

AOPA SUMMIT 2011 Trip Report

Howard Wolvington

In the spring of this year, I started my planning for the fall AOPA Summit meeting in Hartford CT. Frequent readers may recall that I made a similar trip in 2007 to what was then called AOPA EXPO, and I had planned to use my experience from that trip on this one. The meeting is a couple of weeks earlier in the year than in 2007, leaving Sunday 9/18/11 rather than Sunday 9/30/07, and I expected somewhat better weather as a result. Since my daughter and family are in the Minneapolis area, I wanted to spend a day or so with them on the way out, and then would visit my son and his family near Nashville on the way back, as well as visit my parents in Denver. 10 days overall were planned for the trip.

The aircraft is a Piper Comanche 250, N6087P, highly modified from its original condition. Up front the engine is a Lycoming factory remanufactured O-540 engine. The airplane burns about 14.5 gallons per hour from four fuel tanks, including the original two wing tanks for a total of 56 usable gallons, and a modification which added 2 tip tanks of 15 gallons capacity each. Thus, at cruise power and altitude, the airplane has a range of almost 6 hours, at a cruise speed of about 155 knots.

The avionics include a Garmin (UPS-AT) GNS 480 WAAS COM/NAV/GPS, connected with GPSS (GPS steering) to an S-Tec System 50 autopilot. For engine and fuel management, there is a JPI 800 graphical engine monitor and a JPI FS450 fuel flow monitor. For in-flight weather, VFR situational awareness, and backup to the 480, a Garmin 396 GPS with XM weather is attached to the panel.

New within the last year is an iPad with ForeFlight primarily for enroute charts, and Jeppesen Mobile FD primarily for approach charts, and GoodReader to view various PDF files, including flight plans and preflight weather briefings. The iPad obtains the GPS position via Bluetooth from a GNS (GmbH, not Garmin) 5870 GPS unit, the third GPS in the airplane. To generate the flight plans, I used the Jeppesen FliteStar product on a Dell laptop, which also is capable of display of enroute and approach charts during flight should the iPad fail. Completed flight plans were transferred to the iPad via the DiskAid utility. One set of paper enroute charts for the entire US were in the airplane, but no other paper.



On departure, I was in IMC by about 2,000' just south of the airport on runway heading to intercept the V2 airway. The flight plan predicted nice tailwinds and temperatures just above freezing at my initial cruising altitude of 9,000'. From the FEBUS intersection east of Ellensburg, I planned direct to Montana. I planned to climb as necessary over higher terrain in Idaho and Montana, and join to V247 west of Billings at BAXTA for the descent to the airport. I was cleared "As Filed".



Level at 9,000' east of the Seattle area, flying in a slight high pressure system (baro 30.12) and +5°C, N6087P settled in at a True Airspeed of 152 knots and a ground speed of 185 knots on about 14 gallons per hour. After 25 minutes in IMC, I was on top of most of the clouds just west of Ellensburg. About 1 hour east of Ellensburg, as expected, I was instructed by ATC to climb to 12,000' for terrain. I turned on the oxygen system as a precaution against hypoxia. At the new

altitude, the TAS was down to 148 knots, but groundspeed was a nice 180, and the fuel flow was down to about 13 gph.

As I proceeded across Eastern Washington, the weather continued to improve with fewer and fewer clouds, and the nice tailwind continued.



At 2341z, ATC asked me to climb to 13,000' and gave a new routing of direct Helena (HLN), and asked that I report 30 east of HLN. At 13,000' the TAS remained 148 knots.

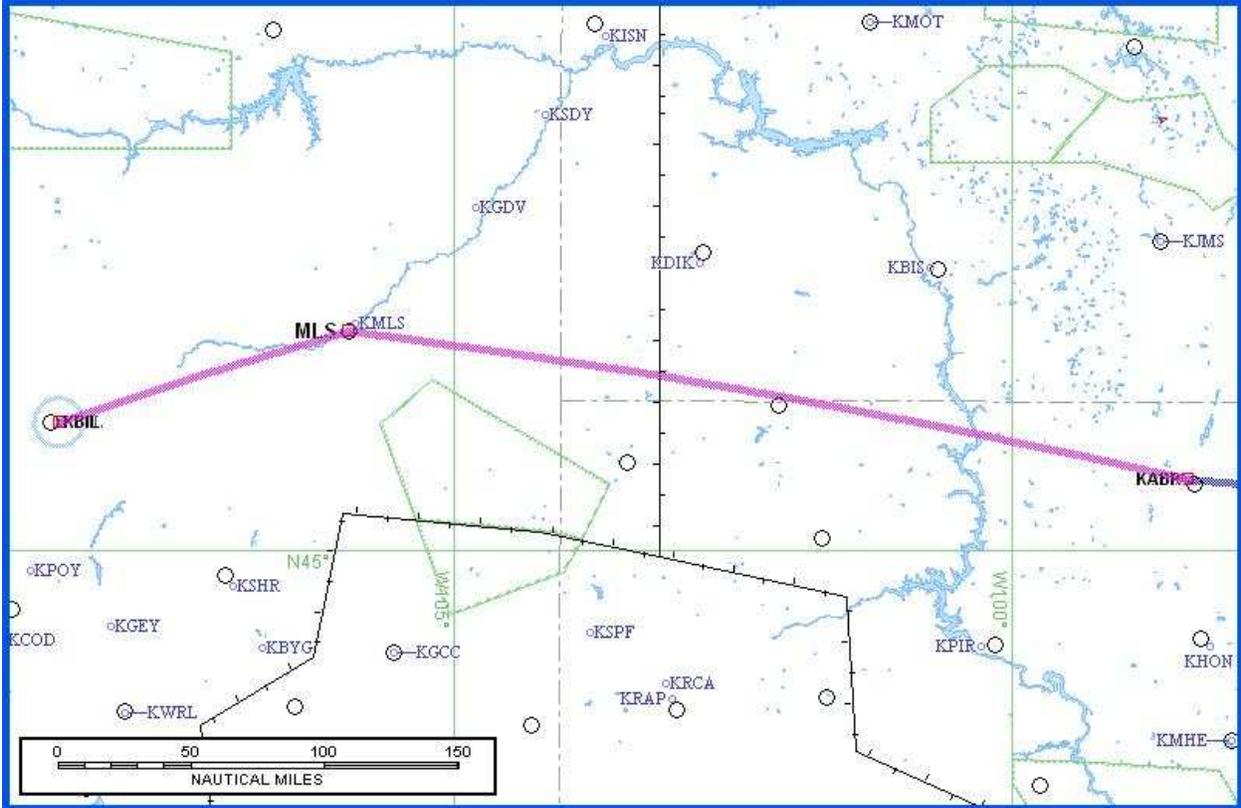


When I reported 30 east of HLN, ATC handed me off to Helena approach, I flew directly over the airport as shown above, and then east of the airport they sent me back to Salt Lake Center. I requested direct BAXTA again to get on the airway in preparation for the descent, and this was approved. Approaching Billings in visual condition, I was assigned the visual approach for 28R. The photo below is on a dogleg to the downwind for the airport. I landed after a flight time of 3:22, using 48.5 gallons of fuel, and a total IMC time of 0.7 hours.



Monday 9/19/11:

Billings was nice VFR weather for departure on Monday to Aberdeen SD. I planned a route through Miles City, MT, as there was a MOA along a direct route and a fire TFR.



On initial contact after takeoff, Billings departure asked if I would like Direct Aberdeen, so I said OK. The resulting route did in fact take me through the TFR area and the MOA, but Salt Lake Center reported that the TFR was no longer active, and that the MOA, while scheduled to be used, was not yet active, so I was free to proceed along the direct route.



As I approached the “Power River A” MOA, ATC reported it was about to go active and directed that I turn 20 degrees left to go North of the MOA. I found the “TOUGH” intersection on the map of the 480 GPS that was just north of the MOA and direct to that intersection was approved. As I got north of the MOA, I reported that I was able Direct Aberdeen and would clear the MOA by 1 nautical miles, and the ATC response was that I should continue to TOUGH, as they needed me to clear the MOA by 3 miles. Shortly thereafter, Direct KABR was approved.



ATC then indicated that I would soon enter an area of poor communications, and directed that I contact Minneapolis Center when 205 miles west of KABR. Sure enough, I was “lost com” as predicted, and back with Minneapolis Center at the designated point.

Approaching KABR the winds were from 190 at 8, so runway 15 would be the runway of choice, but it was closed for construction. So a crosswind landing on runway 13 was in order. About 20 miles from the airport I cancelled IFR so that I could proceed direct to a fix on 5 miles final for runway 13, and proceeded straight in for the landing. The leg took 2:30.

Quest Aviation quickly got fuel into the airplane, and after a short break I was back enroute to Minneapolis Crystal (KMIC). This leg was filed as Direct at 9,000’ and I was cleared as filed.





About 80 miles west of KMIC, I received an ATC instruction to cross 35 west of KMIC at and maintain 5,000'. One limitation of the 480 is that it provides no vertical descent planning via a VNAV function found on some other Garmin units. So I defined a user waypoint at the requested location so that I had a time to the waypoint displayed, and then started a descent at 500 feet per minute 9 minutes prior to the waypoint so as to descend 4,000' and comply with the restriction with

a bit of time to spare. When I reported the airport in sight, ATC cleared me for a visual approach to 32R, and when I reported to the tower, they gave me clear to land on 32L. My daughter and grandchildren were waiting at the FBO for me.

After lunch, we went back out in the airplane for some local VFR sightseeing, including turns-around-a-point over my daughter's house. After the flight it was time to watch my grandson's Karate lesson, and fix my daughter's internet router, and have a nice steak dinner.





This was an interesting flying day, primarily because of weather. On Tuesday a cold front had passed over Minneapolis and weather remained. The airplane was more or less dry as it had been kept in an almost enclosed T-hangar by Thunderbird Aviation, and the METAR for the 8am takeoff was few clouds at 5,500' and broken at 7,000'. While I had initially planned 9,000' for the flight to KMFD, the freezing level suggested that 7,000' was a better choice.



Further, at takeoff I was in IMC by 2,500'. I was given a heading to the South and followed radar vectors to exit the KMSP class B area. I listened as a Bonanza had troubles following radar vectors, and ATC concluded that he had an inoperative DG and gave him "no-gyro" vectors.



South of the Minneapolis class B, I received direct Joliet (JOT), some 282 miles away on a course of about 130.

Level at 7,000', in the low pressure system (baro 29.69) that remained after the front, I got 150 knots TAS, and a ground speed of 182 at a comfortable +3° C.



About 100 nm south of KMIC I was out of IMC, some 45 minutes into the flight. Pressure was rising and by the time I passed Dubuque it was up to 29.91. I crossed the Mississippi river about Harpers Ferry, and parallel to the Illinois River near Rockford the ground speed was up to 192 knots.



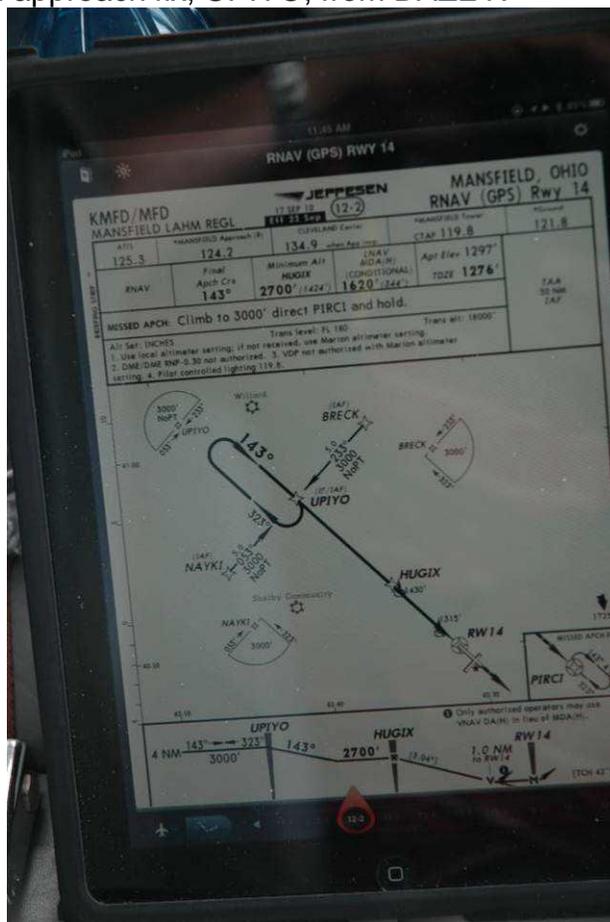
About 1:50 into the flight, Chicago center provided a new routing for Chicago Approach airspace. It was Direct to the KELSI intersection and then EON as filed. I put this into all of the GPS units and reprogrammed the route in the iPad to get a situational view.

Approaching my destination, KMFD, on XM weather I could see a line of storms growing in my path. I found an intersection, DAZEY, that was north of the line and requested and was granted Direct to it enroute to KMFD. This kept me out of the bad stuff.



About this time, I decided that I needed some music, so I turned on the Bluetooth on my LightSpeed headset, and connected to my iPad, and activated the iPod player for some tunes. I had previously tested that the iPad can connect to 2 Bluetooth devices simultaneously, so I had one for position and another for music.

KMFD was reporting 900' broken clouds with winds from 170, so I planned the RNAV 14 approach and requested direct to the initial approach fix, UPIYO, from DAZEY.



The controller wanted to vector me for the RNAV 23, but I reported that I was in some weather and would prefer to get on the ground as soon as practical. He then gave me direct to the UPIYO initial approach fix, but then he asked that I make one turn in holding at the fix for other traffic into the airport.

After the turn, the approach controller then asked for best practical speed for traffic. Other than “slow down” and then “speed up”, the approach was uneventful and I completed the crosswind landing.

The final leg to Hartford was planned through a series of VORs that took me clear of restricted airspace and MOAs.



I had planned to eat lunch at KMFD before this final leg, but the ATIS reported that the on-field restaurant was closed and I observed that another pilot had just taken the one FBO courtesy car. Further, I was concerned about the building line of thunderstorms to the west of the airport that was moving northeast, so I decided that the best course of action was to minimize time on the ground.



After getting fuel and a bathroom break, I filed the next leg to KBDL (Hartford Bradley International), and grabbed three “nutritious” candy bars offered by the Richland FBO as my in-flight lunch.



My takeoff was at 1705z, just a bit over 30 minutes from landing. I was cleared as filed, and after 14 minutes of climb, I was back up at 9,000' over the clouds in smooth air with a ground speed of 175 knots.

Approaching the Lake Henry VOR (LHY), center had a reroute for me: V58 to the JUDDS intersection, which is just Southwest of Hartford. The 480 GPS made this entry easy, and I then found all of the waypoints and entered them into the 396 GPS and iPad as well.



I entered IMC at LHY, and requested a climb to 11,000' to stay on top. Shortly thereafter, I was given a heading "15 degrees right for traffic" and subsequently direct the MOONI intersection on V58. Then when 22 minutes out from KBDL, I requested to start the descent.



ATC put me on radar vectors for the ILS 24 via the downwind, but when I got the airport in sight about 5 miles to the East on the downwind, I was cleared for the visual approach. There was a long roll out down the runway to a taxiway for the Signature FBO on the west side of the field (while a Southwest 737 and a couple of other airlines waited), and I shut down after 2:51 of flight.

The five legs of eastbound flight all had a tailwind, with a total flight time of 13 hours and 43 minutes, over a planned distance of 2,265 nautical miles. This gives an average

ground speed of 165 knots, but the actual average during cruise was higher since I had some radar vectors, a hold, and flew some approaches. The eastbound trip took 200.7 gallons of fuel, at an average of 14.6 gph.



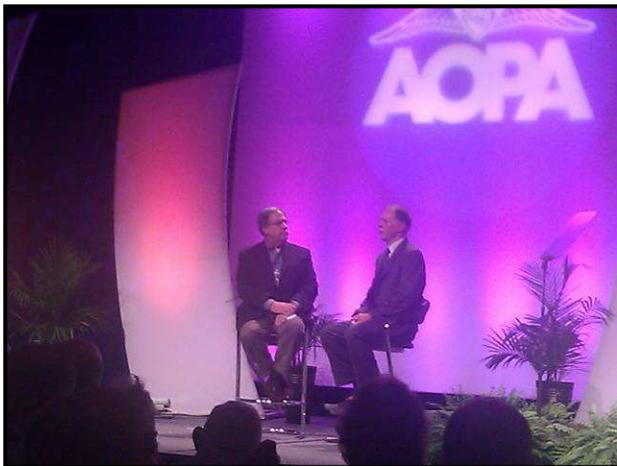
Thursday 9/22/11:

The weather at Hartford was pretty bad, with rain and low ceilings for most of the convention. I am sure that this kept many pilots from attending, as I had difficulty seeing during the drive from my hotel to the Convention Center. AOPA Summit began with a general session at 8am. I then attended seminars on medical issues, and the status of the unleaded aviation fuel initiative. The key “take away” from this session was that the EPA has not yet found that our current fuel constitutes an immediate hazard and is

working well with the FAA to allow time to find an acceptable long term solution. I attended a PAC luncheon and received the names of the GA Caucus members in the House and the Senate. I was disappointed to find that none of our Washington members of congress participate in the GA Caucus and made a note to try to help this. There was discussion about the recently announced proposal from the Administration to implement a \$100 per flight fee for use of ATC services, and discussion about an appropriate response. In the afternoon I attended an Air Safety Foundation presentation on Takeoffs and Landings, and a presentation on NEXTGEN status.

Friday 9/23/11:

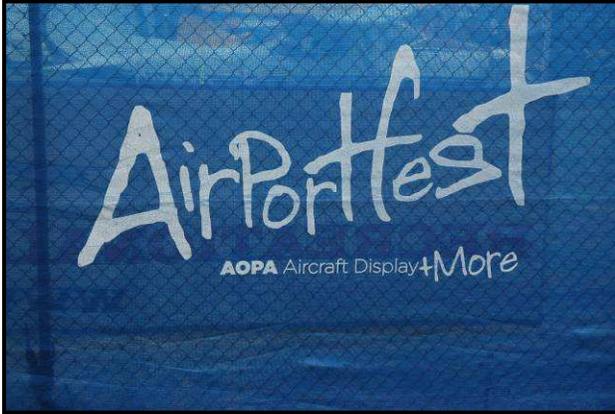
AOPA Summit continued with an opening session that included the FAA administrator, Randy Babbitt. When asked about the proposed \$100 use fee, he smiled and said something like “It is probably too early to talk about the Redskins winning the Super Bowl”. I took this to mean that it was not likely to make it through the legislative process... He also discussed an initiative to improve the Knowledge testing process. Then I visited the Exhibit hall, attended a Max Trescott presentation on GPS approaches,



attended a Luncheon that honored 100 years of Naval Aviation and finished the day with a seminar on aging airplanes (appropriate for a 50 year old Comanche). In the evening, I drove to New Haven, had dinner with my sister, her husband, and two other good friends, and attended a fine performance at Yale Woosley hall. The only problem was high temperatures in the 100 year old building.

Saturday 9/24/11:

The general session on Saturday included a “pancake breakfast” and had more food than anyone should eat. EAA president Rod Hightower joined AOPA CEO Craig Fuller for a discussion about pilot training, and announced a joint initiative to the FAA for use of a Driver’s License in lieu of the Third Class medical. After the session, I went out to Airportfest to see what was on display. I judged that many fewer aircraft were on display at this Summit than say the 2010 summit. Perhaps it is the economy.



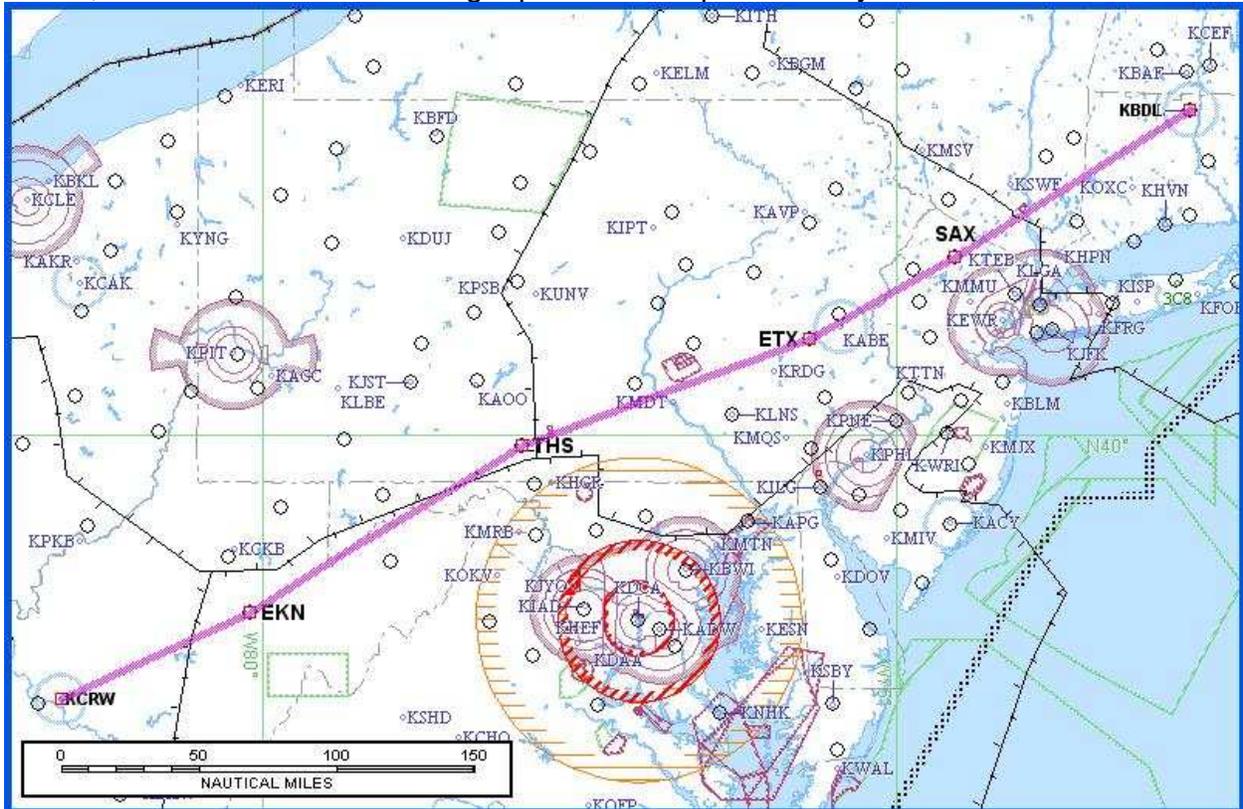


Saturday Afternoon 9/24/11:

I started my trip back home at Signature/Hartford Bradley International where the Comanche was nicely tied down at the edge of the ramp area. When I arrived at the FBO I saw a pilot with an AOPA badge and began a conversation with him. Turns out he is a corporate pilot for the AOPA Citation, N4GA, and was preparing to take officials of the China

Aviation Authority back to Washington. They had been visiting Summit.

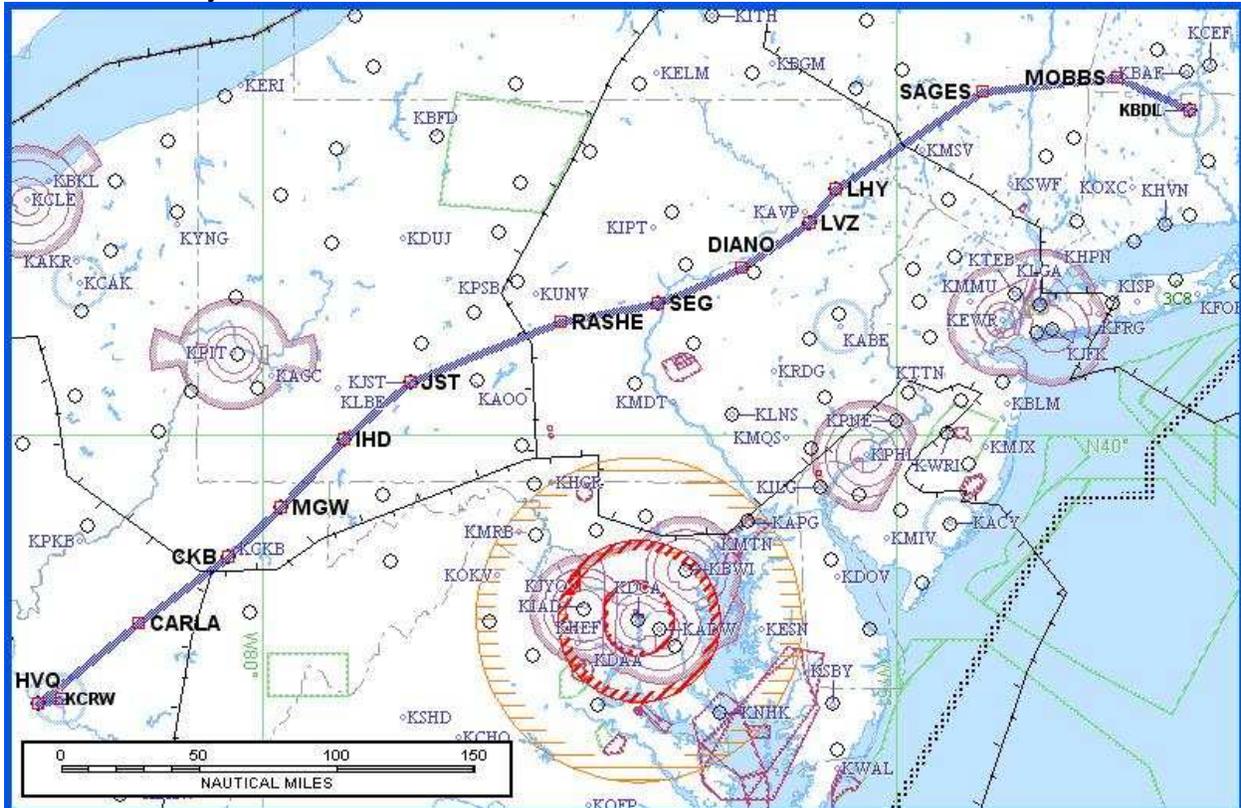
I got the weather briefing which predicted benign weather, with improving weather at the planned destination, Charleston WV. I had prepared a simple flight plan defined by VORs, and filed it. Here is the flight plan that I expected to fly.



When I got to the airplane, and did the pre-flight, I found that the stall warning light was stuck on. After investigation, I determined that there was a wiring problem that did not constitute a safety of flight issue, so I pulled the circuit breaker and placarded it inoperative per the requirements of 91.213(d).

I started the engine and during the initialization the 480 GPS reminded me that the database had expired on Wednesday evening. I had prepared for this in that I had downloaded the update via the Jeppesen Services Update Manager (JSUM) to my laptop storage drive, so that all I needed to do was to transfer the data to the database card at the airplane. It was during this reminder message that I realized that I had not yet done the transfer, so I shut the engine back down and told the line crew that I would be a few minutes. When I got JSUM running, it did not recognize my download, but said that I had 0 updates remaining. Thus, I had to call Jeppesen PC Technical support to get the update refreshed and then do the download over again. I did this by making my cell phone a WIFI hotspot, and the JSUM software then worked correctly. In about 10 minutes, I had an updated database.

I started the engine the second time, got the ATIS (VFR with a few clouds at 3,000', light winds from the south), and called Clearance Delivery for my IFR clearance. The controller warned that it was a full route clearance, and I asked for phonetic spelling of the VORs and intersections that terminated the Victor airways. What I got was "cleared to KCRW via the Bradley 9 departure procedure, MOBBS V292 to intersect V408 LHY V106 JST V35 HVQ direct, maintain 4,000, expect 6,000 in 10 minutes, departure frequency 125.35 squawk 3452." There is no way to place "V292 to intersect V408" into a GPS, so I looked up the airways on the ForeFlight Low Altitude enroute chart on the iPad and found that this intersection was SAGES. Thanks to airway routing in the 480, I was then easily able to enter all of this into the avionics. Here is the route as cleared:



If you compare this to my filed plan on the previous page of this report, it is a bit further to the North and 35 miles longer than the original plan.

Taxi was to runway 15, and I had quite a long delay while tower cleared a number of airliners for takeoff on runway 24. I was given "line up and wait" for 15, and watched a Southwest 737 takeoff in front of me just prior to my takeoff clearance. I planned to be in the air and above the wake turbulence prior to crossing 24.

On takeoff, two of the cylinders went over my 410F alert programmed into the JPI engine monitor because I had sat so long on the ground with the engine running for resolution of the clearance, the taxi, and the departure delay. I got the airspeed up and the power back, and the temperature warning was quickly resolved.

Enroute, I found a modest headwind, but I was still getting a respectable 145 knot ground speed going southwest. I tried to get some shortcuts, but ATC politely and consistently responded “unable”, until I was near SAGES and received direct LHY, a modest shortcut. Enroute I saw on the chart a published MEA of 14,000’ for the segment between SEG to RASHE. It also had an RNAV altitude of 4,000, and I was comfortable at 8,000 with no obstructions around. The controller had no information about why it was so high, and I made a note to check when I got home for a possible chart error. The route took me about 50 miles north of the Washington DC ADIZ.



The weather at CRW was pretty good, but there remained a few clouds below, and the RNAV 23 approach via the ENIVY IAF was requested and approved to get through some layers.



The flight time was 3:26, and the tach time was 3.4 hours, but the hobbs time was 4.1 hours, primarily because of all of the ground delays at KBDL.

Sunday 9/25/11:



The airport at Charlestown was built by leveling the top of a mountain and sits well above the city itself. Thus, when there are lower clouds, the airport is in them, and when I got to the airport for departure the airport was indeed in fog. However, it was thin and lifting, so I did not believe that it would be much of a delay. I got the airplane ready for departure, and was cleared as filed, and the fog was not an issue by the time I was ready to taxi.



ATC gave me a 250 heading to join the airway and a climb to 8,000'. Level at cruise with the baro at 30.04 and +14C, I measured a true airspeed of 154, but a ground speed of 128 due to winds aloft from 276 at 31 knots. I looked at the XM winds aloft and the terrain elevation and decided that it would be faster and just as comfortable at 6,000' and at 1305z requested a descent to a final altitude of 6,000'. The controller responded to expect that in about 10 miles, and it was

granted 5 minutes later. At 6,000', I set up power at the same fuel rate, got 155 knots TAS, and a ground speed of 138.



The WM weather showed a front to the west of Nashville, but the forecast was that it would remain west of the area during the day and move through during the night. I could clearly see that I was not going to be a factor for my current leg.

As I moved west, the ground speed improved and eventually was up to 156 knots by LVT on the Tennessee border at 1419z. About 30 miles from the destination, ATC gave me a pilot discretion descent to 4,000' and asked that I report the airport for a visual approach. When I reported it in sight I was cleared for the visual and tower cleared me for a left base to runway 19.

I called my son who reported that the family was getting dressed, and we planned to meet back at the airport in 1 hour, so I got the rental car and checked into my motel. There were then several VFR flights so that all 6 grandkids could get a ride, and several took turns at “driving” the airplane. On the last flight, my son who was once a CFI, but had not flown in 2 years, flew the flight nicely with just a bit of reminder coaching from me in the right seat.

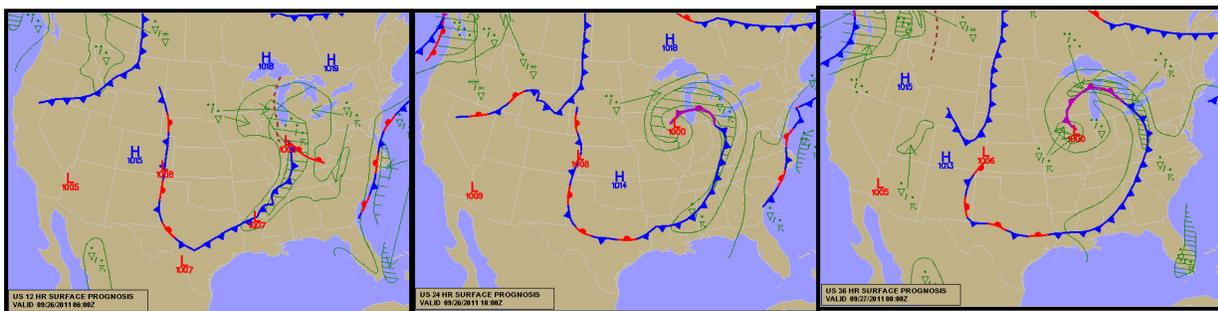




We then had a nice lunch at a local Mexican restaurant, and I spend the afternoon at my son's house.



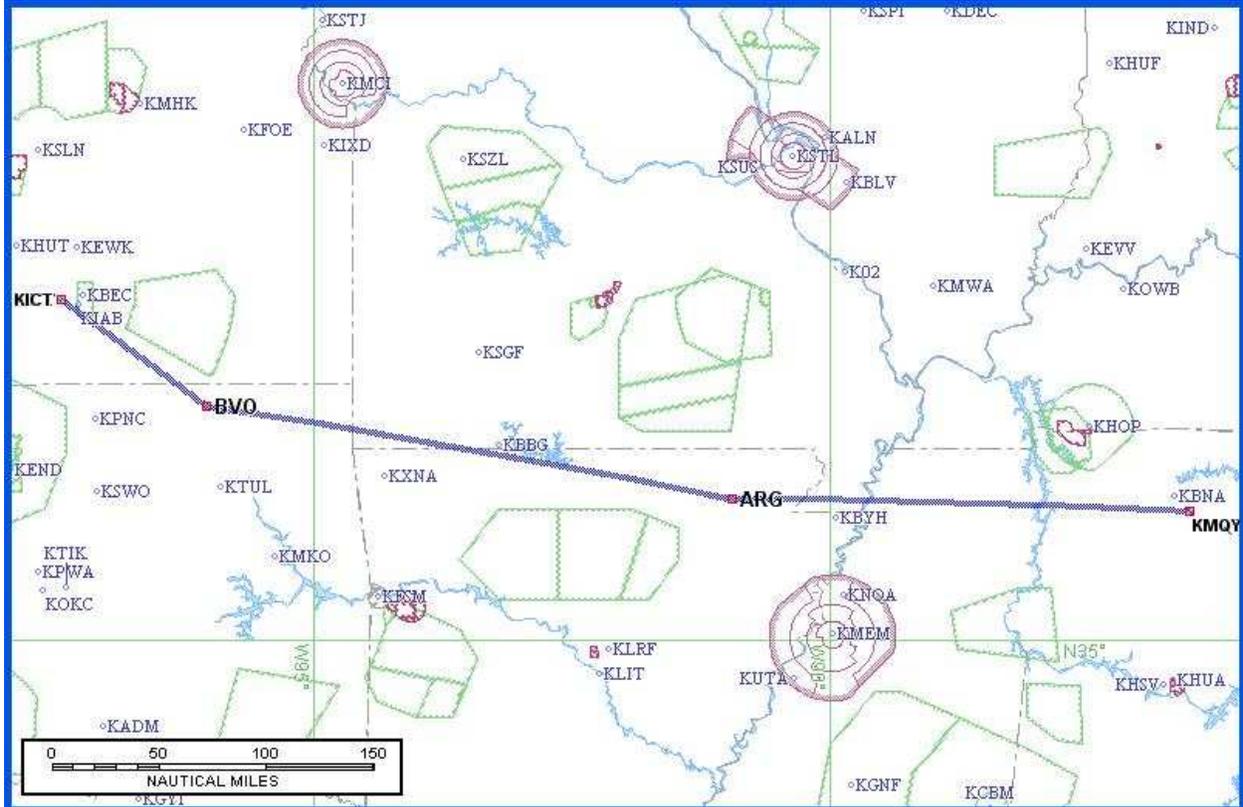
On Sunday night I looked at the weather to get to Wichita and Denver the next day. There was a slow moving front just to the West of Tennessee, and it appeared that it would move to the east during the night, leaving a relative clear path for the morning. You can see the projected progress in the prognostic charts, each 12 hours apart.



By Sunday night, I was really tired and went to bed early expecting a pretty long leg to Wichita in the morning.

Monday 9/26/11:

I planned this simple route to Wichita:



When I looked out the motel window on Monday there was rain and wind, so it was clear that by 6am the front had not yet passed. Yet, the radar report showed most of the weather to the north, and the airport was reporting light rain. Nashville (22nm to the northwest) was reporting heavy rain and its TAF predicted temporary periods of heavy rain from 5am to 7am. This looked good for my planned 8am departure.



Indeed, when I arrived at the airport, the rain had stopped. KMQY was IFR with a 600' ceiling, and light rain reported, but most of the front was to the north, and I was going west. I completed my runup and was cleared as filed for a takeoff on runway 32 and expected a turn to the west. However, ATC requested a departure turn to 090! Nashville departure then turned me north right into the remaining weather.



I listened to a number of Southwest jets inbound requesting deviations for weather, and I joined the chorus, having seen on XM NEXRAD (notice the red on the XM chart to the left...) that I did not want to go further north. I negotiated crossing of Nashville almost directly over the airport at 6,000'.



When I got about 20 miles to the west, I was out of any significant weather, and by 30 miles west I was in nice VFR with increasing pressure. Total time in IMC for the flight was 0.4 hours.

At my filed altitude of 6,000 the ground speed was not very good, so I requested and was granted a descent to 4,000 where the groundspeed was 133.



When level, I looked ahead to the next leg and discovered that XM showed a Presidential TFR over Denver. It was not yet active, but I then investigated, and was relieved to find that it was to be active on Tuesday afternoon from 1pm to 5pm. This would have no impact on me, as I had planned to spend Tuesday on the ground with my parents.



I crossed the Mississippi river about 1:20 into the flight, and shortly thereafter ATC modified my flight plan by inserting the FLP VOR due to "low radar coverage". Then I was asked to climb back to 6,000 for traffic and about 2 hour into the flight ATC reported radar contact lost and began requesting various position reports.

About 2:15 into the flight, ATC gave me direct KICT (Wichita), and asked that I climb to 8,000. The ground speed was

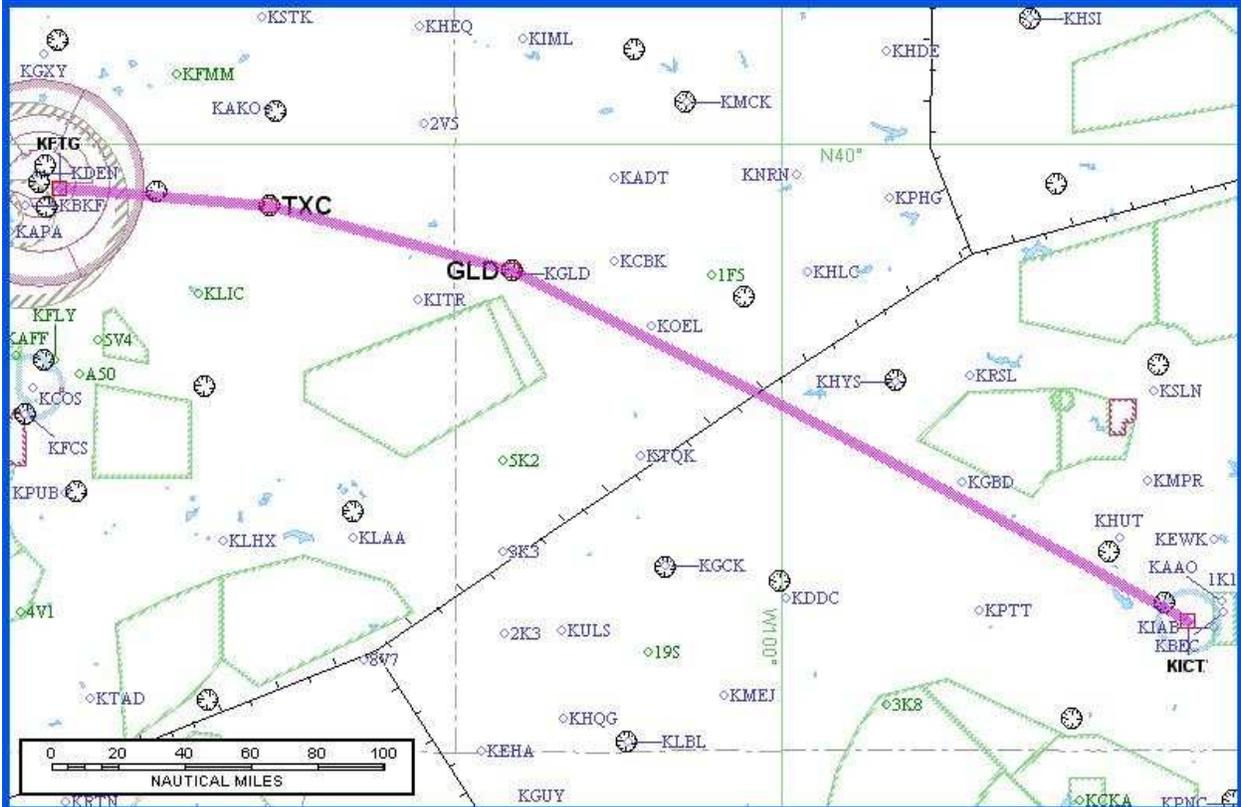
128 at that altitude, but was increasing as I proceeded west, and by 2:30 into the flight I was up to 143 knots over the ground. I listened as an aircraft was broken off an approach into Springfield Missouri because of a bird on the runway that airport operations could not locate. It had apparently been hit by a previous arrival.

About 25 miles east of Wichita I reported the airport in sight and was given the visual approach for 19L. I flew over McConnell AFB, and notice the Dreamlifter on the ramp. About 12 miles east, I was cleared to land by the tower, but on the downwind I offered to extend it so that a business jet could get out. The pilot was most appreciative.



At the Yingling FBO, I discovered that they are the US final assembly facility for the Cessna Skycatcher LSA. There are several large windows from the FBO into the assembly facility where you can watch the workers. I met a cousin and delivered a sewing machine from my grandmother, and then we had lunch at a local Mexican restaurant.

For the second leg to Denver, I knew that I eventually would need 10,000', but I wanted to stay as low as possible to minimize headwinds, so I filed at 6,000, and was cleared as filed.



About 20 minutes into the flight at 6,000, I had a ground speed of 150 knots, but the turbulence from thermals was significant, so I requested 8,000. This was smooth, but cost me 10 knots. About 1:30 into the flight at 8,000 it got bumpy again, so I requested a climb to 10,000, and the groundspeed was still a respectable 140 knots.



KFTG at Denver was clear with winds from the north, so I was given the visual approach to runway 35, and then a long taxi to the FBO. The rental car was waiting, and I drove to my parents care facility and had dinner with them.

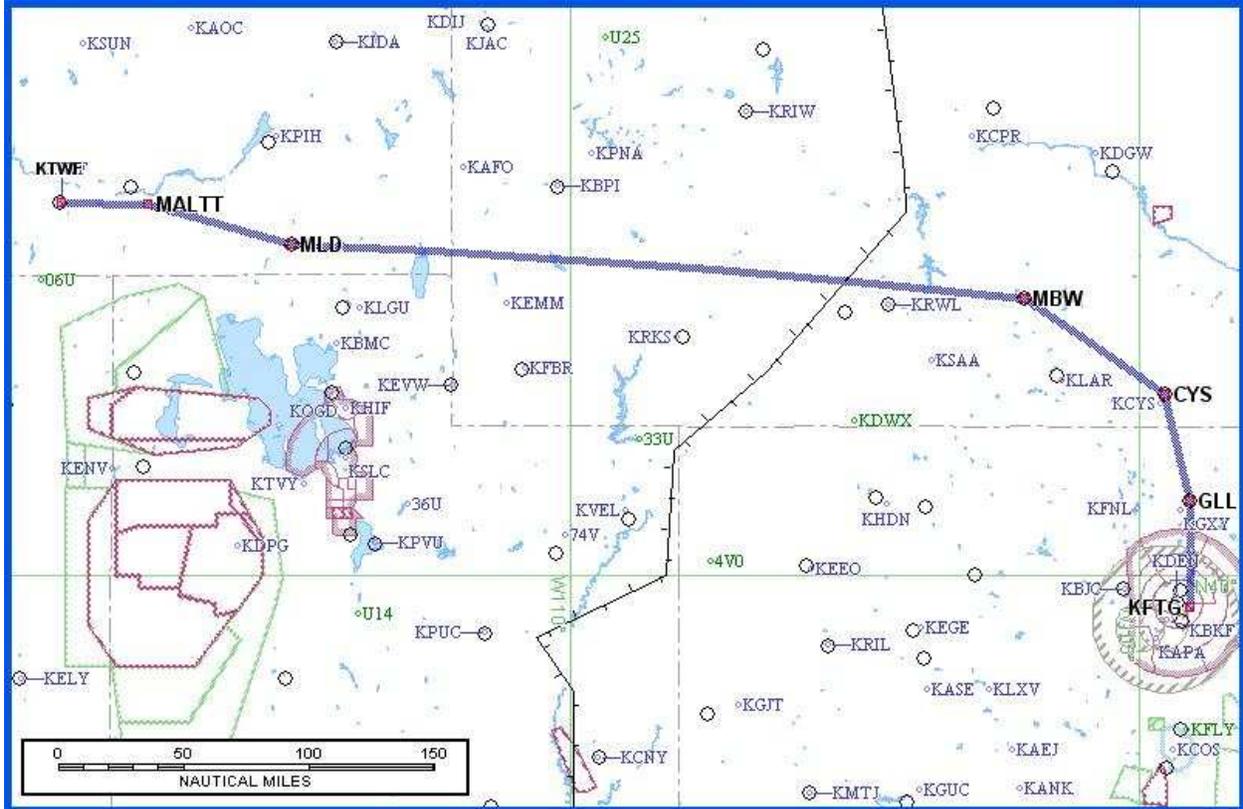
Tuesday 9/27/11:

I spent Tuesday with my parents and no flying was planned, nor was possible, due to the Presidential TFR over Denver.

Wednesday 9/28/11:

The final day of the trip was VFR weather and relatively light winds. I programmed the Garmin Nüvi auto GPS to take me back to Front Range airport from the motel, and asked for a “via” waypoint for breakfast and fuel. It turns out that a Shell station had an attached McDonalds so this was convenient. The Nüvi quickly did this and sent me on my way.

My clearance from KFTG was a full route clearance, and was Radar Vectors to the Gill (GLL) VOR, V611 CYS, V138 MBW and then as filed.



KFTG tower assigned runway 17 for takeoff and I climbed to 8,000' per the departure clearance. Denver departure vectored me to the east and north of KDIA, and then sent me direct to GLL. At 10,000 at a density altitude of 11,800', the Comanche gave me 152 knots true airspeed, and the headwind was not too bad at 12 knots. About 25 minutes into the flight I requested and was granted direct MBW, but got a climb to 11,000'. Again the winds aloft were not too bad.

16 minutes later, I was assigned 12,000' for terrain, and when stable checked my oxygen saturation which was at a comfortable 93%, but I turned on the supplemental oxygen. I eventually negotiated VFR-on-top at 12,500 direct MLD. I did have to climb briefly to 13,500 to maintain IFR separation over some terrain.



There were some interesting features along the route including this string of power generation windmills, with one that apparently blew over (lower center).

I crossed Bear Lake and found the Great Salt Lake some 30 miles off my left wing.



The leg took 3:59 and I landed at Twin Falls ID for lunch.

The final leg home from Twin Falls was cleared as filed using V253 to BOI and V4 to SEA. Most of the leg was flown at 10,000' but from Pendleton to Yakama I requested and was granted 8,000 where there was essentially no headwind and the groundspeed picked up significantly. At Yakama, approach sent me back up to 10,000 for the crossing of the Cascades. Mount Rainier was initially visible 200 miles from Seattle, and I crossed about 10 miles north of it on V4 for the descent into Boeing Field. I was given vectors for a visual approach, and ATC asked that I keep up a 190 knot ground speed during the descent as long as practical, as a Boeing 737 military derivative was to follow me. The second leg took 3:10.

The total trip took 38.5 hobbs hours. I flew in actual instrument conditions for 3.1 hours, less than 10% of the trip.

