

The Trailing Edge

June 2024

Alone and Unafraid in Unfamiliar Territory

When in the course of human events...er...I mean, earning your pilots license, every private pilot hopeful must complete a “long” solo cross-country flight. FAR 61.109 lays out the experience requirements necessary to earn your pilot license. Among those requirements, it stipulates that every student must accomplish 5 hours of solo cross-country flight. These 5 hours must include one solo cross-country flight of 150 NM total distance, with full-stop landings at three points and one segment of the flight consisting of a straight-line distance of more than 50 NM between the takeoff and landing locations. This is commonly called the “long” cross-country flight. After months of dual instruction and a short cross-country flight under my belt, it was time to plan and fly my long cross-country flight. Due to this requirement, I would find myself in unfamiliar territory.

I’m lucky to say my home airfield is Edwards Air Force Base (EAFB) where I’m a member of the EAFB Aero Club. One of the benefits of flying out of EAFB is the variety of military aircraft that are assigned to the base. On a typical day, I’ll taxi by C-12s, F-16s, T-7s, B-1Bs, and B-52s to get to the runway. Sometimes you’ll see a very unique airplane like the T-6A Texan. Many days I’ll be in the pattern with one of these aircraft or an F-22, a F-35 or a C-17. If you’re passionate about airplanes, as I am, this is a wonderful benefit.

Initially, I had planned a trip from Eddie Air Patch (KEDW) to Santa Maria Airport (KSMX) on to Shafter-Minter Airfield (KMIT) and back to KEDW. Unfortunately, I was unable to fly this trip due to weather considerations. Santa Maria is located on the west coast just a few miles from the Pacific Ocean. During the spring months the coastal airports tend to have IFR conditions in the morning. In the afternoon, the winds tend to be too high to land at KEDW and other airports in the area. After a few weeks of waiting for the weather to cooperate, I decided to change my plan. This time I planned the standard route that the Edwards Aero Club prescribed. This route had 5 legs to get the required distance: Edwards AFB to William J Fox Field (KWJF or “Fox Field”) to Barstow-Dagget Airfield (KDAG) to Southern California Logistics Airfield (KVCV or “Victorville”) to Fox Field and finally back to Edwards AFB. This route would be a 185 NM round robin flight with KDAG being 54 NM distant from KEDW. The interesting part of this flight is that I had never flown into Barstow Airfield. In addition, I had landed at KVCV once, but that was months ago. Since both these airports were unfamiliar to me, this trip would challenge my airport arrival and radio communication skills.



North American T-6A Texan

At 0905 on 16 May 2024, I was sitting in Cessna Skyhawk niner-zero-niner-echo-delta (909ED) holding short of Eddy Field runway 25. It was a beautiful, blue-sky, no-cloud, California day, and the winds were calm at all my destination airports – a perfect day to fly! Earlier that morning, I had consulted with my flight instructor, Mr Bishoy Abraham, in the Aero Club Office. When he walked in, I was studying my flight plan. I had checked the weather already and knew this was a good day for my solo cross-country. Bishoy saw what I was looking at and asked, “Are you doing a solo cross-country today?” I said, “It looks like a good day.” He agreed, sat down beside me, and asked if I had any questions. I had a few questions about radio comms on the route, but the most important question was whether to cruise at 5,500 MSL or 7,500 MSL from Fox Field to Barstow. He looked at my Foreflight plan and told me that 5,500 MSL should be fine. Since he flew the plane last, I asked how much fuel was in the tanks. He said it should be about 35 gals. He asked me if I needed to get gas before starting the trip and I told him “No” since I’d only need 25 gals with the 30 min reserve. 35 gals was plenty. I asked him if he wanted me to fuel the plane at Fox before I returned, and he said yes. As Bishoy was entering the necessary endorsements into my Foreflight logbook, he asked a question he always asks me before a solo flight, “What’s the magic words?” I said, “Student pilot solo.” If a solo student pilot is having issues with radio comms, you can always say those words and the controllers will be more patient with you and help you out. He also usually asks, “What do you do if you don’t like your approach to landing?”

The answer, of course, is to go around, but today he left that question out. That surprised me. I guess at this point he has enough confidence in me that he didn't think that question was warranted.

As I sat at the hold short line of runway 25, I did my Pre-Takeoff checklist: fuel selector – both, fuel shutoff valve – in, trim – set to takeoff, mixture – full rich, flaps – up for normal takeoff, engine – in the green, transponder – VFR 1200, lights – all on...and this time, since I had my Foreflight iPad hooked into aircraft power, 12V Cabin Power – on. That last step was important. My last solo cross-country flight I had forgotten that step and was lucky my iPad didn't go dead during the flight. I had 18% battery when I landed – whew! KEDW ATIS said winds were 210@8. It was a hot day with a high density altitude, however, without the weight of an instructor in the plane I expected good performance. Given the high temperature, I also expected some low altitude convective turbulence. As I always do just prior to a solo flight, I took a deep breath in and let it out slowly to calm the nerves. After a ton of dual instruction and two solo flights, I was pretty confident, but there was still a nagging worry about the unknown. Today my main concern was flying into an airfield I'd never been to before. Essentially, I would be in unfamiliar territory. I checked to make sure the Eddie Tower frequency was in comm 1 and highlighted green to indicate I would transmit on that frequency. I keyed the mic, "Edwards Tower, Skyhawk 909ED, holding short South Base runway 25, ready for takeoff with Charlie, Westgate departure." From Tower, "9ED, winds 210@6, Westgate departure approved, report airborne." "9ED will report airborne and Westgate departure approved." I pushed in a smidge of power, rolled onto the runway, lined up with the center line, and pushed in full throttle. On the roll, I checked my instruments as usual and said out loud, even though there was no one to hear but me, "2350 RPM, everything in the green, speed coming up, 55 knots." I pulled back on the yoke to rotate to takeoff attitude, and at 0907 local time, 9ED and I slipped the surly bonds of Earth. We were ready to dance the skies on laughter-silvered wings. Well, on laughter-white-ed wings in this case.



Skyhawk 909ED - My Chariot for the day

I grinned as I said, "Edwards Tower, 9ED, airborne." Today the Edwards AFB Delta airspace was busy. As I climbed away from the runway, I heard several other aircraft on the radio who were taking off and arriving. From Tower, "9ED, extend your departure leg and stay south of the extended centerline. Your traffic will be 2 F-16s taking off on 23L." "9ED will extend departure leg, stay south of the centerline, and watch for the traffic." I continued my departure leg and turned about 20° left to stay south and parallel to the main base runway 23L centerline as instructed. I leveled off at 3,300 MSL which is the published altitude for Edward's traffic pattern. I watched the 2 F-16s take off in about a 15 second interval, climb out quickly, and turn toward the North. They were out of sight in less than a minute. As I drove out on the parallel runway heading, Eddy Tower was busy, and I noticed that all the traffic was arriving from and departing to the North and West. This was directly in my path to the Westgate visual waypoint. Since I was headed to Fox Field, I could just as easily use the Southgate departure route and stay out of the way of the traffic, which would make it easier for the tower controllers. When radio transmissions had quieted down a bit, I keyed my mic, "Edwards Tower, 9ED, would you prefer me to take the Southgate departure?" "9ED, you're cleared direct Westgate and report Westgate. Your traffic is a C-17 at your ten o'clock inbound at 10,000 ft." I really don't know why in the world they told me about a C-17 at 10,000 feet, but I replied, "9ED is cleared Westgate, I'll report Westgate and look for the traffic." Hmmm, maybe that C-17 was going to practice a combat descent which could make it a factor. I turned North toward Westgate and arrived in a few minutes. Over Westgate, I turned West toward Rosamond, "Edwards Tower, 9ED, Westgate." "9ED, copy Westgate, contact Sport." "Over to Sport, thank you, 9ED." I had preset Sport's frequency into the standby position on comm 1. I pushed the button that switches the standby frequency into the primary position, "Sport, Skyhawk 909ED, with you passing Westgate outbound headed to Fox." "9ED, altimeter 2989." "2989, 9ED." Then, in a couple minutes, "9ED, frequency change approved, good day." "Frequency change approved, thank you, have a good day." Sport had cleared me off their frequency before I reached the edge of restricted area 2515. This was the second time they had done that, and I wondered why. In any case, I made a turn south toward Fox Field.

This short hop to Fox Field was very familiar. I'd flown it many times. I had preset Fox ATIS in the primary position in comm 2 and switched over to comm 2 to listen. It said winds were 290@7, altimeter was 2989, and the information code was India. I then switched to Fox Tower, from comm 2 standby position into the primary position.



Final Approach to Runway 24, Fox Field

lowered my flaps to 10°. As I got closer to the runway, I continued to configure my airplane until I was full flaps and airspeed was 65 KIAS. As I approached the runway, I rounded out above the runway, eased back on the yoke to flare and touched down at 0920. I turned off on taxiway A6, "Fox Tower, 9ED clear of the runway." "9ED, taxi to parking, monitor this frequency." "Fox Tower, I'd like a taxi-back, please, 9ED." "9ED, taxi to runway 24, via alpha, alpha 7." "Taxi to runway 24 via alpha, alpha 7, 9ED." This was a short taxi since I had turned off at the first taxiway intersection.

I pulled into the runup area to prepare for my next leg. I took a deep breath to relax, set the parking brake, and focused on Foreflight. I pulled up the KWJF to KDAG leg I had planned and checked it over. I listened to ATIS to make sure it was still information India, then set up my radios with the frequencies I'd need. I then keyed a route into the G1000 direct to KDAG – push the "direct to" button, dial in K-D-A-G using the FMS buttons, then enter and enter again. The route popped up on the map displayed on the passenger side multi-functional display (MFD), and I turned the range button to the left to zoom in to where I liked it. I double checked everything and did my Pre-Takeoff checklist. I pushed the "TMR\REF soft button on the PFD to bring up a timer. I wanted to time the checkpoints I planned. Finally, I thought about my departure; I'd need to do a right downwind departure to head east toward Barstow. I taxied up to the hold short line, "Fox Tower, 9ED, holding short runway 24 at A7, ready for takeoff with India, request right downwind departure." Tower responded, "9ED, cleared for takeoff runway 24, right downwind departure approved." "Cleared for takeoff runway 24, right downwind departure approved, 9ED." I pushed in some throttle to taxi onto the runway. I also pushed the enter button on the PFD to start the timer. I heard the Tower controller tell another airplane they were cleared to land behind me – note to self, don't dilly-dally. I looked down to check things over one last time and to make sure the mixture was full rich; it was, but I noticed that the flaps were still down. Dang it! How had I missed that in my Pre-Takeoff checklist?! That would have been extremely bad to takeoff with full flaps. Thank God I caught that. I reached down quickly to pull the flap lever up as I lined up on centerline, glanced over my shoulder at the flaps to make sure they were up, then pushed the throttle all the way in. As the plane picked up speed, the engine was in the green and showing 2350 RPM. I rotated at 55 KIAS and lifted off the runway at 0925 for the 2nd leg of my journey.

I climbed away from the runway at Vy (74 KIAS) and as soon as I reached the end of the runway turned onto a right crosswind and then a right downwind. I leveled off at pattern altitude, 3,200 MSL. Abeam runway 24 threshold, I continued straight out on my approved downwind departure and started a climb to my cruise altitude of 5,500 MSL. As I approached the edge of Fox delta airspace, "9ED, frequency change approved, have a good flight. "Frequency change approved, and thanks!" I switched over to Joshua that I had preset into the standby position, "Joshua, Skyhawk 909ED with you out of Fox Field, climbing to 5,500, VFR request." Joshua gave some instructions to another airplane and after about 30 secs, "9 echo... Aircraft with VFR request say again." "Joshua, Skyhawk 909ED, departing east out of Fox, 3,800 climbing to 5,500, request flight following to Barstow." "909ED, squawk 0407." I pushed the code

I set Fox Ground frequency into the standby position. Before takeoff, I had entered a route direct to Fox Field into the G1000. I kept an eye on the G1000 distance to the airport. When I reached 12 NM from Fox Field, I keyed the mic, "Fox Tower, Skyhawk 909ED, 12 miles northeast of the field, inbound to land with India, full stop." "909ED, make straight in to runway 24, report 5 mile final, altimeter 2889." "9ED will make straight in to runway 24 and report 5 mile final, 2889." I flew south and then turned to line up with runway 24. When I reached 5 NM from the airfield I reported, "Fox Tower, 9ED 5 mile final." "9ED, winds 290@8, cleared to land runway 24." "Cleared to land runway 24, 9ED." I heard Tower talking to another airplane and giving him clearance to land behind me. I ran my GUMPS before landing check, and 3 NM from the runway, I pulled the throttle back to about 1700 RPM, noted I was below 110 KIAS, and

into the transponder and then responded, "Joshua 909ED squawking 0407." "9ED, radar contact 8 miles east of Fox Field, altimeter 2986." "2986, 9ED." I leveled off at 5,500 MSL. As I expected, there was some significant convective turbulence. As I was getting bounced around the sky, I wondered if it would be like this the whole way; I sure hope not. I reached my first checkpoint and wrote down the time elapsed -- 10 mins, 10 secs. My flight plan estimate was 11 mins, 40 secs. That was 1 min, 30 secs early. I had used the V_y to calculate the time en route with a cruise altitude of 7,500 MSL. Since I only climbed to 5,500 MSL, it would make sense that I got there early. The Airman Certification Standards (ACS) says you have to arrive at the en route checkpoints within 5 mins of your ETA. Given that, I met the standards.

As I continued my journey and got farther away from the Mojave Desert, the turbulence ceased, and it became a smooth ride. I was thankful. My next checkpoint was Sun Hill Ranch Private Airfield. I reached it in 13 mins. My dead reckoning calculations showed the ETA as 11 mins. Well, I was still within the ACS standards, but I like to be more accurate than that. I noted that the groundspeed displayed in the G1000 was about 102 kts. That was significantly slower than what I had calculated. My weather brief said there was going to be a 12 kt tailwind. That wasn't really accurate today. I had virtually no tailwind, just a knot or 2. The indicated airspeed on the PFD was just a couple knots below the groundspeed. Oh well, that meant I'd reach Barstow about 5 mins later than I planned. No big deal. At this point, I was farther east than I had ever flown. I was definitely in unfamiliar territory. Navigation was easy enough, but I wondered if I'd be able to spot Barstow Airfield and if it would be busy. I reached my next checkpoint where the Mojave River touches a set of train tracks in 10 mins as opposed to the predicted 7 minutes. Still within the ACS but this time 3 mins slow. Bummer. As I reached this checkpoint, I heard my tail number, "9ED, you're reaching the end of our radar service area, we're about to lose you, frequency changed approved and squawk VFR." I pushed the VFR button on the transponder, and it switched to 1200, "Joshua, frequency change approved and squawking VFR, thanks for all your help, Sir, 9ED."

At this point in the journey, I could see the city of Barstow about 10 NM to the northeast, but the airfield was directly at my 12 o'clock 20 NM in the distance. I pushed the button to monitor the Barstow ASOS on 132.175. Winds were 290@13, viz was 10 SM, density altitude 3,100 (for a field with a 1,930 elevation), and altimeter 2988. I dialed 2988 in the PFD and the standby altimeter. I had my pick of 4 runways, 8/26 or 4/22. Given the winds, I picked runway 26 and planned to enter a left downwind on arrival. I dialed the heading bug to 260 to help me plan my arrival and dialed the altitude bug to the pattern altitude of 2,900. Since this was a magenta, untowered airfield, I switched over to the common traffic advisory frequency (CTAF) of 123.0. I thought I could pick out the airfield in the distance, but from this vantage point, it looked like the airfield was right up against the mountains. It didn't look like there was room for a comfortable downwind. This concerned me. In addition, the yoke mount for my Foreflight iPad had somehow loosened and I was having trouble keeping it attached where I could see my flight plan. Finally, it became so loose I just took the whole thing off and laid it on the passenger seat beside me. While I was flying, I couldn't detach the iPad from the yoke mount, so when I needed to reference the sectional and flight plan, I would just pick the whole contraption up to look at it and then lay it back down on the passenger seat. That was annoying, but, as we say in the Air Force, flexibility is the key to airpower! I watched the miles count down in the G1000 display and at about 12 NM started a descent. I only had to lose 2,500 ft. I left the power in during descent to increase airspeed and try to make up a little bit of time. There was no radio traffic on the CTAF. It was completely quiet. As I got closer, I confirmed I was indeed looking at Barstow airfield. I could see that the airfield was farther east of the mountain range than it initially looked and farther away from the mountains than I thought. My initial view was sort of an optical illusion. Now I could see the mountain ridge actually stretched to the southeast away from the airport. Okay, that was good.

When I reached 10 NM from the airfield, I made my first radio call, "Barstow traffic, Skyhawk 909ED is 10 miles west of the field, inbound to land, Barstow." When I passed the mountains, I turned to the south so I could enter a left downwind with the standard 45° entry. I leveled off at 2,900, and when I passed the end of



Barstow-Daggett Airport - KDAG

the runway 8 threshold, I turned to a 45° entry for runway 26 left downwind. As I approached the downwind, I made a radio call, “Barstow traffic 9ED, entering 45 to left downwind for runway 26, Barstow” and then turned into the downwind from the 45° approach. When I was established on downwind, it may have been overkill, but I made another call, “Barstow traffic, 9ED, left downwind runway 26, Barstow.” I looked at the HSI to make sure the heading bug which was on 260 was centered at the bottom; yep, I was on the correct downwind. I did my GUMPs check: Gas – both, undercarriage – fixed down, mixture – full rich, propeller spinning and power set, Seatback\Seatbelts – upright and locked, lights – all on. Still quiet on the CTAF and I could not see any traffic in the pattern or on the ground. I reached abeam the threshold and started my usual configuring habits and spoke out loud. “Perch point, pull power to 1700, below 110, lower the flaps to 10, push yoke forward a bit.” I looked over my shoulder to see when I reached 45° to the threshold and turned onto a left base, “Barstow traffic, 9ED, turning left base runway 26, Barstow.” Once on the base, I checked I was below 85 and lowered the flaps to 20°. I saw the airspeed decrease to 75. I turned final and noted a “26” on the runway threshold, “Barstow traffic, 9ED, final runway 26.” I lowered the flaps to 30°. I pitched for 65 KIAS. This was the best approach I’ve flown in a while. There was a bit of right crosswind and I had left rudder and right aileron controls. I held 65 and pushed in a bit of power to stay on glideslope. When I had the runway made, I pulled power to idle, rounded out, and flared. The airspeed bled off and I touched down softly on first the right wheel with a slight chirp and then the left wheel. Sweet! That was the best landing I’ve performed in quite a while! I reached down and pulled up the flap handle and let the airspeed slow before I started braking. I slowed and made a right turn onto taxiway Charlie and keyed the mic, “Barstow traffic, 9ED is clear of runway 26, Barstow.” Yeehaw! I’d just conquered unfamiliar territory. I had arrived and landed at an airport I had never been to before! That felt good! I noted the time. It was 13 mins from the last checkpoint to the airfield, and I landed at 1011. That was a total flight time of 46 mins. That was 5 mins slower than my trip planning, but still barely within ACS. I’m pleased with that.

I went through my After Landing checklist and started the taxi back to the threshold. This was cool! I saw a yellow crop duster sitting out by a hanger in the distance past the other runway. There were big cracks in taxiway A, and the airplane bounced as I taxied over them. This place was dead. I didn’t see a soul anywhere around. It was almost like a ghost town. When I reached taxiway A1 leading to the threshold of runway 26, there was no runup area. I pulled off to the side to prepare for the next leg. I set the parking brake, took my feet off the brakes, and pushed in a smidge of power to make sure I didn’t move, then pulled it back to 1,000 RPM. The most important task was to figure out why my yoke mount was so loose. I worked to tighten the mount and succeeded in getting a good, tight fit for the trip back. I loaded the next leg from KDAG to Victorville into Foreflight. I entered the frequencies for Victorville ATIS and Tower into Comm 2. I entered Victorville Ground into comm 1 standby. I entered the route direct to Victorville into the G1000 and adjusted the range of the map when the magenta line popped up. I dialed the cruise altitude of 6,500 MSL into the PFD’s heading bug. After completing the Before Takeoff checklist, I was ready to go. I taxied up to the hold short line. There was still an eerie quiet on the CTAF. I keyed the mic,



Photographic evidence I was alone in the airplane!

“Barstow traffic, Skyhawk 909ED is taking runway 26 and will be doing a straight-out departure to the west, Barstow.” I checked final – clear. I checked the runway – clear. I pushed in power, taxied out to the runway, lined up on centerline, and pushed the power all the way in. Engine in the green and 2350 RPM, airspeed coming up, 55 KIAS, rotate, and off on the 3rd leg of this long journey. I climbed away from runway 26, stayed on runway heading, and just kept climbing. Then I made my final radio call for Barstow, “Barstow traffic, 9ED is departing the traffic pattern to the southwest, Barstow.” See ya later, Barstow!

I turned toward my planned heading of 231 toward Victorville. That put those mountains I'd seen on arrival between me and Victorville. Houston, we may have a problem. 9ED was climbing well, but not fast enough for my taste. I wasn't sure I'd be able to climb above the ridge in front of me. I turned left toward a more southerly heading because that was the lowest terrain in the mountains. I pulled up the profile view in Foreflight to monitor my clearance over the top of the mountains. Foreflight told me I was still below the mountains. I leaned the engine to try to get more power. If I had to, I'd do a climbing 360 to gain more altitude. As I approached 6,500 MSL, I realized I was going to be high enough to clear the top of the mountains, but the clearance at that altitude seemed a bit thin to me, so I decided to keep climbing to 8,500 MSL. When I passed over all the mountains, I had reached 8,500 MSL and decided the "coast was clear" and I could start a descent. This worked out well because Victorville was only 33 NM from Barstow, and I was already about halfway there. I pushed the button to monitor Victorville ATIS: 270@7, 2993, information echo. I dialed 2993 into the PFD and the standby altimeter. I switched Victorville Tower from comm 2 standby to the primary position. I dialed Victorville Ground into the Comm 2 standby position, even though I had previously set it in the Comm 1 standby. I thought using only comm 2 would be easier. I set the altitude bug to the Victorville pattern altitude of 3,900. Given the winds from ATIS, I predicted they would give me runway 21, especially since I was almost on a straight-in heading to 21, and I set the heading bug to 21. When I was 10 NM out, I pushed the PTT switch on the yoke, "Victorville Tower, Skyhawk 909ED, 10 miles east of the field, inbound with echo, full stop." The Victorville airfield was very easy to see. I had spotted it a few miles back. "9ED, ident, altimeter 2993." I pushed the ident button and replied, "ident and 2993, 9ED." "9ED, continue modified base to runway 21, report 3 mile final." "Continue to runway 21 and report 3 mile final, 9ED." In a couple miles, I turned to line up straight in to runway 21. I was descending to pattern altitude as I flew closer, and the mountains to the left were close. As I descended, turbulence started to increase. When I was about 5 NM out, I reached pattern altitude, and a big gust abruptly lifted my left wing to a 30° roll and I had to quickly input left aileron to get back to wings level. At 3 NM out, I started to configure the airplane and made my radio call, "Victorville Tower, 9ED, 3 mile final." "9ED cleared to land runway 21." I responded, "Cleared to land runway 21, 9ED." As I approached, I saw the boneyard. The Victorville airport is also an aircraft boneyard. Aircraft maintenance and storage company ComAv Technical Services operates a 240 acre open storage facility with a capacity of over 500 aircraft. The dry desert environment is conducive to long-term preservation of aircraft. In response to the sharp drop in air travel during the COVID-19 pandemic, several airlines contracted with ComAv to store aircraft and to keep them clean and in working order while they are in storage. By March 2020, about 275 airliners were in storage at KVCV. Southwest Airlines had parked 50 active Boeing 737-700 aircraft, and the Australian airline Qantas moved its entire Airbus A380 fleet into storage due to the lack of international demand for flights. FedEx still has a bunch of aircraft in storage there. I was amazed at how many large commercial airplanes were stored there. I managed another nice landing and turned off on taxiway B, "Victorville Tower, 9ED is clear of runway 21, request taxi back to threshold." "9ED, taxi to runway 21 via Charlie, Alpha, and remain this frequency." "9ED will taxi to runway 21 via Charlie, Alpha and remain this frequency." I completed my After Landing checklist and



The FedEx Boneyard at Victorville Airport



Southern California Logistics (Victorville) Airport and Boneyard

several airlines contracted with ComAv to store aircraft and to keep them clean and in working order while they are in storage. By March 2020, about 275 airliners were in storage at KVCV. Southwest Airlines had parked 50 active Boeing 737-700 aircraft, and the Australian airline Qantas moved its entire Airbus A380 fleet into storage due to the lack of international demand for flights. FedEx still has a bunch of aircraft in storage there. I was amazed at how many large commercial airplanes were stored there. I managed another nice landing and turned off on taxiway B, "Victorville Tower, 9ED is clear of runway 21, request taxi back to threshold." "9ED, taxi to runway 21 via Charlie, Alpha, and remain this frequency." "9ED will taxi to runway 21 via Charlie, Alpha and remain this frequency." I completed my After Landing checklist and

turned left onto Charlie. This short leg took 23 minutes in the air. That was 2 minutes slower than my flight plan, but well within the ACS. I seemed to be taxiing a long time and since I was unfamiliar with this airfield, I was unsure if I was headed in the right direction. So, "Victorville Tower, 9ED, I'm unfamiliar with the field, please confirm I'm heading toward taxiway alpha." "9ED, shack, alpha will be on down in that direction and follow it all the way to the threshold." "Copy all, thank you, 9ED." Taxiway A finally came into view. I made a left turn onto the taxiway and noted it was still quite a distance to the threshold. After what seemed like a very long taxi, I pulled off into the run-up area to get ready for the 4th leg of this long cross-country trip. Again, I loaded my flight plan into Foreflight, noted that my iPad still had 84% power to confirm it's charging from aircraft power, entered all the frequencies I needed into the radios, entered 6,500 MSL into the altitude bug, dialed the heading bug to 24 (Fox Field runway) and completed the Pre-Takeoff checklist. Within 7 minutes of landing, I had taxied back to the threshold and was ready to go again.

I taxied up to the hold short line, "Victorville Tower, 9ED holding short runway 21 at Alpha, ready for takeoff with Echo, request right crosswind departure toward Fox Field." "9ED, cleared for takeoff runway 21, right crosswind departure approved, remain at or below 4,000 for traffic deconfliction." As I started to roll onto the runway, "Cleared for takeoff runway 21, right crosswind departure approved, at or below 4,000, 9ED." I lined up with the centerline, noted the big "21" painted on the runway, and pushed the power all the way in. In a few seconds, I was airborne and climbing out at 74 KIAS. I heard my tail number again from Tower, "9ED, at or below 4,500 will be fine." "At or below 4,500, 9ED." When I reached the end of the runway, I turned right crosswind and climbed to 4,300 to give myself a little buffer. Then I heard, "9ED, traffic is a Cessna at your 10 o'clock at 5,500." I looked to my 10 o'clock and keyed the mic to tell him I was looking for the traffic, but I spotted it as I pushed the button and started talking, "Loo.. uh, Traffic in sight, 9ED." "9ED, resume your own navigation, frequency change approved, good day." "Victorville Tower, resume own navigation, frequency change approved, and thanks for your help, 9ED." I started a climb to my cruise altitude of 6,500 MSL but kept an eye on the other Cessna. That pilot was going in roughly the same direction as me, but he was level at 5,500 MSL and seemed to be flying much slower than me. He was to my left and I watched him as I climbed above his altitude, overtook him, and passed him. I leveled off at 6,500 MSL, trimmed up the aircraft and looked over my shoulder for the other Cessna, but could not see him anymore. I switched the Joshua frequency into the primary position, "Joshua, Skyhawk 909ED, about 10 miles west of Victorville, level at 6,500, VFR request." Off in the distance at my 1 o'clock I could see the Rogers Dry Lakebed at Edwards AFB. I was back in familiar territory now. "9ED, go for VFR request." "Joshua, 9ED, request flight following to Fox Field." "9ED, Squawk 0410." I punched in the code and said, "Joshua, 9ED squawking 0410." "9ED, radar contact 12 miles west of Victorville, altimeter 2991." "2991, 9ED." I dialed in 2991 into the PFD and the standby altimeter. I was almost home now; I didn't really need Foreflight anymore. I could see Palmdale airport to my 10 o'clock and Fox off in the distance. From Joshua, "9ED, traffic at your 12 o'clock, another Edwards Cessna, at 5,500." "Searching for the traffic, 9ED." The traffic was 1,000 feet below me, but I couldn't find him. I was a bit worried because I knew another aero club tail meant it was probably practicing maneuvers in the area and may be climbing and descending, so, "Joshua, negative on that traffic, are they staying level at 5,500?" "9ED, I don't know, I'm not talking to them, but it looks like they're not going to be a factor." "Copy, Joshua, thanks, 9ED."

At this point, I was like a barn-sour horse; I was headed toward the barn (home) as fast as I could. I had pushed up the power to 2500 RPM. I tuned in and monitored Fox ATIS: winds variable@4, altimeter 2991, information Kilo. I turned off ATIS. When I reached about 15 NM to Fox, I heard, "9ED, flight following cancelled, contact Fox Tower." "Over to Fox, thanks for your help, sir, 9ED." I switched to Fox Tower frequency, 118.525, and when I got to 10 NM out, I keyed the mic, "Fox Tower, Skyhawk 909ED, 10 miles east of the field with Kilo, inbound, full stop." "909ED, make straight-in runway 24 and report 5 mile final." "Fox Tower, straight-in runway 24 and report 5 mile final, 9ED." "9ED, reporting 3 mile final will be fine." I must have misunderstood the first transmission, my bad. "Copy, report 3 mile final, 9ED." I lined up with runway 24 and drove in to 3 miles. I started slowing and configuring the plane and reported, "Fox Tower, 9ED, 3 mile final." "9ED, roger, cleared to land runway 24, use caution, there's a mower on the left infield cutting grass." I laughed. "Cleared to land runway 24 and I'll watch for the mower." With virtually no wind, this one was fairly easy. I performed a respectable landing and turned off on taxiway A5. Once I cleared the hold short line, "Fox Tower, 9ED clear of runway 24." I'd need to fuel the plane before the final leg to Edwards. "9ED, taxi to parking and remain this frequency." "Taxi to parking this frequency, 9ED." He didn't tell me how to taxi. Since I was an Edwards aircraft, he probably assumed I was familiar. I completed the After Landing checklist and turned right on taxiway A toward the FBO. I taxied to a parking spot across the ramp from Barnes aviation and shut down the engine. I had landed at 1118. In 26 minutes, leg 4 was complete!

I grabbed my cell phone and called the gas truck. The guy said he'd be there right away. I stepped out of the airplane and stretched my legs. I pulled a water bottle out of my backpack and downed about half of it. I texted Bishop that I was getting gas. The gas truck arrived and started fueling the airplane. My phone rang. I looked down and it was Bishop. I answered and he asked me, "How was it?" I said, "it was great! I had fun!" He asked me if I was hungry, and I said I was. He said, "Why don't you get you something to eat at the restaurant there. The safety meeting is about to start and if you fly over now, I won't be able to meet you for a while." I told him that sounded like a good idea. After the plane was fueled, I locked it up and walked over to the restaurant. It's called Foxy's Landing. I ordered a grilled cheese sandwich with fries. Yum! As I dined, I thought about the flight. I debriefed it in my mind and thought about what I learned.

First and foremost, this flight was a huge confidence builder. Every time I fly solo, I learn a ton about flying and about me. Just the very experience gained from being the solo PIC is like a family heirloom -- invaluable. I love my instructor and he has taught me so very much, but, after you have mastered the basic flying and navigation skills, 1 flight hour of solo PIC experience is worth about 2 flight hours of dual training experience. There is no better learning experience than to be solely responsible for the flight. There's no one there to answer questions or catch your mistakes. You must shoulder all that responsibility. You must have the knowledge and ability to react and solve any unexpected challenges that come your way. Learning to trust your training and your airmanship skill is an essential step toward becoming a capable pilot.

Second, preparation is the most important part of the flight, especially for a student or low-time pilot. The old adage "*plan your work and work your plan*" is apropos. Also, another one: "*knowledge is power.*" The more you know about the route, the airplane, the airspace, the weather, and the destination airports, the easier, safer and more enjoyable your flight will be. When you encounter the unexpected, planning, knowledge and proficiency will be your savior. When I took off out of Barstow, I didn't expect the mountains to be that high and that close to the airport. I also didn't know that I wouldn't be able to see my first checkpoint because of those mountains. However, because I had thoroughly planned and studied, I was able to quickly come up with options and adapt. I knew I had enough gas to fly north and around the mountains. I knew I had the gas and the airspace to execute a 360° climbing turn to gain more altitude. I knew how to use the Foreflight map view and profile view to help me make those decisions. Ultimately, the only changes I had to make was to aim my nose toward the lower mountain terrain and climb a bit higher than I planned. But if circumstances had required me to make more significant changes to the plan, I am confident I would have had the knowledge to make those decisions. The key point is to never get complacent in cross-country planning and preparation.

Third, radio communication gets easier, and I sincerely appreciate the controllers. My attitude about radio comms has evolved from dreading to talk on the radio, to practicing radio calls on the ground, to making the radio calls with trepidation, to being slow at composing the calls in my head, to being cautiously comfortable, to enjoying it. Yes, you heard that right -- I actually enjoy talking on the radio, now. This was a revelation to me, too. Sure, I had to learn, and I made plenty of mistakes, but now talking on the radio is fun. I remember one of the first times I went flying with Bishop, we were talking about comms and he said he enjoyed talking on the radio. At the time, I thought "this guy is bonkers," but now, I agree with him. Those controllers are my friends and teammates. They keep me out of trouble and help me when I need help. Most of the time, even when I ask stupid questions, like I did at Victorville about the taxi route, they are patient and kind. I always try to remember to thank them for their help.



After finishing up my grilled cheese and fries from Foxy's Landing, I walked out of the restaurant and across the ramp toward my airplane. As I entered the ramp, a beautiful, bright red airplane taxied up and parked. Wow, I think that's a Pitts Special! The pilot hopped out of the airplane and started walking toward me on his way to the FBO building. As we got closer, I asked, "Is that a Pitts Special?" He said, "Yes, it is. It's a Pitts Special S2S." I said,



Pitts Special S2S

"That's a beautiful plane! Do you mind if I take a picture of it?" He said, "No, not all. Take as many as you want, however the cockpit is a bit messy." I said, "I won't get that close, I'll just take some distance shots." We talked a few minutes, the easy conversation of two men who love airplanes, and then parted: He to find the Lancaster Public Works building and me to start the last leg of my cross-country flight. I love being a part of the general aviation community!

I walked up to 9ED, did a quick visual walk-around, checked the oil, and hopped in. Time to fly home. I opened Foreflight and loaded my flight plan to Edwards AFB, although, I really wouldn't need it. I've flown this route dozens of times. I took a few seconds to text Bishop that I was about to start the engine. I completed the before Starting Engine checklist and moved on to starting the engine. I knew that 9ED had been finicky with hot starts. In the past, we've had a bit of trouble re-starting the engine after a previous flight. Since the plane had been sitting for almost an hour, I decided to prime it with the auxiliary fuel pump. Then, I yelled "Clear prop!" and turned the ignition switch to "START." The engine didn't catch. I paused for a few seconds and tried again. Nothing. Dang it! It would be embarrassing to have to call for help starting the engine. Then, I thought, WWBD – what would Bishop do? I tried another start and this time I gave a couple of pumps on the throttle after the starter engaged. I had seen Bishop do this once when we were having trouble getting it started. It worked! The engine caught and I immediately pushed in the red mixture knob to keep it running. I pulled the throttle back to 1000 RPM and the engine coughed. I pushed the RPM up a bit to keep it running. It smoothed out and sounded strong after a few seconds, and I pulled the throttle back to 1000 RPM. The oil pressure was in the green and it kept running smoothly. I finished the Start Engine checklist and Taxi checklist. I put all the frequencies I'd need into comm radios. I listened to ATIS. It had changed to information Lima, but winds and altimeter were the same as before lunch: variable@4 and 2991. I entered 2991 into the PFD and standby altimeter. I checked the brakes and then called Fox Ground, "Fox Ground, Skyhawk 909ED, ready to taxi with Lima." "9ED taxi to runway 24 via alpha, alpha 7." I repeated the instructions and started the taxi to the runway.

When I reached the end of the runway, I pulled off into the runup area. I did an engine runup and everything checked out. I did my Before Takeoff checklist and set the altitude bug to Edwards pattern altitude 3,300 MSL. I paused to think about my departure route. I'd need a right downwind departure. For some reason, I was feeling uneasy. I felt like I was forgetting something, so I doublechecked everything, even though I'd already completed all the checks. Foreflight was loaded, I had my frequencies setup, gas on both, fuel shutoff in, trim to takeoff, mixture rich, flaps up, engine in the green, G1000 route direct to KEDW, squawking VFR, no bad indications on the PFD, altitude bug set to 3,300, no need for the heading bug, lights all on. I can't explain why, but I couldn't shake the uneasy feeling. I checked everything again for a 3rd time and, of course, nothing had changed, everything was still set and ready. Well...I had to get home, so I trusted my checks and instruments, and taxied up to the hold short line. "Fox Tower, Skyhawk 909ED, holding short 24 at A7, ready for takeoff with Lima, request right downwind departure toward Edwards." "9ED, cleared for takeoff runway 24, right downwind departure approved, and that mower is still out there, it's to the left of you on the infield." "Cleared for takeoff runway 24, right downwind departure approved, and I'll watch for the mower." I rolled out onto the runway, noted the big "24" written on the concrete, lined up with centerline, and pushed in full power. As I lifted off and started to climb out all the uneasiness drained away.

After I flew past the end of the runway, I turned right crosswind and then right downwind. I leveled off at 3,300 MSL and kept flying straight out toward Edwards. Fox Tower cleared me off their frequency a couple miles past the threshold of runway 24. I took a few seconds to listen to the Edwards ATIS: Winds calm, altimeter 2988, information India. Then I switched to Joshua, "Joshua, Skyhawk 909ED, out of Fox to Edwards, Westgate arrival." Joshua gave me a squawk code and I entered it and responded appropriately. I can't remember the squawk code. Honestly, this leg is a bit fuzzy in my mind since it's somewhat routine. In another minute, they switched me over to Sport, "Sport, Skyhawk 9ED checking in 3,300, request Westgate arrival." "9ED, Westgate arrival approved, report Westgate." "9ED will report Westgate." When I was over Westgate, I did just that, "Sport, 9ED, Westgate." "9ED, contact

Edwards Tower.” “Over to Tower, 9ED.” I switched the radio, “Edwards Tower, Skyhawk 909ED, inbound over Westgate with India, request South Base full stop.” “9ED, enter left downwind for runway 25, and report base.” “Left downwind runway 25 and report base, 9ED.” The turbulence I’d experienced on the way out was still there. I was getting some significant updrafts and downdrafts. I decided to get a windcheck from the Tower to see if anything had changed. “Edwards Tower, 9ED, can I get a wind check please.” “9ED, winds caaalm.” The controller emphasized the word calm and drew it out. I laughed and wondered why. Maybe he was just having fun while things were slow. “Copy, thank you, 9ED.” I drove in and entered a left downwind for runway 25. I completed my before landing GUMPS check. I reached the perch point, started configuring the plane, and turned base, but I forgot to make the base call. Tower helped me out and right before I turned final, “9ED, winds calm, report off runway.” “Report off runway, 9ED.” I flared and touched down. Not one of my best, but it’ll do. I pulled the flaps up, slowed and turned off the runway. “Edwards Tower, 9ED is clear of runway 25.” I was home! I now have that long cross-country requirement in my logbook. I think I’ll do another one soon!

Today, I flew alone into unfamiliar territory and survived, nay succeeded. I conquered the unknown and unfamiliar and all the fears that go along with that. Flying is fun, but it is challenging with an element of risk. That risk can be mitigated with proper training, knowledge and preparation. I know now that I have the knowledge and ability to navigate to and land at any Class E untowered or Class D towered airport. I like to think that I’ve “topped the wind-swept heights with easy grace.” OK... at this point, it may not be *easy* grace, but as I continue to learn and gain more flight experience, my goal is to increase my proficiency and develop into the safe, competent, graceful pilot that I dream of being.

- Glenn Nicholson
USAF Lt Col (Retired)
Student Pilot