

Re-cap of July 10, 2017 Flight from KGEU to 33 55' 45" N to 112 8' 26" W

Approximate Departure from KGEU: 0730 MST. Fuel tanks were filled to ~30 gallons that morning before departure.

Tach Start: 62.6

Approximate Emergency Landing Time: 0750 MST

Performed an engine run-up after reaching an adequate oil temperature. CHT, OilP and EGT in normal operating range.

Received clearance to taxi to active runway, 1. Taxied to run-up area and performed a second run-up and moved to the hold line for runway 1. There was traffic in the pattern and I waited for two aircraft landings. The temperature on #3 cylinder reached the warning mark at 350degF, 395Fdeg is the limit. I ascertained that the I would begin the take-off roll and upon reaching 30mph would re-check the CHT. As soon as the plane began rolling for take-off the #3 CHT dropped to 330degF CHT and continued to drop upon rotation and climb-out.

Climb out rpm was at 2660. Propeller pitch had been adjusted on July 7, 2017 to improve cruise speed. At the previous setting max speed was in the 125-130 mph range. I had completed a change in the angle of incidence of the right wing on July 7, 2017 as well. The flight back from Marana area on that day revealed a change in heavy left wing performance to light right wing tendency which was the desired effect on the plane. I had installed a tab on the right aileron at an earlier date and I surmised that its removal would resolve the slight right roll performance. I removed that tab on the morning of July 10. The performance of the airplane during the flight was balanced requiring no pressure in either direction to maintain straight flight.

After reaching 2300 feet, I pulled back the power and leveled off just below 2500 feet msl indicated for the flight to the north. I reset power to 2800 rpm. Between 2800 and 2900 rpm the engine did not feel as if it were operating smoothly. (A defective fuel pump had been replaced at 33.5 hours, January 15, 2017. The engine had previously exhibited rough running symptoms with the previous fuel pump). Airspeed climbed from ~80mph in climb to an indicated 115-120+ mph at this point in the flight

Route of Flight: Northbound from GEU ~360 deg. Remained on a path between KDVT and SATR. Received a TFR warning for continued northbound flight and turned eastbound north of the Phoenix Class B 90/80 section east of Lake Pleasant. Turned NE toward the plateau area in the Mazatzal Wilderness area. I had begun a slow climb from 2500 foot as I passed P48 to the west of my flight path.

Checked to ID TFR which flashed on EFIS while I was changing fuel tanks from left to right tank. I did not visually inspect the tank selection. I conducted the tank change while looking at the instruments and focusing on the turn to the east, and moving my right hand to the EFIS to investigate the TFR warning.

Passing through 5980 feet at an indicated 450fpm climb at 2850rpm the IAS varied between 110-120 mph, I felt a loss of power and the indicated RPM dropped to 1450rpm. I quickly scanned the EFIS and did not see an immediate indication of engine shut down. I leveled off and began a right turn back toward North Phoenix in a south westerly direction.

I moved the throttle cable with no effect on engine RPM. The throttle moved freely. I looked at

the engine switch and it was set in the both position. I grabbed the chart in the right seat to ascertain the tower control frequency for KDVT and made an attempt to contact the tower to advise of my situation. I subsequently reset the transponder while searching for a suitable landing site. I selected an area to the east of I-17, a plateau north of the town of New River.

I sought a landing site that would offer easier retrieval and the selected area was adjacent to a dirt/gravel road with a clear path to set down the aircraft. I decreased speed to the 80-85mph range to achieve best glide. I attempted to raise KDVT tower again. My indicated RPM slowing dropped from the 1450 to 1000 rpm as I was turning base to final to land on the plateau. I selected a flap setting at 20 degrees on base.

On final I still had excess airspeed, I pulled back on throttle to see if there would be any effect. There was no change in engine RPM at 1000rpm indicated.

I lined up down the approximate centerline N-S on the plateau. As I still had too much airspeed for a touchdown, I proceeded descent over the rim of the plateau. I put in the rest of the flaps to 40 degrees as I approached the edge and reached down to ensure fuel was off for the rough landing. There was a road paralleling my flight line, but it veered off to the SE and I could not see the road down the slope. I elected to land straight ahead rather than risk an unusual attitude for touchdown.

The landing area beyond the rim was typical AZ landscape with small brush, cactus, rock and undulating surface. My left wing tip clipped a small creosote bush as I was flaring for landing. Touchdown was rough and angled slightly east of south, upon hitting an area of depression, the gear collapsed and the propeller struck the ground and sheared off. At this point the aircraft slid on its belly to its resting place on the right side of Coyote Pass Road (heading south).

The time of the emergency landing was ~0750 hours MST.

Upon coming to a rest I shut down all the switches. The ELT remained on, activated by the impact of the gear collapse.

I exited the aircraft, called my wife and indicated that I had an emergency landing and I would give her a call back. I then called Greg Hobbs, the owner of the build center that I had built N273DB the previous year. Greg loaded up his truck and trailer and departed the Marana area to assist in the recovery of the aircraft.

Bill Jordan, a local resident, came up the road from his house in a four wheeler to provide assistance. We began collecting some debris and I pulled out my iPad and located the airport manager number for KDVT. I called him and got the number for the KDVT tower and contacted the tower, spoke to Travis and advised him of the emergency landing. Travis indicated that he would take care of contacting appropriate personnel with the FAA and NTSB. I then looked up the number for the New River area Fire Department. I was not injured from the landing impact, so I chose not to call 911. Upon contacting the fire department, I explained that I had effected an emergency landing, my approximate location and the receptionist indicated that the on-duty Fire Marshall would give me a call.

Bill and I retrieved some of the parts and he brought over two 5 foot sections of 2x6 boards that we used to turn the aircraft to clear the road.

In the meantime, a Phoenix Police helicopter began searching the area for the wreckage just east of I-17. The pilot was in the air for about 15 minutes prior to working toward my location. The Fire Department arrived with a number of vehicles. The Maricopa county sheriff's department also arrived on the scene with a number of officers. The Phoenix Police helicopter

landed as the vehicles were arriving. I spoke briefly with one of the officers on board. At their request I shut down the ELT.

The EMT's from the Fire Department requested they quickly check my vitals. I agreed. BP/ Pulse rate were elevated and did come down on the second check. I was ambulatory, alert and declined further medical attention.

Upon discussion with the Fire Department and coordinating with Greg Hobbs, we ascertained that he was coming with necessary equipment to ground the aircraft when we extracted the fuel later and prior to retrieval.

I contacted the insurance company agent and advised them of the incident. They put me in touch with AIG, the underwriter.

The Fire Department personnel left, my wife arrived and I coordinated with the Sheriff's department to leave the scene for approximately 45 minutes to retrieve my pickup truck and some tools and fire extinguishers from my hangar at KGEU.

A sheriff's department deputy remained on-site until we were given the go ahead to remove the airplane in the late afternoon. Other individuals from the Maricopa county Sheriff's office arrived later and indicated they were conducting some training on accident sites.

Steve Stein from the NTSB called me. I recounted the incident. He indicated that the FAA would be sending a team out led by Scott Hutson and I would receive a subsequent call from Mike Heun who would be assigned to the investigation. I was advised by Steve to leave the aircraft in place and to not attempt a recovery. Greg Hobbs had arrived a few minutes earlier with his recovery vehicle.

The FAA team arrived with Scott Hutson and Scott "?". They began their investigation. They marked out the areas where the aircraft touched down, collected parts along the path and took pictures of the aircraft. Scott Hutson asked me questions about the events that led to the emergency landing.

Toward the end of their on-site review, Greg and I removed the cowlings to inspect the engine to ascertain the cause of the engine problem. The float bowl was removed and revealed a minimal amount of fuel in the bowl. The fuel line to the carburetor also appeared devoid of fuel. The gascolator sump still had fuel in it. An inspection inside the cockpit revealed that the wing spar box had been bent in the landing and the fuel line from the right tank was kinked. Fuel remained in both filters, with the left filter being nearly full while the right filter was about 1/3 full.

The FAA team spent some time in their vehicle and speaking with the NTSB rep, Steve Stein. Before their departure I was advised that Mike Heun would give me a call. They indicated that we could now recover the aircraft.

In parallel, I had been in contact with AIG, Renee Bertonlina. She reviewed the procedures for recovery and dispensing with the aircraft. Greg Hobbs reviewed the wreckage and ascertained that the airframe, wings were not serviceable. The ailerons might be reusable. The metal frames (engine mount, wing spar box) were beyond repair. Status of the engine after the propeller strike is yet to be determined. Given the extent of damage, I elected to go with the AIG recommendation to have their agent, Air Transport, recover the aircraft and move it to their facility. I advised the FAA on-site team and they are familiar with the organization and felt that would make subsequent inspection by the FAA/NTSB more expeditious. Renee sent me the

contact information for Air Transport and I contacted them and provided the directions and GPS coordinates to the landing site.

The FAA and sheriff's department deputy departed the area. Greg and I proceeded to remove the fuel from the wings prior to Air Transports arrival. We confirmed the aircraft was grounded and then used a siphon to remove the fuel from each wing. Approximately 25 gallons of fuel were removed from the wings.

Air Transport arrived at approximately 1600 MST and we proceeded with removing the wings and loading the wings and fuselage onto the recovery trailer. We completed the operation around 1640 MST. I picked up the trash around the area and Mr. Hobbs and I departed. Mr. Jordan had assisted us during the entire day.