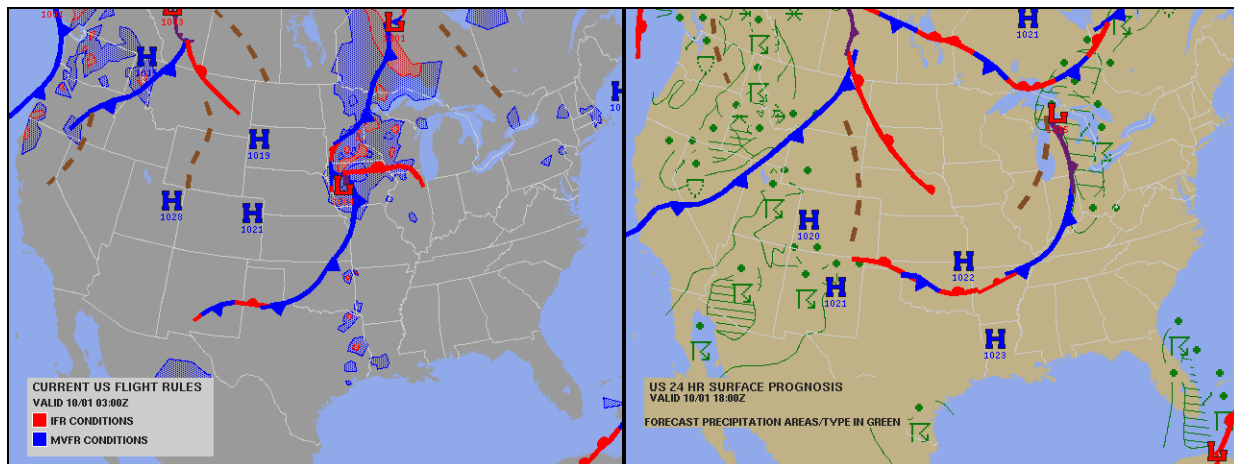


## AOPA EXPO 2007 Trip Report

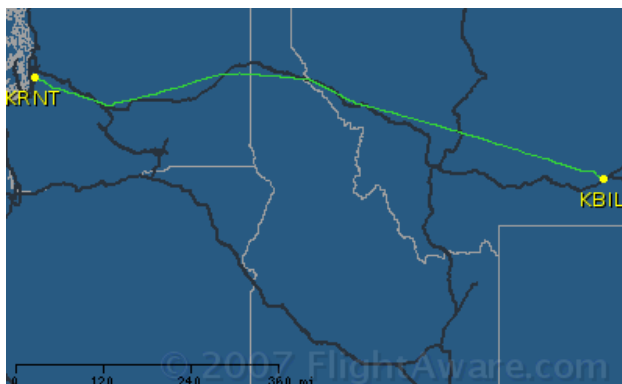
Howard Wolvington, BEFA Past President

My trip to AOPA EXPO 2007 started on Sunday 9/30. The overall plan was to fly 5 legs of about 3 hours each to get to Danbury Connecticut for the convention. The first leg on Sunday was to get me to Helena MT, and then on Monday I'd fly 2 legs to get to St Paul MN to visit with an old college professor. Then on Tuesday I'd fly 2 legs to get to CT.

The plan is always subject to weather, and on Saturday a big cold front came through Washington lowering freezing levels and dumping rain. I was unable to leave before it because of weekend obligations, so I had to wait until Sunday afternoon for departure. When it was time to depart, there was copious rain with the visibility down to 5nm at Renton. The ceiling was high, 5000 overcast, but Stampede Pass reported fog and low ceilings, so a VFR crossing of the Cascades was impossible. The freezing level was 8,000' and there was a PIREP of light mixed icing from a PC12 at 9,000' over the cascades.



Since all of this weather was moving East, I decided that Helena was too close to the weather and reasoned that even if I could get there, it might be overcome by the weather as I slept Sunday night. So I changed the plan to a leg to Billings MT which is further East in just past most of the highest problems areas in the Rockies. From the METARs, it appeared that if I could get to Missoula, then I could get as far to the east as I wanted.

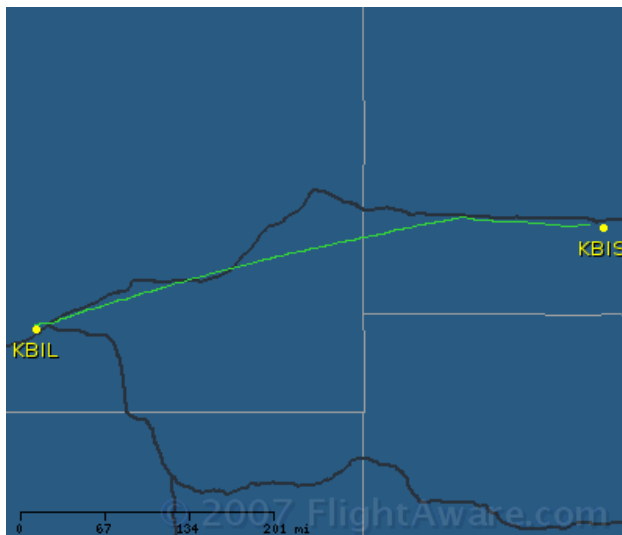


I filed for 8,000' with a plan that if I started to get ice, I'd turn around and come back to Renton. The initial clearance was for 9,000', the normal altitude eastbound, and I took off just before 2pm. I asked the departure controller for 8,000 because of potential ice, and this was granted. At 8,000' over the Cascades, the temperature was 1°C with lots of carb ice,

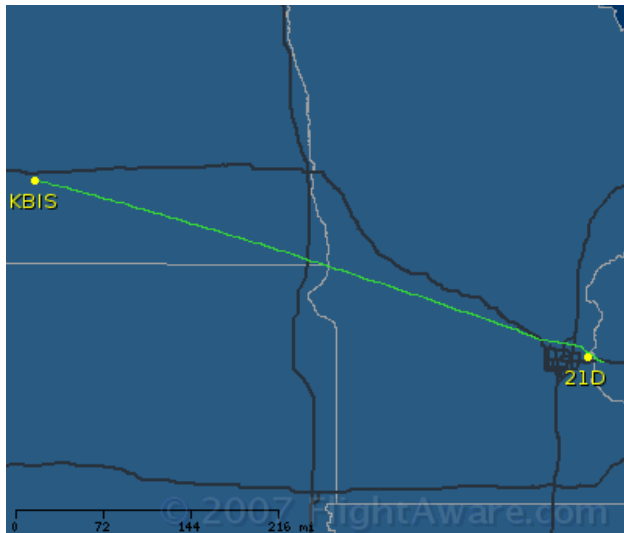
but no airframe ice. My usual route to Montana is Direct Missoula (MSO) from Ellensburg (ELN), and this requires 12,000'. However, since I was still IMC at ELN, I thought that the climb to 12 would produce ice, so I requested V2 to BIL, and planned to stay down on the airways. At Spokane, I had to climb to 9,000', and the temp went to -1°C, but I was just at the bottom of the clouds and could usually see some ground, and got no ice.

At 10 west of Mullen Pass (MLP) I had to climb to 10,000' and picked up a trace of ice (legal in my airplane) on the cowl and windshield, but I could not see anything on the wing. As I proceeded east it continued to warm and improve and by 40 west of Missoula the weather broke up to clear skies. I was able to climb to 11,500 VFR-on-top, and requested and was granted direct Billings, 252 nautical miles ahead. The Density altitude was 12,447', TAS was 147 knots, and I had a nice tail wind giving me a ground speed of 177 knots.

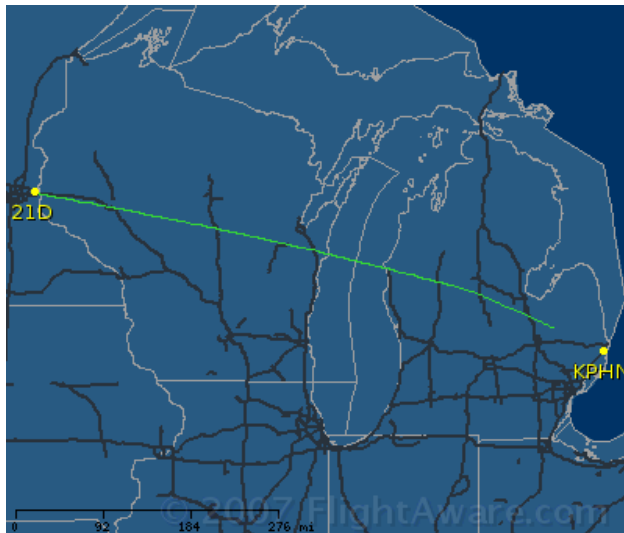
I landed after a flight time of 3:38, covering 597nm on 55.3 gallons of fuel with an average ground speed of 166 knots. The FBO at Billings was great. When I opened the airplane door, the line crew took my hotel phone number from me, and had a shuttle van delivered to pick me up for my hotel.



On Monday I departed Billings for 21D - Lake Elmo (St. Paul) MN via Bismark ND at about 9:00 a.m. The flight was uneventful in VFR conditions. I selected 9,000' and was getting 153 knots TAS with a density altitude of just under 11,000'. The average ground speed for the leg was 162 knots. Execair Taxi Corp, the FBO at Bismark was another excellent FBO. While they serviced the airplane, they loaned me a crew car to get a sub at the local Erbert & Gerbert's. It was very good and in no time I was back at the FBO for a quick rest break in a very comfortable pilot lounge.



The second leg was also mostly VFR conditions. I did get an ATC instruction that made me think. It was to cross 25 west of the GEP VOR at 5,000'. It took some quick calculations to determine that I should start down at 50 miles, and plan to drop 1,000' for each 5 miles of distance. Lake Elmo was reporting 1,900' overcast, so I had to fly the GPS 32 to get into the airport. There was a radar vector around Minneapolis airspace to get to the east side for the approach.



On Tuesday I completed the final two legs to get to Connecticut. My fuel and lunch stop was Port Huron MI. I was cleared via radar vectors and shortly after departure was given direct MBS (Saginaw) which was in my plan, but over 350nm to the east. Eight minutes after departure I entered IMC and while the XM weather showed no problem ahead, it became very bumpy and wet. This continued to get worse and I would see the weather developing right behind me on XM. While I got past it without incident, the XM eventually showed substantial convective activity, storm cells and lightning, and ATC started vectoring jets around the area.



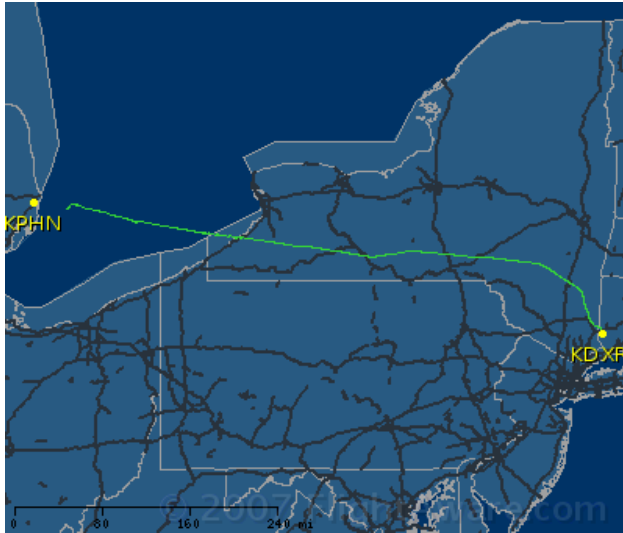
Within a few minutes, I flew out of the weather and was on top of an overcast layer for the balance of the flight, and did not get to see Lake Michigan.

I gave some thought to my crossing of Lake Michigan. At the point of my crossing, I was at 9,000' and estimated my glide distance at 15 nm. The lake is

about 56 miles wide at this point, and I was getting a ground speed of 188 knots. Thus, my crossing would be about 18 minutes and there would be a 26 mile area where I

would be unable to glide to shore in the event that the engine might fail. However, I judged this 8 minute risk to be acceptable, and the Lycoming literally “did not let me down”.

The weather at Port Huron was 2300' scattered and 2800' broken, and ATC was able to vector me under the clouds for a visual approach.



Getting a clearance out of Port Huron, a non-towered airport, was difficult. There was a published ground communications frequency, but it did not appear to work. I elected to depart VFR and tried to pick up my clearance in the air. However, departure sent me to Toronto center to get the clearance since I was about to enter Canadian airspace, and it took them a while to get me IFR. After some initial vectors, I was finally cleared “as filed” and proceed east at 9,000'. Just under an hour into the flight the cloud tops were rising, so asked for higher multiple times to avoid the bumps. I eventually got to

17,000' where I was still in the clear (and on oxygen of course), and the temperature was -4C. At 15,000 I measured a true airspeed of 151 and still had a nice tail wind.

Boston approach then changed my clearance. I received Direct Rockdale (RKA) and then the NOBBI Four arrival into the New York area. This was easily done with the Garmin 480 once I figured out how to spell everything. Near Danbury, New York Approach took me off the arrival and sent me direct to the airport for the visual approach.

The great circle distance from RNT to DXR is 2,092 nm. The total flight plan length of the 5 legs was 2,167, flown in a total time of 13:33 on 206 gallons 100LL. The average ground speed was 160 knots.

On Wednesday, the day before the conference, I was able to spend the day visiting Edwin Taylor (a pilot friend and organist) and his wife Faith, and touring the area with my sister, Nancy, who drove up from New York. During the morning, we drove CT country roads in her new Cooper Mini. In the afternoon we had a short sightseeing flight.



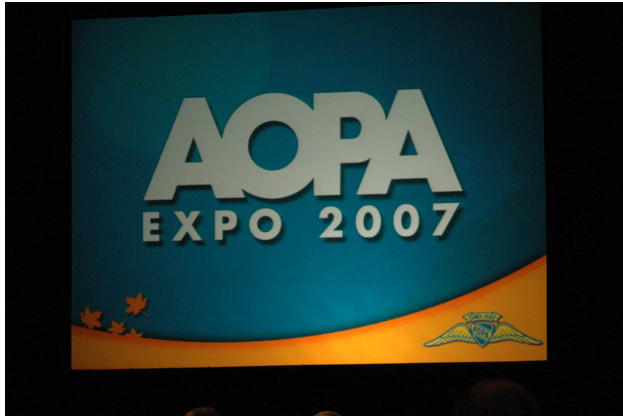


The flight included “steep turns around a point” (for photos) over the First Congregational Church of Fairfield where Edwin is the Director of Music. The evening activities included playing both of the two grand piano’s in the living room.

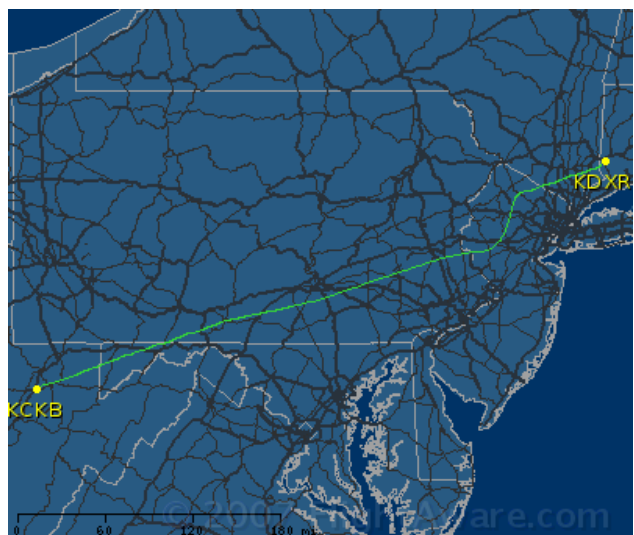


The AOPA conference itself was excellent. The general sessions covered critical topics including Airport land use issues and of course User Fees. I attended several educational seminars, including an excellent one by the Executive Director of the Cessna Pilot Association (which I joined) on engine operating techniques for long life and good performance and economy. I visited the Exhibit hall and purchased an oxygen mask with microphone to use in the new T210, and some GPS training references. At the aircraft exhibit at nearby Hartford-Brainard airport, I viewed many new aircraft, including the Light Sport offering from CIRRUS.





On Saturday night I was supposed to fly a private client and his wife from Plainville to dinner on Martha's Vineyard (KMVY) in his Piper Navajo Chieftain. However by 5pm KMVY was becoming enclosed by fog. You can't argue with this, so we settled for a VFR flight to Republic Airport on Long Island for an excellent dinner at the "56<sup>th</sup> Fighter Group", an on-airport restaurant. The Atlantic FBO loaned us a new Camry as a crew car to get to dinner. We arrived back at Plainville well after dark, and I was glad to have someone else on board with local knowledge for the night landing at this airport that has no visual approach slope guidance.



On Sunday morning, I started the legs back home. The task for the first day was to get to Nashville, where my wife was to join me for visits with our son and his family. The first leg was challenging because of a Presidential TFR enroute. I had selected a simple VOR to VOR route that stayed north of the TFR, but the clearance came back as a full route clearance involving VORs and airways that were completely foreign to me. The actual clearance was "Direct Carmel V39 Sparta V249 Solberg V30 East Texas V39 Martinsburg V166 Clarksburg" (CMK V39 SAX V249 SBJ V30 ETX V39 MRB V166

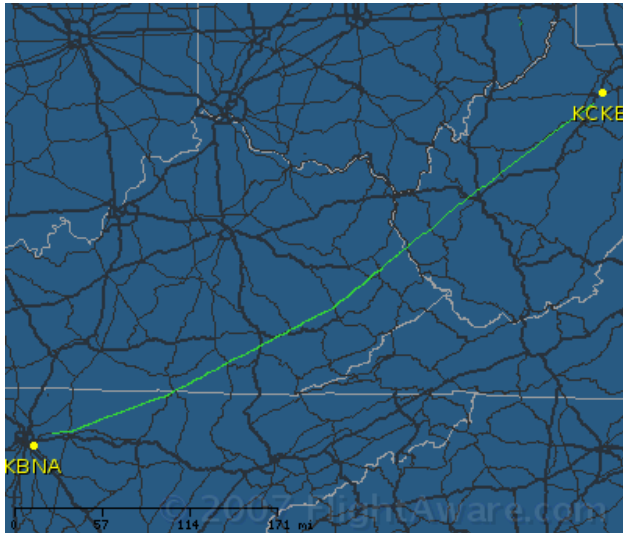
CKB). To copy and readback this clearance, I had to ask the controller for the phonetic spelling of the terminating VORs. Then it took a few minutes to find everything on the low altitude enroute chart and to reprogram the GPS receivers.

As soon as I was in the air, departure control started to change the clearance, and about 45 minutes into the flight they threw out my careful programming and gave me direct SCAPE HGR MRB V166 CKB. The Presidential TFR consists of a 10nm inner ring where no flight is allowed and a 30nm outer ring where aircraft may fly if on a discrete transponder code and ATC monitoring. I soon realized that ATC was assigning me a route through this outer ring!





I checked with ATC to confirm that they really wanted me to do this, and even suggested an alternate route that was further away from the inner TFR ring, but the controller indicated that he was required to assign the route. Meanwhile, I was listening on 121.5 to several intercepts by USAF F15s of VFR pilots who had flown into some portion of the TFR. I felt sorry for these folks, and you could tell from the dialogue that they no idea that there was a TFR in place. Finally, ATC gave me a more direct route out of the TFR outer ring. Soon I was in Clarksburg WV for fuel and lunch.



The second leg to Nashville was uneventful until I landed. Then I asked for a progressive taxi to the Signature FBO (since I did not know where it was located on the airport.) The fun part was the taxi on a bridge that goes over a highway. I had in previous years viewed this from a car below, but it was different from the airplane above. The FBO provided outstanding service. The FBO is clearly used to dealing with the jet crowd. When a nice lady came out with some window cleaner, she asked "Captain, may I clean your windshield?" My AVIS rental car was driven right to the baggage door of my

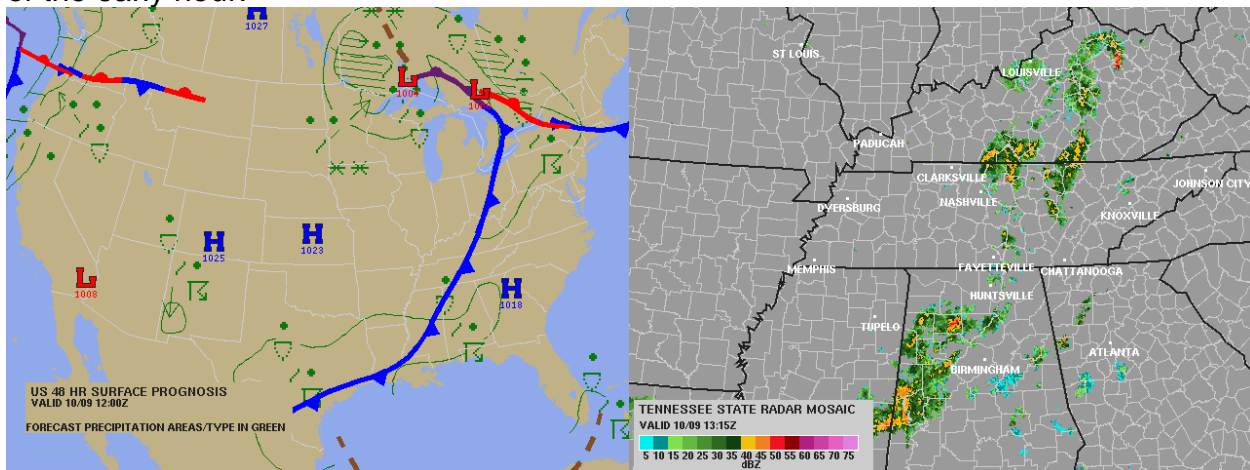
airplane, and the line crew loaded all my stuff in the back, gave me the keys, and sent me off.

I met my wife Jean upon her arrival from Seattle via Denver on Frontier, only to learn that she had a severe cold. She said that the descent for landing was quite painful and that her ears were congested. We had dinner with my son Matthew, his wife Cathy, and the 5 grandchildren.

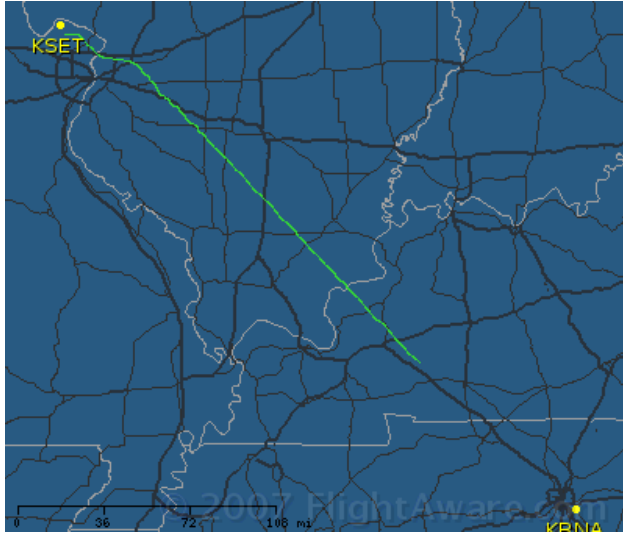
The plan for Monday was to meet at the Shelbyville airport so that my son Matt (also a pilot, but not current) could give some of his kids an airplane ride. I departed BNA VFR with Jean and made the short trip to Shelbyville. I stayed low and minimized the descent rate, and Jean had no significant problem with her ears. Matt arrived with family for the flights, but it turned out that only 2 (Austin and Melia) of the 5 wanted to go. Matt attempted to get Jacob into the airplane, but Jacob just did not want to fly at the time. Jean stayed on the ground with our most recent granddaughter, Kathryn, and Christine supervised the baby carrier.



On Tuesday, Jean and I left Nashville to fly to Des Moines to visit with my daughter's family. I was very worried about a cold front that was approaching and had hoped that it would pass through during the night, leaving us on the back side. It was not to be so. When we woke up on Tuesday, I found that it was right over the area, but fortunately most of the energy had dissipated, and there was not much convective activity because of the early hour.

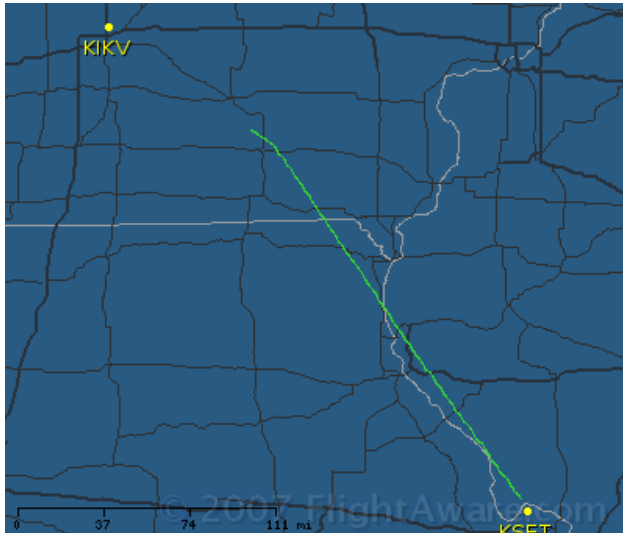






I changed my route to proceed northwest out of Nashville, as this appeared to miss most of the remaining cells. Nashville did have a 1,500' broken ceiling, but we took off and punched through it in no time, to find pretty good VFR weather as we proceeded northwest. Jean wanted the back seat so that she could stretch out and sleep, as she did not sleep well the previous night due to her cold. I picked 6,000' as a compromise between her cold and a desire to have flight without turbulence.

As we approached the St. Louis area, I asked for, but was denied, a "pilot discretion" descent. Then later ATC demanded a descent from 6,000' to 4,000' that was quicker than what I wanted, so Jean's ears hurt again when we landed. It was some consolation that she said that the pain was slightly less than the Frontier descent into BNA. Self service fuel was only \$4.02 per gallon, and we had a nice lunch at the airport diner that is operated by a former Boeing employee. (We had eaten there before.)



After lunch, we departed for Ankeny Iowa, a suburb of Des Moines. I wanted to stay low because of Jean's ears, but the turbulence got too bad and she asked for higher. It was OK at 7,000'. At this altitude, we had a 50 knot headwind and were getting only just over 100 knots ground speed.

Jean elected to stay in the back seat and for in-flight entertainment used my Pocket PC and her Sudoku book.



I was able to get a nice slow descent, and Jean had no pain in her ears on the landing.

Before dinner there was a sightseeing flight with my daughter (Sandra) and my two Iowa grandchildren (Rebekah and Joshua). Included were the mandatory “G turns” that they love.

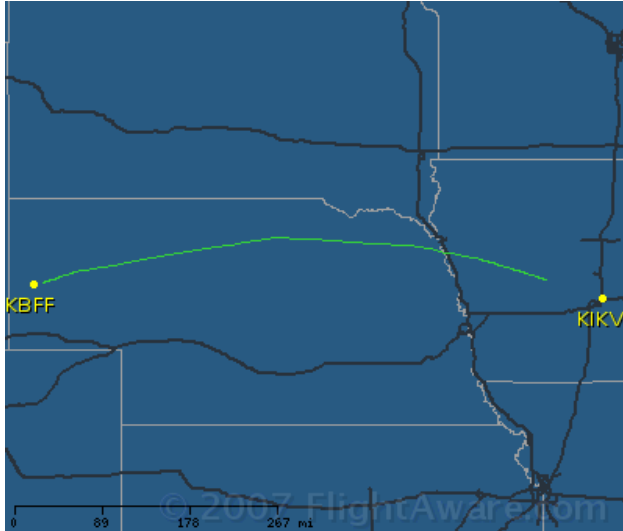




At dinner there was a surprise birthday party (for my previous month birthday), and lots of fun with our family.



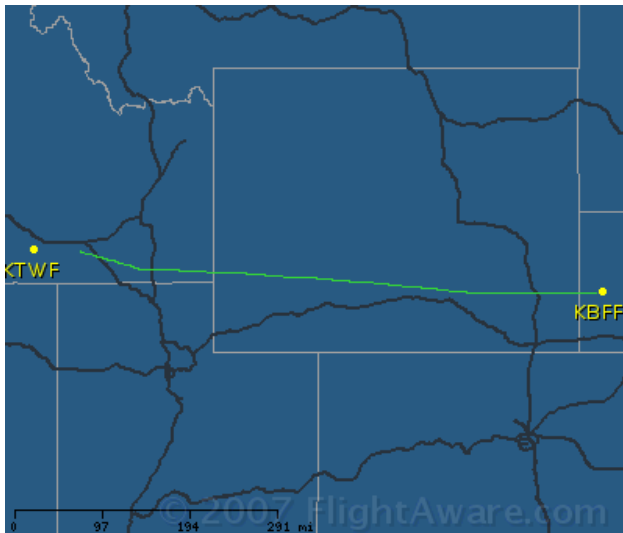
Jean stayed in Iowa to spend a few more days with the family, but I needed to depart on Wednesday to get back to Renton for other scheduled activities.



I departed Ankeny into scattered to broken clouds at 3,300'. My routing was initially "as filed" to Scottsbluff NE, and I selected a low altitude (4,000') because of adverse winds aloft. However, this had me in bumpy clouds, and a climb to 5,000' got me in smooth air on top. Much of the trip was not in radar contact, so I was required to provide position reporting over the compulsory reporting points. Further, ATC eventually put me on airways, so this again required a bit of GPS reprogramming. The ground speed was down around 130 knots early in the flight, but improved as I proceeded west

towards my fuel stop.

Valley Airways, the FBO at Scottsbluff, lived up to its reputation and my expectations having read the reviews on [www.airnav.com](http://www.airnav.com). It is a beautiful new facility, with a prompt and courteous line crew, and you can walk inside from the FBO through the commercial passenger terminal to a nice restaurant that had a good soup and salad bar that was just perfect for lunch.



The most uncomfortable leg of the trip was from Scottsbluff to Twin Falls ID. I filed at 10,000 because of strong headwinds aloft and was cleared "as filed" through Medicine Bow (MBW) and Malad City (MLD). However, to remain as low as possible, I requested and was granted a "VFR-on-top" clearance at 10,500 to go direct from MBW to MLD. This saved quite a bit of time, but this altitude was very bumpy with constant light turbulence, and an occasional moderate jolt. I eventually had to climb to 12,500 for terrain. There was a large forest fire south of Bear Lake that I reported.



When approaching Twin Falls, the weather reported visibility down to 4nm in haze, so I asked for direct to an initial approach fix to set up for a straight-in ILS approach to runway 25. I got to the airport at the same time as a cold front. This cleared up the haze, but resulted in 20 knot winds that were gusting to 40! The approach was converted to a visual approach when I reported the airport in sight, and I observed a 50 knot difference between my indicated airspeed and the

groundspeed when I was on final approach 1,000' above the airport. I took this picture when on about 4 mile final on the ILS.

After landing, it was rather strange to still see an airspeed indication when I got on the ground with the airplane at a crawl for the taxi to the FBO. As soon as I got into the FBO, the winds took out the electrical power to the airport. The "Happy Landing" restaurant in the terminal building had the advantage of being on the airport emergency generator, so I had some fish and chips while I waited for the front to blow through.



The weather improved for departure, but the challenge for the last leg was to get home without icing. I departed TWF at 10,000' "as filed" on V4 through Boise, Baker City, Pendleton, and Yakima, but near Boise started to pick up some rime ice with an outside air temperature of 0°C. A Skylane was reporting icing at 12,000' ahead of me, so I decided that a descent was a better choice versus a climb to above the clouds. When I asked for it, I was quickly given 8,000', and that fixed the problem. I continued at 8,000' and flew through one significant rain cell over Boise (which was down to 1 ¾ nm

visibility on the ground) and came out the northwest without ice. For the Minimum Enroute Altitudes long the route, I climbed first to 9,000' and then back to 10,000' with some deviations around rain cells and without a problem. From Baker City the weather improved, and I was on top of most of the clouds at 10,000'. I elected to climb to 12,000' to stay on top and then asked ATC for a top report for the Cascades. They did not have one, but got one from an airliner that reported that they broke out on their climb at about 14,500'. Thus, I decided to climb to 16,000' to stay clear of the clouds for the crossing, as it was getting dark, and I was not sure that I would be able to see the clouds. At this



altitude, the outside air temperature was -12°C. There was a nice sunset as I approach the Cascades.



Renton was reporting scattered clouds at 2,900' and 7,000', so I was confident that I would be able to descend through the clouds on the west side of the Cascades with minimal icing. This worked exactly as planned. On the descent, at a rate of more than 1,000' per minute, I entered the clouds at 9,000' and -1°C, and the rime ice started to form. However, less than 3 minutes later I was down through 6,500' and the light ice that had formed came off the airplane. I asked for and was given the visual approach, and Renton tower cleared me to land runway 15 when I was 5 miles southeast over Lake Youngs. I touched down at 7:14 p.m. PDT, 50 minutes past sunset.

The flight plan length of the 7 westbound legs was 2,570 nautical miles, flown in a flight time of 18:39 on 275 gallons 100LL. The average ground speed was 138 knots.

The trip total was 4,736 nautical miles, flown in a flight time of 32:12 using 480 gallons of fuel. The trip average ground speed was 147 knots.

The AOPA EXPO for 2008 has been scheduled for November 6-8 in San Jose, CA.