

Trip write-up

I recently moved to northern AZ from central Illinois. In order to complete the move, I got to make a great trip in my RV.

Trip Prep

I knew that I had a lot to learn because my destination (northern AZ) is very different in topography and elevation from what all my flight hours up to this point have been (central Illinois). After a short wait I secured a ramp parking space for the plane at an airstrip in the mountains with an elevation of 6700'. I started reading anything I could find on mountain flying principles. The most helpful resource I found was the "Mountain Flying Bible Revised Edition" by Sparky Imeson which I read cover to cover and used extensively in preparing for the trip. I also started soliciting routing advice from anyone I could ask. I asked on the Van's Air Force forums online and received a lot of helpful tips and landmarks. I asked local pilots at my intended destination and I asked the experience of people in my EAA chapter 563 who had flown out west. All of the input was helpful and moved me from concerned about the trip to excited about it. I started scouting for a good weather window across half the country for my route of flight. Once I found one, I booked a one-way commercial flight back to Illinois and began to get the plane ready for the flight.

Trip Complications

I suppose complications are inevitable – regardless of the planning that goes into a trip of this length. On the morning of my departure, I showed up to the airport prior to sunrise. My plan was to preflight in the dark and then be wheels up by sunrise. My preflight held a surprise for me. Despite having flown just fine the day before, during preflight, my autopilot roll servo failed. Any attempt to engage the autopilot returned error messages about a failed roll servo. I unscrewed my access plate in the wing and checked connections. Echoing through my head was the sage advice given to me multiple times in the EAA hangar, "It usually is something simple". Unfortunately for me, it was not something simple to repair. Having checked the connections and re-seated them several times, I still had no autopilot available. Now an hour later than I intended to leave and still on the ground I had a decision to make. I could cancel the trip in light of this change. I would forfeit my weather window and of course the expense incurred up to this point in getting back to central IL to fly out. Or, I could press on with the proposed 10 hours of flying time knowing that I would have to hand fly the whole thing. My evaluation considered these factors:

1. Losing the autopilot is not a flight safety issue necessarily. I decided that I do not like the flight safety margins of single pilot IFR flying without an autopilot – so if I elect to continue then I am ruling out filing IFR at any point. If IFR conditions develop I will have to wait it out on the ground.
2. No autopilot will mean that fatigue will enter into my pilotage much earlier than normal. But, I planned the trip to take two days and I had separately thought out different stopping points for my first day. If I elect to continue I have to coach myself to pay attention to my level of fatigue and be willing to stop early if needed.

I decided to continue and went wheels up around 7:30 central time (I am sure I should be telling you that time in Zulu time – but I cannot for the life of me keep zulu time conversions straight!)

Trip Leg 1: 3MY to KUKL to KEMP

I completed my first trip leg flying at 8500' with the speed and fuel economy that has made me love my RV. The morning air was smooth and most of the flying required only a light touch on controls to maintain heading and altitude. I landed at KUKL in Kansas. While refueling, I asked the repair tech there if he had any experience troubleshooting a roll servo. He replied that he did not work on avionics but that there was a Garmin repair shop in Emporia – one airport over. After calling the Garmin repair shop (Airtronics in Emporia, KS), they agreed to take a look at it for me. I took off from KUKL for KEMP optimistic and hopeful. But, I also took off poorly prepared. I had not looked at any airport information for KEMP – I figured I could just enter it in my flight plan and go. My lack of knowledge about the runways and frequencies briefly put me behind the airplane and led me to call out, not one, not two, but three different runways I proposed to land on over the CTAF. Not too bad considering there are only four options at KEMP! Fortunately, there was no one else in the pattern and so my chaotic poor preparation only rang out on the radio at the FBO. I landed, and got to work with a great repairman testing my servos. I cannot say enough good things about this shop who fit me into their already booked schedule and were friendly and helpful. However, after testing wire continuity, we determined that my Garmin roll servo was, in fact, the actual problem and so I would have no autopilot for the whole trip. This little detour cost me another 1.5 hours and did not repair the plane. Bummer.



Trip Leg 2: KEMP to KDHT

I departed Emporia, KS at close to noon. The extra 2.5 hours I was behind schedule would come back to bite me on this leg. The heat and wind had time to build up. I met a cloud deck at 8500' cruise near Wichita. I could tell that climbing to 10500' would not get me all the way above it. Since I did not have oxygen and was unwilling to file IFR with no autopilot – I had to drop down to 6500. For the next two hours I bumped along under the clouds. I have never gotten motion sick in my life – but this leg of the trip got me as close as I have gotten. A swirling 35 kt wind plagued me, hampered my progress and generally beat the crap out of me. I looked wistfully at the nice lunch sandwich I had brought with me, knowing full well that there was no way I could let go of the stick in the bumps long enough to actually ingest it. Around this same time, I realized the desolate nature of these big stretches of country. I stopped even hearing chatter from flight following. It was just me - hungry, motion sick, and hot. Remember – we do this flying thing for fun! As I got close to my destination, KDHT Dalhart, TX the radio silence began to concern me. I switched over to guard frequency after not receiving a response to my radio calls. I must have missed a frequency handoff – because sure enough the controller broadcast my tail number on guard and told me a new frequency to contact. Having re-established contact, I started into KDHT. The wind was almost straight down the runway. I broadcasted my intentions and discovered there was no one else even thinking about flying in the 20G32 wind that afternoon. I decided to make a long straight in rather than flying the pattern. I went straight in at such a slow pace and landed at 3991' elevation. The CTAF informed me that the DA was all the way up to 6200' – did I mention I was hot?

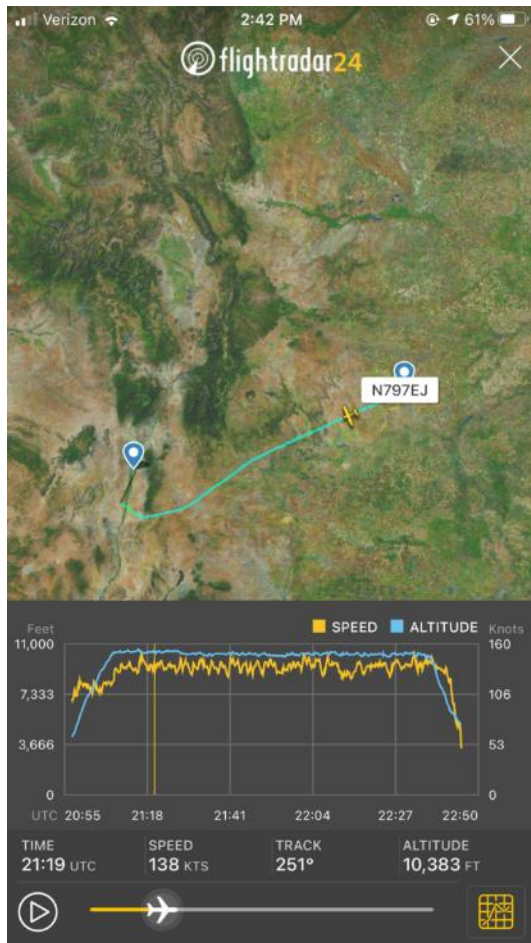


Regroup and plan

Safely on the ground at KDHT, I considered overnighing there. I got a great mental boost when Greg texted me and said that they had been watching my progress on flight tracking and they could not believe how slow that long straight in was! Tim texted congrats on my arrival in TX and other friends started texting me as well. Real time flight tracking is kind of amazing. Good natured ribbing from many friends by text that also reminded me of a whole community within aviation cheering you on each step of the way. The next proposed leg would involve flying near mountains that are 7500' elevation. As a result, the GPS direct routing that is so normal in the Midwest would not be appropriate for the next leg. I setup my plan to fly point to point on VORs, airways and waypoints. Setting up the flight plan this way allows one to use the IFR low charts to check for MOCA and MEA to ensure terrain clearance. These numbers give you 1000' clearance guaranteed over flat terrain and give you 2000' clearance guaranteed over mountains. My numbers checked out and if I flew at 10500 I would have almost 3000' clearance at all times. My preflight briefing revealed that they expected convective activity in the mountains along my route of flight starting around 7pm. I decided that I would like to do one more leg of close to two hours and set out. About 4pm central I mounted up. I had checked out all the little airports around me so that if I ran into that weather or any problem, I could just divert to one of those.

Leg 3: KDHT to KBRG

Taking off with a DA of 6200' is very different from taking off at 820' elevation. The mountain flying books I had read prepared me well. I used partial flaps and took off in ground effect facing straight into a 30 kt headwind. It took forever, but I finally climbed to 10500 and started on my route of flight. Good places to set down in an emergency quickly disappeared as mountains formed and climbed under me. Flight following setup with Albuquerque center was so helpful and active. The thunderstorm came early to the area, but it also stayed a little bit north of where it was predicted. ATC was busy diverting almost every commercial flight down toward me! Of course, they fly a lot higher, so no problem. Eventually, I picked up just a little bit of rain on the back side of the storm. I deviated briefly to the south to maintain good separation from the downdrafts of the storm. Despite having good terrain clearance, the updrafts and downdrafts near ridgelines in the mountains were very noticeable. I flew my plan, cleared the last range before my destination and descended to land at 5200' elevation in Belen, New Mexico. This was my preferred overnight spot. From KBRG I only had a two-hour flight to my final destination. However, that 2 hours was over mountains that were up around 9000' elevation. I wanted to overnight in Belen, NM so that I could fly over the mountains in the early dawn hours the next day before the wind gets ramped up for the day. Great service at KBRG, one of the line guys even dropped me off at a hotel on his way home because the crew cars were gone. I ate a good Mexican dinner, planned my flight for the next day and fell asleep exhausted.



Leg 4: KBRG to KCMR

The only downside of being dropped off at the hotel the night before was that there was no transportation available the next morning before dawn. A quick check with the hotel front desk confirmed my suspicion that there is no uber or taxi service available. So, I walked two miles to the airport in the dark. Good morning exercise I guess. I arrived winded but ready to preflight and go. No surprises on this preflight and I was airborne again as the sun was rising. I had to circle to climb. My fixed pitch Lycoming O-320 prefers thicker air. I was still able to climb at 500 fpm at first. Closer to 10500 I was lucky to get 300 fpm. Once at altitude I turned on course, called up center and activated my flight plan. Once again, I made use of airways and VORS and waypoints to navigate around the taller mountains. The early morning was mostly placid (for the mountains anyway). I registered 25 kts of wind at altitude, but mostly it was lower than that. Some bumps and some downdrafts, but nothing uncontrollable and before I knew it, I was flying over more familiar terrain near my new home.



I flew almost directly over our new house and closed in on KCMR – my new home airstrip. There are mountains all around the field there that are a little bit higher than the pattern altitude of 7700'. Though my EFIS terrain warning was going crazy, those mountains make it pretty easy to fly a standard pattern into the field. In case you want to come out and visit sometime, I will tell you the key to that traffic

pattern. The key is – turn base before you hit the mountains! After all that, a smooth easy landing at 6700' elevation in Williams, AZ with a slight crosswind. Tied it down, got a ride from my wife and went home. Time to eat, drink and be merry.



This was a great trip. I feel like it used every bit of piloting skill I have accumulated and probably called for several skills I still need to develop more. I was glad for every minute of preparation I had put in and can't wait to start exploring this new terrain with the plane. I made mistakes, but they were manageable and I can continue to learn from them. My thanks to EAA chapter 563, VAF, Airtronics and so many others.