



RECORD OF EXAMINATION

Mitchell Gallo
Aviation Accident Investigator
Central Region

NTSB Accident Number: CEN17FA297

Location: Topeka, Kansas

Participants: Mark Hopp, Federal Aviation Administration, Wichita FSDO

John Butler, Lycoming

Mike McClure, Piper Aircraft

Narrative:

The airplane wreckage was located between runway 13 and taxiway B, near the approach end of runway 13. The tail-to-nose heading of the wreckage was about 125 degrees. The airplane's wing flaps and landing gear were retracted. The left wing exhibited greater relative impact damage than the right wing and leading-edge crushing estimated in range from 0 - 10 degrees, consistent with a low-speed impact in a left wing-low and shallow pitch attitude.

The left and right propellers were attached and secured to their respective crankshaft flanges. Both propellers displayed S-shaped bending and leading-edge polishing consistent with torsion.

The left and right wings were attached and secure to the wing center section and fuselage. The left and right wings, horizontal and vertical stabilizers, and their respective control surfaces were attached and secure. Examination of the flight control system confirmed flight control continuity from the ailerons, stabilator, and rudder to their respective cockpit controls. Control continuity from the aileron and stabilator trim tabs was confirmed to the cockpit controls. The stabilator trim and rudder trim jack screws were in neutral positions.

There was no evidence of fire or soot on the wreckage and at the accident site.

The accident site had a smell of fuel consistent with aviation fuel and a liquid consistent with aviation fuel drained from the wreckage during the airplane's recovery. There was a liquid consistent in color and smell with 100 low lead aviation fuel in the fuel system. The fuel system was not obstructed by debris and testing of fuel within the fuel system with Kolor Kut water disclosing paste showed no color change of the paste indicating the presence of water.

The cockpit throttle, mixture, and propeller controls were in the forward position. Cockpit throttle and mixture control continuity was confirmed for both engines. Both fuel selectors were in the MAIN position.

Left engine ignition timing of the left and right magnetos was 24 degrees before top center (BTC). The right engine left magneto timing was 24 degrees BTC and the right magneto timing was 25 degrees BTC. The engines' data plate specifications for timing listed 25 degrees BTC. The left and right engine magnetos produced an electrical spark through each lead in correct sequence when their magneto drive shafts were rotated through by hand. Both engines' top spark plugs displayed features consistent with normal combustion.

The left engine was rotated through using the vacuum pump accessory drive gear, and the right engine was rotated through using the propeller. Engine drive and valve train continuity to the accessory section was confirmed.

Both engine's propeller governor screens did not contain debris.

Post-accident examination of the airplane revealed no mechanical anomalies that would have precluded normal operation.

Mitchell Gallo
Air Safety Investigator