



MEMORANDUM FOR RECORD

The following information was provided by the responding inspector for the Federal Aviation Administration, Duane "Dale" Hoff:

On July 11, 2020, at approximately 12:05 a.m. eastern daylight time (0405 Zulu), Piper PA32-30 Cherokee 6, N22111 collided with trees and a fence located at the airport boundary on the approach end of Runway 24 at the Springfield-Beckley Municipal airport (KSGH) Springfield, Ohio. The pilot said at the initial interview, the accident was due to fuel exhaustion. The aircraft is registered to Barcelona Six, LLC and operated under the Provisions of 14 Code of Federal Regulations Part 91 as a personal flight. The private pilot and passenger were uninjured in the accident and the aircraft was substantially damaged from colliding with trees and a fence. Night visual meteorological conditions prevailed at the time of the accident. The SGH weather at the time of the accident was wind 290 degrees at 9 knots, visibility 10 nautical miles and sky clear. The pilot did not file a flight plan and used flight following enroute to SGH. The aircraft departed Ocean City Municipal Airport (26N) approximately at 7:35 p.m. eastern daylight time (2335 Zulu) to the Springfield-Beckley Municipal airport.

The pilot stated the flight originally departed from Lincoln regional airport (IPJ), Lincoln, NC on July 10, 2020 at approximately 10:45 am local time to Carroll County Regional airport (DMW), Westminster, MD. Flightaware showed the flight to DMW was 3 hrs and 19 minutes. The pilot departed DMW at approximately 2:12 pm local time with full fuel tanks of 84 gallon of useable fuel for a 55 minute flight to Ocean City Municipal airport (26N), Ocean City, NJ. Before departing 26N at approximately 7:35 pm local time, the pilot visually checked the wing tip tanks and estimated by visually measuring the main wing fuel tabs and subtracting the calculated fuel consumed on the trip from DMW to 26N to have about 70 gallons of total usable fuel for the flight to Springfield-Berkley Municipal airport.

The Foreflight program was used to determine fuel required for the flight. The estimated time enroute for the 430 nautical mile, direct route from 26N to SGH was 3 hours and 17 minutes with an estimated 10 knot headwind and would require an estimated 50 gallons of fuel. Fuel consumption was based on 15 gallons per hour from the pilot-operating handbook. The pilot estimated he had about 4 hours and 36 minutes of total flight time with the 70 gallons of usable fuel. The actual time en route from takeoff to the crash for the 478 nautical mile route flown was approximately 4 hours and 24 minutes based on data taken from the FlightAware website. An estimated 66 gallon of fuel at 15 gallons per hour would be required for the actual route flown. Due to weather along his flight path west of the Washington DC area, and the Clarksburg, West Virginia area, the pilot had to deviate approximately 60 nautical miles south of his intended course to avoid weather. The pilot had to make multiple altitude changes to avoid weather and encountered higher than expected forecasted headwinds along the route of flight. These factors could have contributed to the unexpected increased flight time and fuel consumed. The pilot

monitored the fuel remaining at the destination using the ForeFlite program to determine the time remaining to SGH based on current headwinds, fuel remaining in each tank after switching to another tank, mental calculations of fuel remaining and range based on 15 gallons per hour fuel consumption. The pilot estimated there would be an adequate reserve of 7-10 gallons remaining on landing.

Engine power was lost shortly after crossing the RNAV 24 final approach fix. The pilot attempted to restart the engine by switching from the left wing tip tank, and then to the left inboard tank. The engine ran momentarily before losing power. Attempts to restart the engine by switching to the other fuel tanks failed. The aircraft came to rest just inside the airport boundary on the approach end of runway 24. The damage to the propeller indicated the engine was not producing power at the time of ground impacts. The total fuel drained from all four tanks was approximately 2 inches in a five-gallon bucket.

---END---