



RECORD OF CONVERSATION

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Eastern Region

Date: July 19, 2022
Person Contacted: Elbridge Harmon Brewer
NTSB Accident Number: ERA22LA309

Narrative:

Mr. Brewer was contacted by phone on July 15, 2022 at 1213 EDT. He was called at [REDACTED] and left a voicemail message. He returned the call the same day at 1504 EDT. He was called back at 1519 EDT to the same phone number. He provided an email address of [REDACTED]

At the beginning of the interview he was advised that the NTSB is a federal agency mandated by Congress to investigate aircraft accidents, and NTSB has no authority to take any action against any individual. He was also informed that the purpose of an NTSB investigation is for safety only, and any person NTSB talks with has the right to representation; he agreed to the interview without representation. He added that he is a member of AOPA and consulted with them about the interview and they informed him would be ok talking with NTSB by just telling the truth.

At this stage of the conversation he was advised that for transparency I would be typing the notes and would send to him for review and comment. Further, any personally identifiable information (PII) would be redacted and not released into the public domain.

He provided a home address of [REDACTED] Lancaster, Ohio [REDACTED] His date of birth is [REDACTED] His pilot certificate number is [REDACTED] He holds a private pilot certificate with airplane single engine land and instrument airplane ratings. His original certificate was issued on November 26, 2006. The instrument rating was issued on November 1, 2010. He was issued a 3rd class medical certificate in October 2015. He was issued Basic Med on December 17, 2017. His last medical examination was performed on February 21, 2022. As of June 22, 2022, he has about 540 hours total flight time, and 428.3 hours in a Cessna 172. He also has 102.3 hours in a Cessna 180, 6.8 hours in a Piper PA-32, and .9 hours in a Cessna 182RG.

He was asked the following questions:

What was the date of his last flight review?

His flight review and instrument proficiency check (IPC) was performed over the course of four days at the end of March and beginning of April 2022, totaling 4.2 hours. The dates of the flights were March 16, March 28, April 5, and April 7. Only his Flight Review was signed off.

He and two partners owned the accident airplane starting approximately in May 2010. The two partners dropped out of ownership in the last 2 to 3 years, but he owned it continuously.

Have you had a similar engine problem in this aircraft since owning it?

No. The aircraft is leased to a fixed base operator (FBO) who maintained the aircraft in accordance with 50 hour, 100 hour, and annual inspections.

What was the purpose of the accident flight?

It was training. He intended to perform touch and go landings, air work and maybe fly 5 miles away then he planned to return to the airport.

After the initial takeoff did he stay in the traffic pattern?

Yes. He intended to perform either a touch and go landing, or a full stop taxi back landing. If the approach was faulty he intended to perform a missed approach. The airplane had the capability of extending the flaps to 40°.

Explain what happened from your arrival at the airport for the intended flight to getting out of the airplane postaccident?

Earlier that day the airplane had underwent a 50 hour inspection and he was scheduled to fly the airplane between 1400 and 1600 hrs. He arrived at the airport just before 1400 hrs., and at that time the airplane was already out on the ramp. He got the clipboard for the aircraft and set up to perform a preflight inspection. He unlatched the cargo hatch and removed the step ladder from the cargo area for his preflight inspection setting it on the right side of the airplane to inspect the fuel tank¹. He then inspected the aft empennage. While at the aft empennage he moved the elevator and rudder flight controls and also inspected the control cables for chafing using a flashlight. He also checked for small cracks on the airframe and moved to the right side of the aircraft where he inspected the right wing. Using the ladder, he visually inspected the right fuel tank and noted it was full which agreed with the fuel gauge indicating that the tank contained between 17 and 18 gallons of fuel. After completing his inspection of the right wing he moved to the engine compartment and checked the oil quantity noting it was a good quantity and there was fresh oil in the engine. He checked the air inlets, nose landing gear strut, and then moved to the left wing where he visually inspected and checked the left fuel tank and noted it was visibly full. He finished the inspection of the left wing which included a check of the lift strut and then secured the mini ladder in the cargo area and closed and locked the cargo hatch.

He entered the cockpit, donned the headset, checked the fuses were in the proper position, and called clear before attempting to start the engine. The engine “started right up” and he reduced the throttle, turned the aircraft radios on, and confirmed the altimeter setting and winds. He turned on the landing light and taxied to runway 28 noting that the wind was from 300° between

¹ He left the keys in the cargo hatch to make sure the ladder was returned and the cargo hatch was locked at the end of his preflight inspection.

6 and 8 knots. At the run-up area he did everything noting nominal RPM drop during the magneto check, the vacuum check was good and turned on the landing light. He announced his departure from runway 28, verified the cockpit doors were secured, confirmed carburetor heat control was in, set the directional gyro, and initiated takeoff from runway 28. He turned on the crosswind and then onto the downwind legs of the airport traffic pattern, flying on the downwind leg between 1,600 and 1,700 feet mean sea level (msl). On the downwind leg he was flying inside a road that was north of the airport (Coonpath Road NW) . While flying between 1,600 and 1,650 feet msl he applied carburetor heat and adjusted the engine RPM to 2,000. When the flight was abeam the approach end of runway 28, he reduced the power to 1,700 RPM, lowered the flaps to 10°, and heard radio calls from several other aircraft announcing they were transitioning the area. He turned onto the base leg of the airport traffic pattern and noticed something was “not right”, adding that his sight picture was “not right.” At that time he could see the propeller blade rotating, and turned onto final approach. Realizing that he would be unable to reach the runway and with a soybean field under the approach path, he made a radio call on the common traffic advisory frequency (CTAF) declaring an emergency. With the airspeed decreasing and the engine not developing power he touched down in a field adjacent to, i.e. just before the soybean field and on touchdown the cockpit entry door popped open. The airplane went inverted. Stunned, he heard the magnetos spooling down. Since he was upside down and the fuel was below him, he turned off the ignition system, shoved in the throttle, and released his restraint and exited the airplane. He assessed his status which consisted of cuts and bruises but he had no concussion. He did not experience any vertigo or any dizzy sensation nor did he have a headache. Shortly afterwards two vehicles from the fire department responded and also the highway patrol responded. He was then driven to the terminal.

What restraint were you wearing?

The seatbelt and shoulder harness. The shoulder harness only went over his left shoulder.

What position was the fuel selector on for takeoff?

On both. He looked and verified it was on the both position.

Did you look at the engine gauges after the loss of engine power?

He looked at them but did not recall the readings. The loss of power occurred quickly, and during his IPC he practiced several circling approaches to runway 10 and 28 but the time between the loss of engine power and the landing was a matter of seconds.

Did you extend the downwind leg of the airport traffic pattern?

No. He turned onto the base leg when the airplane was 45° from the approach end of the runway in fact he may have turned early.

What altitude were you at when you realized the loss of engine power?

Between 1,450 and 1,500 feet msl. He just started descending and was trying not to descend too soon.

Did you move the fuel selector or the magnetos after the loss of engine power?

No, it was a matter of seconds.

NTSB Questions Continued -

Was the engine sputtering?

No, it was not sputtering there was no roughness. It was “quieter than it should be and he physically saw the propeller blades.” The soybean field which was his intended target was between his position and the approach end of runway 28. There is a county road that makes ½ circle east of the approach end of runway 28 (Election House Road NW). A chain link fence separated LHQ from Election House Road. His intended location was the soybean field and his plan was to avoid or miss the vacant field that was overgrown and rough. A housing development was located to the south. He noted that he was a couple hundred yards from Election House Road. He impacted a ditch at the edge of the soybean field about 2 feet below the lip.

Did he open the doors prior to touchdown?

It was either by impact or he reached and opened his door. Both were shut and locked for takeoff.

In your comment you mentioned the magnetos were winding down. Were you referring to the gyro operated flight instruments?

Yes. He turned off the ignition and pulled the throttle.

Do you recall the magneto drops during the engine run-up before takeoff?

It was “within the right range.” There was no roughness when he performed each magneto check, and there was almost no difference between the drops for the left and right magnetos. There was no indication of any problem with the engine during his run-up check before departure.

As part of your preflight check did you check the fuel vent?

Yes, there was nothing in it. There was no fuel contamination in the wing tanks, but he did not check the airframe fuel strainer as part of his preflight inspection. With respect to fueling they use a cart with a pump on it, and that is checked for contaminants every day.

Was the airplane equipped with vented fuel caps?

Yes.

Have you had any problems with fuel purchased from the same location?

No. He did mention that about 10 to 15 years ago they did have an issue with water contamination of the fuel, but that was very rare. They did change the filters, and the past several years there has been no problem with the fuel purchased.

Is the airplane insured?

Yes, Old Republic.

Do you have any questions for NTSB?

No.

The call end time was 1610 EDT.

The digest was e-mailed to him for review on July 19, 2022. He replied on July 26, 2022, at 0037 EDT with comments that were incorporated into the narrative. The corrected digest was e-mailed to him for his final review on July 27, 2022. He replied the same day at 2149 EDT with comments that were incorporated into the digest. The FINAL digest was e-mailed to him for last review on July 29, 2022. He replied on July 31, 2022, at 1302 EDT with, "Looks good. Ebby Brewer." The FINAL digest was e-mailed to him on August 1, 2022.