



National Transportation Safety Board

Office of Aviation Safety
Central Region

Wreckage Examination Summary

NTSB Accident No: CEN18FA236
Accident Date: Sunday, June 24, 2018
Accident Time: 1957 EDT
Accident Location: Detroit, Michigan
42°24'26"N
83°01'30"W
625 ft mean sea level

Aircraft Make/Model: Cessna P210N
Aircraft Registration: N3896P
Aircraft Serial No: P21000071
Aircraft Airworthiness Date: July 27, 1978
Engine Make/Model: Continental IO-550P (modified by STC SA02918CH with a turbo-normalized system)
Engine Serial No: 1009462
Propeller Make/Model: Hartzell HC-J3YF-1RF/F8068-2
Propeller Serial No: JN564B

Examination Date: January 14, 2020
Examination Location: AMF Aviation, LLC
Springfield Robertson County Airport
Springfield, Tennessee 37032

Participants: Andrew T. Fox – National Transportation Safety Board
Henry J. Soderlund – Textron Aviation
David Bliss – AMF Aviation, LLC (Salvage Company)

The three landing gear actuators were previously removed from the airframe before the main wreckage was recovered by AMF Aviation for secured storage at the Springfield Robertson County Airport, Springfield, Tennessee. Upon arrival at the AMF Aviation hangar, the three landing gear actuators were found in the same box that the NTSB investigator had placed them in during the initial on-scene investigation. All three actuators extended and retracted normally when hydraulic fluid was pumped through the actuators using a hand-activated hydraulic pump apparatus. No hydraulic fluid was observed to leak from the actuator bodies during the functional tests. There was no evidence of a mechanical malfunction of the two main landing gear actuators or the nose landing gear actuator.

The six engine cylinders were removed from the crankcase. The interior of the cylinders, intake and exhaust valves, and pistons exhibited features consistent with normal operation. The crankcase halves were separated for additional examination. The interior of the crankcase halves contained 3 small metal pieces that were consistent with remnants of the fractured oil gauge. Additionally, there were numerous scratches on the interior crankcase surface near cylinder Nos. 3 and 4. The observed scratches were consistent with the remnants of the oil gauge contacting the interior surface of the crankcase in conjunction with the movement of the connecting rods. The crankshaft, camshaft, connecting rods, and piston pins appeared normal with no evidence of oil starvation. The crankshaft bearings exhibited signatures of normal wear with no evidence of excessive heat or oil starvation.

The engine examination did not reveal any mechanical malfunctions or failures that would have precluded normal operation during the flight.