

Event Summary Description

My family and I were flying home to Georgia after spending the weekend at my parents' place in Illinois. KTAZ is the closest airport to their house, and I have flown in and out of this airport for many years and am very familiar. We had rented a Piper Lance, N349SB, from Skybound Aviation in Atlanta, GA. I am a member of their flying club, and had flown this specific airplane for about 3 and half years, totaling nearly 50 hours.

On Sunday October 30, 2022, I filed an IFR flight plan from KTAZ to KXNX. We had decided to stop in Nashville to use the restroom and wait on the weather in Atlanta, Ga (our home and final destination) to improve a bit. My wife had a friend who lived nearby KXNX and their 10-year-old son was interested in becoming a pilot someday. We had arranged to meet their family there and take their son up for an introductory flight.

Our filed routing was KTAZ.BIB.PXV.HAGNO.KXNX at 5,000 ft with an alternate of KBNA. ETE for this leg was 1:56. I had used Flight Plan GO for flight planning, weather and weight and balance services and had complete NAV Logs printed for the routing. I reviewed departure, destination, and enroute NOTAMS and weather thoroughly. I fueled the aircraft using the self-service station at KTAZ, purchasing 45 gallons of 100LL and filled each wing. The receipt for this purchase is attached.

My preflight inspection of the airplane was done while referencing the laminated onboard checklist. Oil quantity was checked and found to be at approx. 9 qts on the dipstick. Fuel quantity was physically inspected and fuel tank caps were properly seated. All fuel sumps were inspected with the fuel strainer. Once we were ready, I called St. Louis Approach for clearance delivery. I started the aircraft, and taxied out to the runway. After I completed the runup procedures, I made our position and direction of departure calls on the CTAF frequency 122.8 and we departed runway 18. Weather at departure time was 5SM with broken ceiling at 800 ft and light winds out of the south.

After takeoff, I contacted Springfield Approach as clearance had assigned. I climbed to 5,000 ft initially and we proceeded via our filed IFR routing. We flew uneventfully for about an hour and 10 minutes, making an altitude change to

7,000 ft and switching fuels tanks at 30 min intervals. We were in clear air, well above a cloud layer below, and getting a smooth ride. TAS was showing 155 KTAS, and ground speed was 135Kts with power set at 22 inHg and 2300 RPM on approx. 18.0 GPH. All oil pressure and temperature readouts were in the normal green range. At this time in the fight, I felt the engine shake a bit and noticed that cylinder #3 had some abnormal indications on the aircraft's JPI display. I turned the fuel pump on and moved the mixture slightly more rich. The engine smoothed out and ran normally for a few minutes. Then the engine began to surge to full power, momentarily, and come back to previous power settings. I turned to my wife and told her to prepare herself and the kids for a precautionary landing where we would have the engine inspected.

I reviewed our position and then asked center controllers for vector to divert to KEVV. I told them that it was for engine trouble. Out of an abundance of caution, I gave them souls on board and fuel remaining. I tuned in ATIS for KEVV and saw that the winds were 180@3kts with vis of 10SM and ceilings BKN 011. I was given a vector of 070 and descent clearance to 2,500 ft. As we descended the engine smoothed out completely. I ran the appropriate Descent and Approach checklists on the laminated card and reviewed the ILS 04 at KEVV. The back side of the laminated checklist had emergency procedures, which I began to review on descent. After checking in with Evansville approach control, they asked us to state intentions, to which I replied that we would land on runway 04 and taxi to an FBO to have the engine looked over before continuing. Evansville approach cleared us for the ILS 04, heading 070 to intercept and maintain 2500 ft until established. We were in IMC conditions at 2500 ft. I intercepted the localizer and tracked it inbound while maintaining 2500ft. Approach control switched me to Evansville tower; Just as I contacted the tower, the engine failed completely. The unmistakable sound of three thuds was heard by my wife and I, and engine power was lost. I immediately pitched for best glide speed of 92KIAS. Mixture was already set at full rich, and the fuel pump was ON. Tower transmitted a low altitude alert and stated that there was a tower at our 12 o'clock position and 2 miles. This was noted on the chart, but we were in IMC and had no visual reference. Tower aided with a vector of 350 to avoid the tower. As we descended, I ran the emergency checklist for power loss in flight on the laminated card. I open the Alternate Air. Fuel pressure showed fine on the engine displays, as did fuel quantity, volts and amps. I attempted restart but to no avail.

I soon broke out of the clouds at approximately 1100 ft. I could then see the tower and we were clear. I could see KEVV and there was no chance of making the field. I glanced at the river to our right as a possible landing site and a nearby interstate. I asked tower if there were any other fields nearby. Tower controller mentioned a private grass strip approximately three miles away, but I could not see it. I was descending in excess of 1,000 FPM and options were limited and we were over a residential community. I spotted a golf course ahead to the right and maneuvered towards it. There were two cell phone towers that I could see and were able to avoid. I put the gear handle down and received a three green indication. As I approach the golf course, I did not see any golf carts, so I lined up with a fairway on the course and reduced speed through flap deployment. I got full flaps and was holding 75KIAS. As the aircraft neared the ground, I instinctively flared aggressively and tried to avoid hitting any trees while maintaining a wings level attitude. We hit the ground hard and skidded to a stop but did not hit any obstacles. It was a hard landing. Paneling from the overhead came down along with wires and anything loose in the cabin was thrown about. As the aircraft came to a stop, I yelled "IS EVERYBODY ALIVE?" My wife responded affirmatively, and I could hear my sons crying. I got my 3 point harness off and dug my way out of the aircraft, exiting from the passenger side door. I ran around the aircraft and saw my older son, Henry, already out of the cabin. I grabbed our 10-month-old baby, Thomas from my wife and helped her out of the aircraft. She began bleeding from the top of her head. I asked if she was okay, and she calmly said she was. We moved away from the aircraft in case of fire and laid down on the golf course. Thankfully there was no fire or fuel leak that we observed. Some teenage kids came over a nearby hill and asked if we needed help. They called 9-1-1 as did my wife. She told the operator the extent of our injuries. She had a head injury and gash, and I stated that I thought I broke my back. First responders arrived very quickly, they stabilized us and transported us to Deaconess Midtown Hospital for evaluations and treatment.