

Hot & High: An Adventure Flying the Western Deserts by Stu Simpson



“Okay, let’s switch,” Bob radioed from his Cherokee.

“Rog, switching.” I pressed the frequency flop button on the Cav’s radio and saw the display change to 122.2.

“One.”

“Two,” I replied tersely.

“Great Falls Radio,” Kirkby called, “This is Cherokee Charlie Foxtrot Xray Yankee Bravo on the Cut Bank RCO.” The radio was silent as we waited, Bob and Carl Forman in Kirkby’s plane, me in my Cavalier.

“Cherokee Foxtrot Xray Yankee Bravo, go ahead.”

“Great Falls Radio, Foxtrot Xray Yankee Bravo, plus one, is approximately 5 miles north of the border at seven thousand five hundred on a trans-border flight plan looking for a transponder code, please.”

“Cherokee Foxtrot Xray Yankee Bravo, you’re with Golf Bravo Quebec Romeo?” the controller asked.

“That’s affirmative,”

The controller had us stand by for a moment, then provided our codes. We each tuned our transponders and a couple of minutes later passed over the almost invisible border with the United States. I marveled again, somewhat proudly, that it was the longest open and undefended border in the world.

A few minutes later I set the Cav down well behind Kirkby and Forman on Cut Bank’s runway 14, and slowed enough to make the intersection taxiway. We rolled to the customs ramp, shut down, and opened our cockpit doors to stay cool in the warm morning sun as we waited for the customs officers to appear.

Cut Bank is often the first stop on our summer flying adventures. It's a convenient place to enter the US and then jump off for wherever we're headed. We're usually in the air again within half an hour.

This time, though, we sat in our planes for over half an hour waiting for the customs guys to even arrive. When they did show, the processing went extremely slowly as a new guy tried to work his way through the computer system that wasn't working. His training officer made some calls and eventually managed to get things operational. In the end, we spent an hour and a half at Cut Bank, a delay that would cost us later.



Cooling our heels on the hot customs ramp at Cut Bank, Montana.

Freshly fueled and happy to be on our way again, we took off and headed south. We flew toward Helena near where we'd angle southeast for Ennis and another fuel stop. Our other option from Helena was to go southwest which would put us in a valley toward Butte and later Dillon along I-15. I went that way in 2019 with Doug Eaglesham and Dennis Fox. But back then we had better weather for it.

As it was, along the Ennis Valley, clouds bottoms menaced the mountain tops and tried to force us lower along our course. We scooted through their damp, drooping tendrils, not really worried because the valley was so wide. Our two planes had lots of room to maneuver should weather become more troublesome. We wondered, though, how far south it stretched. Would it block the Reynolds Pass that sat at 6800 feet?



Looking west in the Ennis Valley. That weather is sitting atop the valley where I-15 is.

About 35 miles north of Ennis we outran the lower clouds. Relieved, I looked west to see the weather causing havoc in the valley where I-15 sat. We clearly chose well.

We fueled and pottied at Ennis, which is incidentally at 45 degrees north latitude, half way to the north pole or the equator, depending on which direction you're heading. Now we faced a pretty hot and high takeoff from the 5400' high runway. Our density altitude worked out to about 7300 feet. Luckily, the pavement is 7600 feet long, so we were unlikely to have any issues.

The Cherokee accelerated along the runway, steadily gaining speed, but using much more ground than normal. Bob eased the Piper gently into the air and held the runway heading, gaining speed before his turn. He later described his takeoff as 'mushy'.

"Ennis airport traffic," I called, "Cavalier Bravo Quebec Romeo is rolling runway 34 in sequence. Left turn out southbound from Ennis." The Cav started forward as I pushed the throttle. My acceleration was good, but nothing like it is back at home. I too eased my plane into the air where it sped up much more slowly than normal. I'd have to get used to this because our route plan was going to take us to a lot of hot and high airports on this adventure.

I caught up to Bob climbing out southbound toward the Reynolds Pass a few miles south. Once we cleared the pass, we turned to the southwest for our final destination of the day, Pocatello, Idaho. But our reaching there was beginning to seem doubtful. Thunderstorms interrupted the horizon in various locations ahead. Some were waning, but more appeared to be growing. This is what worried us during the delay at the border.

The storms were still a long way off and more alternates became viable the closer we got to I-15. We flew along over Idaho's post-volcanic landscape which included calderas, lava fields, and sand dunes. I was very uncomfortable for the few minutes we spent above the lava. A forced landing there meant certain death on the jagged rock shards.

While we played chicken with the approaching thunderstorms we got to use the weather features on our ADS-B systems for the first time. It was tremendously helpful to see the storms cells on radar, but comparing the ADS-B radar image with what Bob and Carl were able to bring up on Windy.com

showed the ADS-B image was a few minutes older than what Windy offered. We were operating in a visual environment, so we could look out the window for the best comparison. I wondered how that might go in an IFR situation.



A fight we can't win. This storm forced us to divert to Blackfoot, ID, and wait it out.

We wound up having to set down at Blackfoot, a town about 20 miles up the road from Pocatello. We cooled our heels and pored over the radar for a bit more than an hour as a big cell battered our destination. Like a school yard bully bored with beating his victim, the storm finally trundled off to the northwest leaving us an unfettered path to our final landing of the day.

Day 2

The morning was delightful. Clear blue skies surrounded us as we prepped our planes. We'd see some great sights today if our plan unfolded as we hoped.

After takeoff, Pocatello's controller cleared us southbound out of his airspace and we switched to our en route frequency.

"How high do you want to go, Stu?" Bob queried.

"How about 7500 feet to start?" I suggested.

"Roger that. I'm going to cruise climb to get there."

"Copy. Likewise. I'm at your six o'clock for three quarters of a mile."

We had the Malad City VOR punched in to our GPS's, though we'd be angling off to the southwest before we got there. We climbed steadily in the calm air enjoying how the sun captured the high valley below us and the mountains to either side. We chatted about various things like the landscape below,

ADS-B, and Carl's new high falutin' Garmin GPS that he was practicing with in the Cherokee's right seat.

We soon turned more to the right, crossed a high ridge and made for the Lucin VOR in the middle of the desert west of the Great Salt Lake. We were headed for Wendover, a town that sits right on the border of Utah and Nevada. There are casinos on the Nevada side, but not on the Utah side.

Wendover's airport is rather historic. It's where the 509th Composite Squadron was stationed and trained in the last year of World War II. The 509th was the B-29 squadron that dropped the atomic bombs on Japan. It's been my goal for many years to visit Wendover's airport because of its historic significance. Now it looked like I'd finally get there.

As we made our way the Great Salt Lake slipped into view on the horizon. Its northern reaches appeared parched as the water shrank back several hundred metres from what appeared to be the regular shoreline. I wondered if it indicated that the lake's water levels were lower than normal. Or perhaps it was merely a seasonal position for the water level.



Spring Bay, the most northern reach of the Great Salt Lake.

The Lucin VOR passed by off our left wings and we were surprised to see there's actually an airport there in the middle of absolutely nowhere. It's a dirt strip with a couple of runways in seemingly good condition, and is marked as Restricted on the map. I got curious and learned that the owner's address comes back to an obscure bay in a shabby looking building shared by a VW repair shop in an industrial area in Long Beach, California. A Google Earth satellite shot also shows a camouflaged single-engine Cessna in front of the only building on the site. Now, I'm not saying that Lucin might be an airfield used for clandestine governmental activities, I'm just saying what I saw. If you know what I mean.

We needed to be a bit more careful with our navigation now. We were approaching a block of restricted airspace that we needed to circumnavigate to the west to reach Wendover. We continued on around the restricted zone, which was bounded by a small range of mountains, and banked back to the southeast to set up for a long straight-in to runway 08.

We landed, fueled up, and parked our planes. We then spent about 45 minutes exploring the small museum on the field and enjoying the history of the place. I bought a souvenir shirt. I'm grateful that Bob and Carl agreed to accompany me on my dalliance to Wendover.

We lit out eastbound, climbing slowly over the bright white salt flats. We flew along a roughly 10 mile wide strip of airspace between the previously mentioned restricted zone to the north and a similar one to the south. We passed just south of the famous Bonneville Salt Flats where a lot of land speed records have been set. That was cool to see, too.



The legendary Bonneville Salt Flats, home to many land speed records.

As we leveled off on the south side of the Interstate highway below us, I spotted an aircraft on ADS-B approaching from our 12 o'clock. We adjusted our position a bit more to the right for added clearance, and we increased our altitude. We watched our screens as the other plane got closer, and we all tried our best to spot it as it passed. But we never laid eyes on the guy. To be fair, we were most likely looking for a white airplane a couple of miles away against a blazing white backdrop. I can see how we might not see it. Or perhaps it was a plane engaged in clandestine governmental activities. If you know what I mean.

We rounded the corner at the east end of the restricted airspace and set up for our next stop, Delta, Utah. We soon passed by the Simpson Mountains, and Carl declared they appeared lonely and sad looking. I thought Carl maybe ought to go back to figuring out his new GPS.

It was definitely getting bumpier in the afternoon heat and it was taking its toll on my forward speed. I was continually falling behind Bob as I was all over the throttle trying to keep my RPMs in the right range. I'd catch a thermal and the engine would surge toward red line, so I pulled the throttle back. In the next instant I was fighting a downdraft that required nose up and increased power. Kirkby's Cherokee has a constant speed prop, of course, so speed control for him was a piece of cake.

We refueled at Delta and climbed as fast as we could away from the desert heat. Small storm cells were forming ahead of us and we wanted to get past them before they blocked our way for good. We found

ourselves near a small squall along our trajectory. It was clearly growing but it didn't amount to much while we were there.

"That one didn't even get the windshield wet," Bob lamented. A few minutes later, another building storm did us the courtesy of a brief shower which was enough to clean both our windscreens.

I watched the miles wind down as we left more and more of them behind us. The landscape slowly shifted from one with desert grasses and shrubs to that of almost complete rock and sand. The outcroppings evolved into more rugged and dramatic looking ramparts as we approached the Las Vegas area, especially when we reached the Valley of Fire State Park. There the jagged, iron infused landscape glowed bright red in the falling afternoon sun. The startlingly blue-green waters of Lake Mead, which feeds the Hoover Dam, flowed into sight and we began the set up for our landing at Boulder City.



The blazing red rock in the Valley of Fire State Park northeast of Las Vegas, NV.

Boulder City is a small community on the southeastern outskirts of Vegas. Its airport is bordered less than two miles to the north by a small range of sharp mountains. We had a 23 knot southeast wind, which aligned well with BVU's runway 15. But the upslope wind against the heat soaked southern slopes of the ridge to the north created all sorts of chaos for our approach to the field. On top of that, the runway is sloped downhill to the south at nearly 3%.

Kirkby went first and floated well beyond half the runway length before he touched down. With the ass-kicking I was getting on left base and final, I reckoned that I'd be lucky to not have to go around. Surprisingly, my landing was exquisite, easily the best one of the entire trip. Please don't think I'm bragging because I have no idea how it happened in those conditions.



The Cherokee and Cavalier on the ramp at Boulder City, NV.

We spent three nights in Vegas as we toured various sights that didn't involve The Strip or any of the casinos. On one morning we headed out to where we could watch landings and takeoffs at Nellis Air Force Base, just north of the city. We found a spot at the north end of the field and for the next hour saw a terrific array of tactical aircraft doing takeoffs, landings, and touch and go's. We saw a B-52 fly over, as well as several F-16s in aggressor squadron colours. There were some F-15s departing, a four-ship flight of F-35s departing, and a four-ship of F-22s taking off. But the best thing was seeing a U-2 departing to the south. It was thrilling to see such a rare, amazing, and iconic airplane in person.

Day 5

That doesn't look right, I thought, as I stepped onto the airport ramp and gazed at the Cav. Why were the flaps down? I didn't leave them that way. I soon realized that the wind at some point in the previous 2 ½ days had been strong enough to get in between the top surface of the wing and the flaps, which are split style, and pull them down. I wished I'd pointed my nose the other way, or secured the flap lever in the cockpit. My flap system is exceptionally strong, so I wasn't too concerned, just annoyed at myself.

It was during my preflight inspection I realized something else was wrong. My ailerons were binding just a bit at a certain point in their travel. My heart raced suddenly as I wondered what was wrong and what it could mean for the rest of the trip.

I told Bob and Carl and we launched the investigation. We traced every inch of the aileron control system as best we could. I was under the fuselage peering into an access panel when I discovered the cause. One of the aileron push rod rod-end bearings was slightly bent. This caused the push rod to deviate just enough to rub up against one of the seat support ribs. That meant the wind had slammed my ailerons hard enough to bend the rod-end bearing.

Okay, we'd identified the culprit, now we could devise a solution. The best one was for Bob, who has smaller hands than me, to reach into the access panel beneath the control rods and sand away a couple

of millimeters of the rib where the rubbing was happening. This he did at great awkwardness and discomfort, and the binding disappeared. I'm very grateful for his efforts. Since the rod-end bearing was only bent slightly it posed no serious issue for completing the trip. It would, however, require replacement back home.



Kirkby works at alleviating the Cav's binding ailerons. Carl offers moral support. Notice who's NOT working on the Cav.

We were about 2 ½ hours delayed getting out of Boulder City and it showed. The early afternoon thermals began their raucous rituals as we set out southeastward for Winslow, Arizona. After that, we'd make for Santa Fe, New Mexico, for the night.

A few miles into the leg we again spotted an oncoming target on ADS-B. He was only 500 feet below our altitude so I suggested we climb some more, which we did. The other guy closed steadily on us and we watched his icon slip past our left side. But despite our best efforts, once again we never laid eyes on him. A few minutes later, though, Bob spotted an all black UH-60 helicopter pass us below on our right side. We might have had a much closer call with the helicopter had we remained at our previous altitude. The helo was not on ADS-B



The harsh, searing desert outside Boulder City, NV.

A weak haze layer permeated the sky, courtesy of distant wildfires. It frustrated our efforts to more clearly see the southwest rim of the Grand Canyon. It was a few miles away, but we couldn't see it quite sharply enough. Even with what we could spot, though, it was far more impressive than I expected. The canyon's sheer scale and enormity were simply stunning. The airspace above the canyon is understandably heavily regulated, and we were just outside of it, but sadly we lacked the time to deviate any closer for a better look.



The very southern reaches of the Grand Canyon visible just below the Cav's wing tank tip.

The ride to Winslow was rough. It was hot and bumpy. We watched the terrain change below us, slipping away from hardscrabble desert to a mountainous landscape with more alpine trees and higher terrain. As we passed south of Flagstaff's 7000 foot high airport, Bob talked with the tower controller who warned us of an Embraer RJ departing initially in our direction. We watched the RJ turn left and away from us in a climbing turn to the northeast.

The land after Flagstaff changed back to flat pan desert, much more resistant to erosion than what we saw to the west. By far the most exciting feature there was a giant meteor crater about 15 miles west of Winslow. That was enormously enjoyable for me because I tend to geek out about geography, especially when I can see it from Cavalier altitudes.



A meteor crater 15 miles west of Winslow, AZ.

The line attendant at Winslow was friendly and informative as we fueled. He explained there were basically only two things of any consequence in the town. One was the railroad. The other was a statue at a downtown intersection of a man with a guitar. It was to commemorate the Eagles' hit song, 'Take it Easy', written by Jackson Browne and Glenn Frey. The song opens with the line, "I'm standin' on a corner in Winslow, Arizona." Winslow was also a stop on the old Route 66.

We took off against a gusty wind and banked northwest for another two hour leg to Santa Fe. The desert continued, only now it rose even higher as we encroached on the most southern reaches of the Rocky Mountains. There was a mixture of mountains, hoodoos, sheer cliffs and elevated plateaus. Once into New Mexico, some plateaus leveled off at over 9000'. At one point I saddled an updraft that bucked me to 11,200' before I started back down, and I was still only 2000' AGL. The Cav didn't seem to know the difference, but I did.

Flying above 8500' feet does one of two things to me. I either get a headache, or I get very dry. This is frustrating since I can't drink much up there; the Cav doesn't have a bathroom. As a consolation prize I ate an apple and sipped occasionally at my water bottle.

The Cav's autopilot was a real bonus on this leg. It cut my workload with the turbulence and helped me stave off fatigue. I don't normally use it, but on legs like this it's a treasure.

We neared our destination just before five o'clock. I was a mile or so ahead of the Cherokee when I contacted Santa Fe tower about eight miles back. The controller instructed me to call him entering the zone at five miles out. Bob received the same instruction a moment later.

As we closed on the airport the controller cleared a Cessna Citation for landing on runway 20. I spotted the jet on final north of the field.

"Santa Fe tower," I radioed, "Experimental Bravo Quebec Romeo five miles back now."

"Experimental Bravo Quebec Romeo, cleared to land runway two-zero. Traffic is a Citation on final for runway two-zero."

"Cleared to land runway two-zero, I have the Citation in sight, Bravo Quebec Romeo."

I turned right base as the Cessna rolled out to the far end of the runway. I dropped my first notch of flaps and trimmed for nose down. Bob called that he was five miles out, and received the same clearance to land with me as his preceding traffic.

My landing was good enough that I don't recall it being bad and I cleared at the first taxiway. Then I got a surprise as the controller wanted to chat. He asked about our trip, and where we were from. He stated his wife is from Toronto and that they were headed to Vancouver Island in a few weeks. There was no other traffic but I still felt a bit self-conscious chatting on a tower frequency like that. It was an unexpected and pleasant welcome at the end of a tough, eventful day of aerial adventuring.

I taxied to the FBO ramp and shut down just as Bob and Carl rolled up to their spot.

Day 6

This would be a short day of flying for us, a bit less than 250 NM in two legs.

Just as I lifted off runway 02 I spotted an F-111 swing-wing fighter on the north ramp. It's the airport's gate guard, moved there because its normal spot was under construction. Pretty cool to see that.

We turned a little southeasterly to arc around the bottom of the Sangre de Cristo Mountains, the most southerly range of the Rockies. Even going around the end of the mountains we needed nearly 10,000 feet to stay clear of the terrain. The peaks to the north, of course, were vastly higher. I freely admit that I breathed a sigh of relief as we left the mountains behind us for good and headed toward some flatter, and thus more familiar and comfortable, prairie terrain.

We turned north abeam Las Vegas, New Mexico, and made for a place called Spanish Peaks, just across the state line into Colorado. We'd have a small welcoming party there. Bob's son Keith lives in Colorado Springs. Keith has long-term use of Bob's Piper PA-12 Super Cruiser that he hangs at the Meadow Lake airport on the northeast outskirts of the city. Keith and his buddy Mike were en route in the Cruiser to meet us at Spanish Peaks. Then we'd all fly back to Meadow Lake in formation.

In 2017 Bob and Keith flew the Cruiser from Calgary to Gage, Oklahoma, to collect the Starduster biplane Bob bought. I flew alongside in the Cav. On the way back north, Keith and the Cruiser broke off to return to Colorado while Bob and I continued home. I thoroughly enjoyed Keith's company on that adventure and I very much looked forward to seeing him again.

The eastern slopes of the mountains were stunning in the morning sun. I noted how their appearance began to mimic that of the rest of the Rockies all the way back to Alberta. The flora beneath us glowed

brilliantly green, the result of a wet spring. It would soon turn blonde and brown as the grasses and shrubs parched in the typically hot, arid summer. I did notice some pretty big storms building up over the peaks to our north. It was too early to tell if they were heading into our flight path or dumping themselves out on the high rocks.

We were about 30 miles back from Spanish Peaks when my ADS-B showed the Cruiser landing on runway 27. I let Bob know since his system displays a smaller range. As we entered the landing pattern a few minutes later, the Cruiser's distinct paint scheme gleamed in the morning sun.



Mike Wiggins, Keith Kirkby, and the Super Cruiser waiting for the Cherokee and Cavalier at Spanish Peaks, CO. By Mike Wiggins.

I was the last one down and I taxied to the pumps as Bob and Keith reunited. I greeted Keith who then introduced me to Mike. I took an instant liking to him.



A kind warning at the Spanish Peaks airport to be on the lookout for politicians.

With a glance north at the growing weather, we decided to get going again. We launched on 09 with no wind and I was impressed to see the Cruiser climb so well from the 6000' high runway. It was no doubt a combination of the newly rebuilt engine and the large wing making good use of the growing thermals.

We settled into a loose V formation with Keith and Mike leading. Bob and Carl took the right side and I had the left. Bob told me later that he had a bit of trouble getting the Cherokee configured to comfortably maintain the Cruiser's speed of about 105 mph. As I did for nearly 1300 miles with the Cruiser in 2017, I simply dropped two notches of flaps and dropped back to 2200 rpm. Piece of cake.



A Piper pictured from a Piper. Mike's shot of Bob and Carl in the Cherokee en route to Colorado Springs.

We spent some time positioning for Mike and Keith to shoot pictures and video. It's solid gold to have photos and video of your plane in flight, especially when it's during a flying adventure.

I cranked into a hard left 360 to go line astern as Keith led us into the Colorado Springs area. We skirted the main airport's Class C space and set up for a left downwind for 15 at Meadow Lake, whose ident is KFLY. A storm cell now perched at the west end of the city and was clearly giving it grief, but so far hadn't extended to our position.

A Piper Pawnee pilot announced himself throughout a right hand circuit, and at one point stated he was on a right base leg for the runway while Bob was on a left base. What I didn't hear was that the Pawnee was landing on the parallel grass runway whose threshold was half way down the length of the paved runway we were using. It gave me a whole bunch of needless stress.

I rolled in last to stop in front of Keith's rented hangar, a palatial affair that the Cruiser shares with a Cessna 150. Three minutes after I stepped out of the Cav, the storm's gust front reached out and touched us. We hastily rolled all three planes inside and out of the storm's onslaught.

We spent the rest of the afternoon hanging out with Keith and Mike hangar flying and swapping flying stories. I enjoyed hearing how the two of them had flown the Cruiser to Michigan and back, as well as on other shorter adventures.

Mike's a new pilot with just shy of a hundred hours. He's thoroughly enjoying his aviation journey and the time spent under Keith's mentorship in the Cruiser. It was wonderful to see his enthusiasm and their camaraderie and friendship. I hope I get to hear more of where Mike's flying takes him.

Keith and his wife Deanna generously hosted us for the night and prepared a terrific dinner. We're very grateful for their exceptional hospitality.

Day 7

We'd hoped that Keith and Mike could accompany us for part of the distance northward as we continued back toward home, but a look at the weather quickly killed that plan. We had to make tracks if we had any hope of getting through Wyoming this day.

A large swath of low-level moisture was curving in from the southeast creating up-slope conditions that would bring the clouds down as we tried to cross Wyoming. Our goal was Billings, Montana, but we wisely planned for other options. Good thing, as it turned out.

After saying our heartfelt goodbyes and thank you's we departed Meadow Lake with 8800 feet of density altitude, and banked around to the north. We angled out to the east to stay clear of Denver's busy airspace, then turned back northwesterly to shoot for Wheatland-Pfifer Field north of Cheyenne.



The Cav leaving Meadow Lake on a perfect morning with an 8800' density altitude. That's Pike's Peak in the background. By Keith Kirkby.

The morning was one of meteorological perfection. There was no wind, no clouds, unlimited visibility and breathtaking mountain and prairie scenery surrounding us. We even had a tail wind.

We got a nasty surprise at Wheatland-Pfifer when we learned they didn't have any gas for sale. But there were three guys on the field who were minutes from leaving after their morning of flying. They were very friendly and said one of their buddies on the field had his own gas. He might be willing to

sell us some. A phone call determined the gas owner would give it to us at five dollars a gallon, cash on the barrel head, a bargain we readily accepted. Bob put a bunch in the Cherokee and I borrowed fifty bucks from Carl to put five gallons in each side of the Cav. It would easily get us to Douglas, another forty miles north, where there definitely was fuel.



Kirkby takes advantage of very generously offered fuel at Wheatland-Pfifer Field.

We landed at Douglas a short time later as a thunderstorm encroached from the southeast. After fueling in a light rain, we ate the yummy bag lunches that Deanna so thoughtfully prepared for us, and plotted our next move. We decided to track up the west side of the Big Horn range and make for Worland, or ideally, Billings. But there was a big question mark about how far we could actually get with the weather up that way. It didn't take us long to find out.

We departed Douglas and turned northwest toward a higher plateau that runs out of the south end of the Bighorns. If we could get over that, we might be able to drop down beyond it into the lower plateau known as the Bighorn Basin. But it was not to be.

We made it about 45 miles northwest of Douglas and reached a wall of weather hanging right down to the ground. No way we getting through that. We promptly diverted to Casper for the night. It was only about fifteen miles south of us, so it was an easy decision.

Casper's controller directed us to the Atlantic Aviation ramp where we fueled, tied down and unloaded. A woman in the FBO named Terry was a true angel as she arranged hotel rooms and the hotel shuttle for us. It was simply outstanding service which we stranded aviators very much appreciated.



Fueling up after tying down to overnight at Casper, WY.

Day 8

Today's goal was to reach home if at all possible. Once again, the weather was the determining factor and early on it wasn't looking exactly stellar. Low-level clouds and moisture filled the Bighorn Basin to the northwest. Local weather reports told tales of woe anywhere in that direction. To the northeast the conditions were better, but not by a lot. The numbers were improving slowly, though. And of course, we didn't need a lot, we just needed enough.

At nine o'clock we made our choice. After checking every weather source we could, we opted to try for Sheridan via the east side of the Bighorns, then round the corner westbound over to Billings. We departed north-eastbound initially for the Crazy Woman VOR. We soon ran into lower clouds than we expected and veered more easterly to pick our way through lower and more open areas. We made several course changes while scooting through rain showers, following roads and valleys, and dodging around the higher hilltops in the area. It wasn't pretty, but it was working.



Working our way through some marginal weather northeast of Casper.

We eventually broke through the really low stuff about 45 miles into the leg. We turned more northwesterly shooting for Sheridan, which was at a lot lower elevation than any other place we'd been in the last three days.

As we traversed the northeast sector of the VOR range we all had our GPS signals drop out. I saw the loss on my Android phone running Fltplan.go, and Bob and Carl had it happen on their Garmins. I think, however, it was actually the GPS receivers for our ADS-B systems that were affected as those are the ones that we're required to use for ADS-B position data. Oddly, my old Garmin 496 had no signal loss at all. I've often had it lose satellite connectivity northeast of the Calgary VOR, but not near any other one. Regardless, the effect only lasted seven or eight minutes, then all was normal.

We were about eight miles east of Buffalo when Bob got updated weather from Billings. It was now showing 1600' broken though with good visibility. Billings' METARs and TAFs had brought good news all morning, and so the deterioration was quite a surprise. Would it close down on us before we got there? I didn't want to take that chance, so I suggested a safer, though somewhat more distant alternate.

"Bob, I'm worried about Billings getting worse than forecast. What do you guys thing about heading to Miles City, instead?"

It would add about seventy more miles, but at our speeds, and with the favourable winds of the day, that only meant an additional half hour for us. It also meant getting more quickly out of all the weather - we could see that for certain - and into substantially lower terrain.

Bob and Carl talked about it briefly and agreed to the diversion. We turned back to the northeast and punched in KMLS as the destination.



En route to Miles City, MT, with higher clouds and descending terrain.

The clouds lifted steadily along our new course, then disappeared almost entirely as we slipped back into Montana and covered the easy 110 NM to Miles City. The FBO at MLS offers up small bags of nuts and Halloween candy in the pilot lounge, which we very much enjoyed and appreciated.

What we did not appreciate, though, was learning that Lethbridge was no longer open to us to re-enter Canada unless we all had CANPASS privileges. None of us did. So that meant we had to choose another point of entry. We settled reluctantly on Coutts. I say reluctantly because the runway there is little better than a goat trail due to its roughness and abundant gopher holes. I should've taken Bob's advice and selected Del Bonita. I vowed to immediately apply for my CANPASS when we got home.

We left Miles City behind and climbed westward, excited to be getting ever closer to home. We planned one more fuel stop in Montana before crossing the border, and that would be at Shelby, just a few miles east of Cut Bank.

The ride to Shelby seemed long, though it was just a little over two hours. Once again I employed my autopilot to help ease the workload in the afternoon turbulence. The land below was starkly empty featuring coulees, ravines, and barren soils interspersed with patches of grazing land. There were almost no farms or towns and dreadfully few roads. I'd only flown over that region once before and I guess I'd forgotten how much isn't there.



East central Montana features a stunning amount of nothing!

About 45 minutes into the leg Bob wondered if the winds were any better for us higher aloft. He pulled the Cherokee's nose up, gaining height toward 8500'. I eased back my throttle and angled gently out to the right to keep him in sight as he worked his way up. A few minutes later he started back down, disappointed that the currents up there weren't as helpful as at 6500 or 7000'.

We fueled and peed quickly at Shelby, rushing to make our landing appointment at the border. Bob landed first at Coutts and I followed, wishing like hell we could be at Lethbridge. The runway was hard to spot and in desperate need of mowing. It was rough and rutted and pockmarked with gopher holes, like landing in a battle zone. Then we had to wait nearly half an hour on hold for the CBSA people to answer. It beats me why we couldn't just walk over to the border station to clear.

Okay, one last leg. We'd be home by supper.

I got the Cav light on the wheels as quickly as possible to relieve the jarring effects of the runway. Then it was a matter of staying in ground effect for a few seconds to build speed, and easing into a climbing

turn to the north. I spotted Bob and Carl over my right shoulder as the Cherokee charged down the runway, then Bob popped the first notch of flaps and nestled comfortably into the air. His takeoff looked great from my vantage point.

We passed Lethbridge with a tailwind and found Highway 23, which skips past Vulcan. While the weather in deep southern Alberta was excellent, all that changed about 10 miles south of Vulcan. Several thunderstorms spiked the region, tumbling off the Rocks and rolling our way. Bob and Carl checked radar and reported the storms were mostly to the west, but definitely headed our way. Our speed would outpace them, but there was another one somewhere out ahead. Our nice little tailwind had done a 180 on us, now blowing from the north, gusty and belligerent at 20 knots. And with all that, Calgary was reporting three miles visibility in smoke, also with scattered CBs.

We were in our own backyard, of course, which gave us a great advantage. We'd need it, too. Apparently, we were right on the smoke line. The visibility was steadily diminishing to the west, but strangely, off to the east it was well over twenty or thirty miles. Obviously, that was the non-smoking section of the province.

North of Vulcan we were headed straight into a storm cell that, with the poor visibility, I didn't realize was there. I thought it was merely a shower.

"Stu, that cell ahead is one of the thunderstorms I was talking about earlier," Bob reported.

"Roger that," I replied in surprise. "Good catch. Let's turn more to the west to get around it."

"Copy, I'll follow you."

We caught some rain as we carved around the back side of the storm, but moving west put us more deeply into the smoke. Visibility was dancing around now between two and three miles.



The poor visibility between Vulcan and the Bow River. We'd have preferred a nicer welcome home.

We made it to the Bow River, crossing it at about 4300 feet. Under the circumstances, we agreed to forgo the usual circuit procedures at home, electing instead to do straight-in approaches. I planned to

start the approach leg several miles back, just northeast of Indus, paralleling the two roads that bracket Kirkby Field. This would give us familiar landmarks to steer by and help us stabilize the approach in such poor visibility.

I spotted Highway 22 and the familiar curve in the road east of Indus. The new industrial park north of there was my initial fix, being directly in line with Kirkby's runway. I lined up over the yards, a few hundred metres west of the north-south range road, and reported to Bob that I was slowing down and starting my approach.

One by one, familiar landmarks from the past 32 years slipped into sight, then slipped away, as I advanced on the field. Calgary International reported the wind as 320 at 15 gusting 23. With the steady turbulence I was getting, I believed them.

I dropped the second notch of flaps over Glenmore Trail. A second or two later the runway coalesced into view, a hazy apparition growing clearer every few seconds. A couple of minutes later I passed low over the TransCanada, eased the throttle to idle and sailed into a rather poor and bumpy landing. I rolled the Cav to the end, then spun around to watch Bob set the Cherokee flawlessly onto the grass.

It was just about supper time, and we were home.



Weary travelers taxi in at the end of a great flying adventure. By Gary Abel.

In Summary

For anyone interested, these are our actual nav points. You can copy and paste them into your favourite flight planner to see the details.

Routing Points: CFX8 KCTB 465519N1115709W 463824N1114444W KEKS 444253N1112856W 443220N1111843W 442406N1113550W U02 KPIH 421222N1123426W 411359N1141643W 405854N1142106W KENV 404216N1125709W 401707N1124034W KDTA KBVU KINW KSAF 353306N1054722W 353536N1052420W 4V1 KFLY 394904N1041808W KEAN KDGW 430928N1061518W KCPR 432100N1062253W 432818N1061647W 433841N1060455W 442543N1063157W 443907N1063544W KMLS KSBX CEP4 505513N1134449W CFX8

Our route traversed 2712 nautical miles, or 3121 statute miles, which took us about 25 hours of flying time. We were gone for 8 days and flew for 5 ½ of them.

Our flight path was almost the reverse of the one we flew in 2015 when our destination was Tucson, AZ. We flew down the eastern slopes of the Rockies then, went west to Tucson, and returned via Las Vegas, Utah, Idaho and Montana. Interestingly, the only ground on this trip we hadn't covered on previous flying adventures was the route between Boulder City and Santa Fe. Oh, and we hadn't been out to Wendover, either.

The landscapes we saw on this adventure, like the Idaho lava fields, the Utah salt flats, the Grand Canyon, and the absurdly high plateaus of New Mexico and Colorado, are phenomenal treasures not to be forgotten.

We saw again how our planes handle hot and high conditions. They're pretty damned good at it, and I enjoy having that confidence in the Cav. I know Bob feels the same about the Cherokee.

Some other interesting observations. First, ADS-B is fantastic. I absolutely recommend it, even in Canada. It's honestly akin to having air-to-air radar in your cockpit, and in the US it's even better. You can access all sorts of useful data, especially weather, something that's coming to a few places in Canada, too. I balked at the price of it when I first got mine, but now I'd be miserable without it. ADS-B is a quantum leap in safety and situational awareness for general aviation pilots.

It's good to carry tools in your airplane. The key, of course, is how many to carry because they can be heavy. Honestly, I think I carry too many, so I'll be paring them down. But there's no doubt of the value in having them when something goes wrong.

CANPASS. I vowed I would apply for mine when I got home and I did. It came within two weeks. That opens up several more possibilities for returning home. I'm sure I'll enjoy that convenience.

Finally, if you're at all thinking of flying a cross-country trip, do it. Take the chance. Stretch your wings over the horizon. Put your comfort zone to your rudder. Start small if you like, maybe an overnight out and back. It doesn't have to be far, but soon you'll find the farther you go, the better it gets. Then when you're home again with your plane tucked back into your hangar, all the sights and experiences, all the memories, all the pure *adventure* of it will have you glowing for weeks.

And you'll have a great story to tell. I know I'll want to hear it.