



MEMORANDUM FOR RECORD

Todd Gunther
Air Safety Investigator
Eastern Region

Date: 09/10/2025

Subject: Airplane, Engine, and Carburetor Examinations
NTSB Case Number: ERA24LA010

Examinations of the airplane, engine and carburetors were conducted on October 16, 2023, February 15, 2024, and May 14, 2024. The following information was gathered during the examinations.

Airplane

Examination of the airplane revealed that during the impact sequence with the tree, the left wing with the exception of the wing spar had separated from its mounting location, the fuselage had torn and accordioned back at the left wing root fuselage juncture, and the left landing gear had collapsed and folded back along the left side of the fuselage. The right wing also displayed crush and compression damage along its length, and the right outboard portion was missing the wingtip and was crushed back. The area of the right wing root / fuselage juncture also displayed tearing and crush damage. The fuel strainer (gascolator) screen was clean and free of debris and the fuel strainer bowl contained a liquid consistent with Mogas (automobile gasoline), with no evidence of water contamination.

Engine

Examination of the engine revealed that all 4 of the cylinders' rocker boxes contained oil, and continuity of the drivetrain was able to be established. All 4 top, and all 4 bottom, sparkplugs were discovered to be heavily carbon fouled. Thumb compression and suction was able to be established on all 4 cylinders, but examination of the interior of the cylinder heads and piston tops revealed that they also were also heavily carbon fouled.

Carburetors

Examinations of both the 1/3-cylinder carburetor and 2/4-cylinder carburetor were generally in good condition. The floats were within acceptable weight limits and showed no signs of fuel absorption. Both float bowls were dry but contained an unknown white powdery residue.

The main jets were clear of obstructions. While the 1/3 float bracket was properly adjusted with no anomalies observed, the 2/4 float bracket was bent and out of adjustment.

The carburetor bodies were in good overall physical condition. However, the 1/3 carburetor had a broken or bent tube assembly for the enrichener (choke) cable.