS is correct. First problem solved!

Now came time for speed checks. Marv asked me my speed, I was indicating 140. He was surprised because he too indicated 140, but in Knots, not MPH. I was suppose to be configured for MPH on the EFIS . I did a quick look at my backup Airspeed which reads in Knot, it showed 135kts. I looked at my EFIS again and then realized that it too was labeled Knots. Marv and I had to switch from MPH to KTS when we used Jeff Bloomquist's pitot/static test system and forgot to reset it to MPH. No problem, I was planning on switching to KTS soon after the first flight and luckily my checklist has all the various speeds in both mph & kts. Time to move on.

After a couple of loops circling the airport @ 3,500ft, it was time to slow down and experience slow flight. I pulled back power and slowed to just above flap speed and the controls were still good, no slop at all. I continued to just inside flap speed and lowered the flaps to half and then full flaps and held power to maintain 60kts. Flew a couple of circuits around the field and looked at my fuel tanks and decided it was time to come down. Raised the flaps and pointed the nose down and eventually entered the 45 for rwy 16 while descending from 2,000 to 1,500ft. On downwind I cut power again and slowed to just inside the flap limits. Abeam the numbers, I put half flaps in, and pitched for 60kts and power for @ 500ft descent (@13-14"). On base, I put full flaps in and continued 60kts and re-trimmed. On final I kept 60 kts until just over the threshold and a few feet above the ground and I slowly pulled back. The main hit, no bounce or floating, and I must have been right at stall speed since full back pressure could not raise the nose. I did not have to use brakes at all and actually had to add power to get to the turn-off. Good enough for me!

There were no squawks found other than a reminder to apply a little more friction lock to the throttle. I parked the plane and it was time to have breakfast so Marv & I ate at Hangar Inn and was later joined by Harry Nelson who picked up the tab, thanks!!! After breakfast, I took off the top cowl and found a small oil dribble coming from the two 90 degree fittings in the oil cooler. Fuel lube was used to seal them, but they still leaked. I've heard from others that fuel lube didn't work for them as well on these fittings. I disconnected the oil line running to the cooler and let the oil drain out. I then had to run-off to spend the rest of my day watching Max play in a Football Tournament in Auburn Municipal Field. While I was gone, Marv pulled the oil cooler and resealed the fittings with the same white sealer used on my oil pressure sensor. I hope to reinstall the oil cooler Monday night and get it ready to fly the next time the weather allows.

I've downloaded the engine data from the EFIS and will check to see if the temps stayed pretty even. The only thing close to the red was oil pressure and it was close to 90psi. I need to examine the data and see how long it was at that pressure and what was my oil temps during that time. Given the cold temps, oil temp, and new engine combination, it's not too far from the norm to have high oil pressure. If after my second flight it is still high, I may have to adjust the pressure down a little to make sure I stay well below 90psi.

Flight #2 will be the same as flight #1 and will be conducted over the field, but I will probably fly for an hour or more and pay more attention to the various temps/pressures other than seeing if they are in the green. I also want to double check power settings to maintain certain airspeeds while in the pattern.

For those curious, the Eagle EMS system functioned very well. Even with those quick power changes, it adjusted itself very quickly and the engine was smooth the whole time.

Pray for weather good enough for ceilings of 3,000 or higher and clear visibility!!

Why the RV-9A?

I was looking for a airplane that would be faster than a cub, but allow me to go into short/grass fields. At that time, Van's only side-by-side was the RV-6/6A and it appeared to be just as hard to build as the RV-4 which I didn't think I was capable of building. The RV-8 just came out, which introduced CNC matched hole drilled parts, but I wasn't interested in a tandem.

Marv & I went to Oshkosh the year that Van's had a horizontal stab that you could cleco together to see how the CNC matched hole drilled parts made assemble quick and easy. They had a bucket of clecos so Marv & I clecoed it together in minutes.

Marv had a few choice words regarding that since it took him months of head scratching and finally drilling to get to that stage. I was SOLD! I broke out the check book and purchased the emp kit, which was the only thing available. if I recall, the wings were not available until a few months later.

How do I plan to use it?:

I plan to use it like every other RV owner! Fly the heck out of it and go places my Mooney couldn't. Looking forward to flying

to the various fly-ins and pancake breakfasts. Planning on joining several of the chapter members flying their RVs to AirVenture 2012 to participate in the celebration and recognition of Van by EAA.

Keeping the Mooney?

I don't plan on keeping the Mooney long-term however I don't know yet when I might advertise it for sale. If someone happens to come along and want it, I would sell it if the price was reasonable.

Engine Specs:

Superior IO-320, C/S, roller tappets, custom built by Aero Sport Power.

Eagle EMS Electronic Ignition/Fuel Injection
MT Governor.

Hartzell C/S (Wish I had gone Whirlwind C/S for weight savings).

Plane Power 60 AMP main alt.

BNC 8 AMP stand-by Alt.

SkyTec Light Weight starter.

Avionics:

Advanced Flight 4500 EFIS (includes mapping, synthetic vision, AOA, traffic, wx, many others.....)

Advanced Flight 4500 EMS (can display everything above plus engine monitoring)

Advanced Flight AFS-Pilot Autopilot with auto-trim (TruTrac DIGI II VSGV with auto-trim)

PSE PMA-9000EX Audio panel

Garmin 530W Comm/Nav/GPS

Garmin SL-40 Comm

Garmin GTX-330 Mode S Transponder (TIS-A traffic displays on both EFIS & 530W)

TruTrac 2 1.2" ADI w/backup batt (backup for EFIS)

Van's 2 1/2" Airspeed (mechanical backup for EFIS)

2 1/2" Altimeter (mechanical backup for EFIS)

NavWorx ADS6000B - Plane is wired for this, but have not purchased it yet.

Antennas:

(2) Comm antennas on the belly

(1) Archer VOR/LOC/GS antenna in L-wing tip (Didn't use the GS because 530W requires a separate input for GS and splitting would lose half the GS signal strength)

(1) Homemade GS antenna in R-wing tip (if it doesn't work, will replace with another Archer Nav/Loc/GS antenna)

(1) Archer marker beacon antenna to be installed down the L-Gear leg (a simple copper strip)

(1) Small hockey puck gps antenna for the AFS-GPS

(1) Garmin Active GPS Antenna for 530W mounted top of fuselage immediately following the canopy rail

(1) NavWorx GPS antenna - will be mounted direct behind the Garmin antenna on top of the fuselage

(1) Transponder antenna - mounted on belly

(1) UAT antenna for NavWorx - Mounted on belly behind rear baggage compartment bulkhead

Misc:

- Gretz Heated Pitot tube
- Creative solution to Vans's pathetic alternate air solution
- Creative Air static ports - Way better than Van's blind rivet solution
- Wing/tail strobes
- Led Nav lights
- Beacon strobe tube on the belly synced with tail strobe
- Duckwork's landing lights
- Interior Lighting/Dimmers
- Infinity Grips - Both pilot & co-pilot have same options, but co-pilot can be disabled
- Brake lines - All Steel braided lines, No plastic tubes for me!
- Hat shelf - The upper baggage bulkhead panel was hinged and screws were replaced with winged camlocks. A removable shelf was made that spans the longerons and a cargo net covers the backside.
- Floor panels - All floor panels are secured with nut plates and screws. NO blind rivets for me!
- (2) inspection panels were cut in the front deck to allow easy access to rear of instrument panel
- Custom Panel: I bought the Affordable XL modular panel, but had to cut the framing & re-welded to push the avionics rack over @ 2" to allow the dual 4500 displays to be installed together. The panel consist of 3 sections (pilot side, avionics rack, co-pilot side) which are wired to be easily unplugged and removed. No diving under the panel is really necessary for repairs or changes.
- Electric roll / pitch trim. The pitch trim can be controlled automatically by the auto-trim computer to trim for level flight or climbs/descents

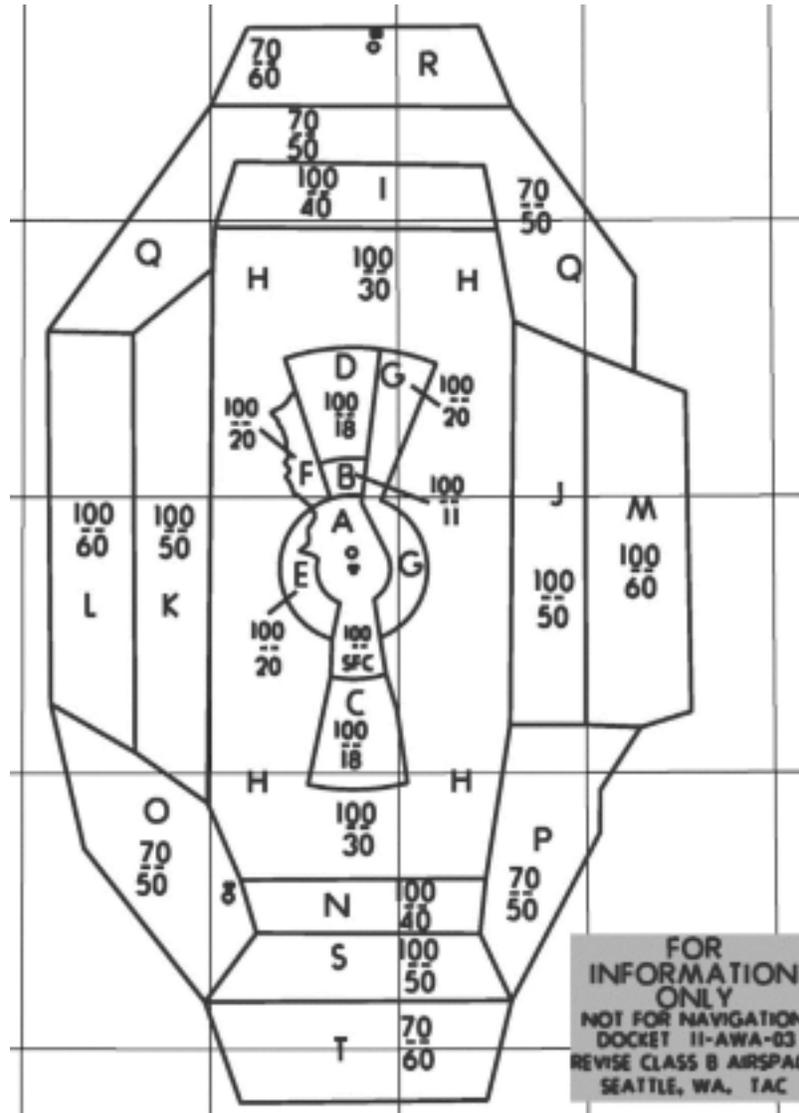
Interior:

I plan on installing the Classic Aero Aviator package to include full carpeting, seats, and side panels. Current, I have the joy-stick covers and front carpeting, and glare shield padding. Gordy was kind enough to let me use his old seats that he replaced with his Classic Aero interior until I get mine.

Paint:

Planning on a paint scheme similar to the Honda Jet with a Metallic Blue on a Pearl White base with silver striping.

Kevin



Not for Navigation... kinda funny. But the new Seattle Terminal Control Airspace goes into effect on Dec 15th. Time to get a new chart!

8 minutes of pilot HEAVEN!!!!

**Yes, this is what it is all about.....
Probably the most beautiful 8 minutes you will spend today.**

<http://www.sleepingdogtv.com/>

end

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