

Date of Accident: 7/24/2022

Time: 1453 PM ET

Location: Ray Community Airport (57D), Ray, MI

Weather Conditions: VFR

- No automated weather on the field, VLL is the closest
- VLL (Troy) airport weather @ 1455 ET
 - Skies - Clear
 - Wind - 230 12kts
 - Temp / Dew Point – 84.7 / 68.5 (in Fahrenheit)

After performing a standard pre-flight inspection and untying the aircraft, we pulled the aircraft using the towbar from the parking position nearest the terminal to the fuel pumps. ~35 gallons of fuel were pumped into the aircraft using the westmost pump to bring the tanks to full. Afterwards, the aircraft was loaded to an approximate takeoff weight of 3829 lbs. with a CG 83.84 inches (forward limit at that weight is 83.30 in) with myself and my wife occupying the pilot seats, my niece occupying the aft facing seat behind the copilot, the dog (Charlotte) on the floor, and bags on the aft facing seat behind the pilot, bags on seats 5 & 6, and supplies in the aft baggage compartment. Estimated takeoff distance to clear a 50' obstacle with the weather and weight conditions using approach flaps was ~2,000 ft. Runway 28 was selected due to the weather conditions and provided 2,495 ft takeoff distance.

After loading the aircraft, I conducted the standard before startup, startup and taxi checklists, using the field elevation to be set in the altimeter and noting the windssock in addition to a weather briefing that I downloaded from Foreflight (which I use and had on my iPad). I then communicated to a yellow Piper Cub that was holding short of Runway 19 that I would be back-taxiing Runway 01 for a short time to turn onto the taxiway for Runway 28. After reaching the hold short point for Runway 28, I conducted the run-up and before takeoff checklists and set the flaps to approach. The runup was executed with normal readings to include proper functioning of the feathering capabilities, magnetos, alternators. After completing the run-up, I set the aircraft instruments & flight plan in the GPS, set the initial takeoff altitude for 3,500 ft to ensure I remained below the DTW Class B airspace until contacting them. I had the Unicom frequency in 1, Detroit approach in standby, and 121.5 dialed in radio 2. It should be noted that I had an IFR flight plan on file to KGYG but was planning to fly VFR to KSBN to drop off my niece at the airport so she could non-revenue travel to KATL (her father is a pilot for Delta).

Noting that the Piper Cub had conducted a closed loop takeoff and had landed, I communicated my intention to take Runway 28 and depart with a westbound departure from the traffic pattern. Upon taking the runway, I ensured that the takeoff checklist was completed and stopped on the centerline for a static takeoff. I advanced the throttle, stopping at 20" MF to check proper function of the propeller, validate oil pressure, and CHTs were in the green, then advanced the throttle to 29.6" MF. I verified 2,700 RPM and adjusted the mixture to show 34.7 GPH. I released the brakes, always kept my hand on the throttle, and allowed the aircraft to accelerate. Upon reaching 70 kts indicated airspeed, I began the rotation, allowing the aircraft to break ground when ready then applied additional back pressure to pitch to ~7.5 degrees up. That's the pitch I target for ~85 – 90kts initial climb. As I witnessed a positive rate and acceleration in the climb through 77 KIAS, I selected the gear up. At approximate that same time, I witnessed 2 larger black birds come very close to the aircraft cutting across from the pilot-left to the right side, and I was surprised at how close they were but did not feel a hit. Immediately after the birds passed, the aircraft started to drift right – the right wing dipped, and the nose began a slight pitch down. I looked up and noted the drop toward some trees and then maneuvered the nose back towards

the runway direction. I then looked back at the indicated airspeed and noted 64 KIAS and the aircraft was feeling "sloshy" ...not as responsive as I would normally expect. I looked over the dash and noted that we were continuing in a descent towards the trees at the departure end of Runway 28 and the stall warning horn sounded. I knew at that point we were not going to out climb the trees and immediately told my wife and niece (who was not wearing headsets) that "Where not going to make it. We're not going to make it." I noted the tree canopies and attempted to direct the aircraft at a 'trough point' between 2 canopies, hoping that would keep the aircraft clear of any large portions of the tree trunks.

The aircraft RPM never seemed to diminish, and I did not notice any abrupt changes / lurches / stoppages in power. As the aircraft hit the trees, the propeller immediately started to cut through branches. At that point, I closed my eyes and the next thing I knew, we were stopped, and a large flame immediately came into the cabin from the left wing and exited the cabin just as quickly. My wife opened the door and struggled to exit. I instructed her to remove her seatbelt. She did so and was able to stand immediately and helped me out from my side of the cockpit. The impact opened the aft doors and my niece was able to step out. The dog may have been in shock as she did not immediately get up. After we were all out of the plane, she jumped to the front seat, looked at us, then ran to the northwest away from the wreckage (we were immediately northeast of the plane). My niece attempted to go after her as the wreckage started to burn. My wife initially went back to the plane to look for her phone, then went to find my niece. I then stood up from behind the right-side wing, started to grab bags that I felt comfortable getting with the fire near and looked for our phones but could not find them.

My niece and wife returned shortly after, we grabbed personal items we could and started to walk away from the wreckage. A DNR officer and 2 police officers immediately met us as we exited the trees and onto the cut grass section west of Runway 28. We were escorted back to the Runway where an ambulance met us and soon after took us to Detroit Receiving Hospital.