

NATIONAL TRANSPORTATIONS SAFETY BOARD
Office of Aviation Safety
Washington, DC 20594

SUMMARY OF AIRCRAFT EXAMINATION

-- CEN20LA258 --

A. ACCIDENT

Location: Bridgeport, Texas
Date: July 1, 2020
Time: 1932 central daylight time
Aircraft: Piper PA-28-140 (s/n 28-20609), N6530W

B. PARTICIPANTS

Craig Hatch
Aerospace Engineer
National Transportation Safety Board
Denver, Colorado

Joshua Lindberg
Aviation Accident Investigator
National Transportation Safety Board
Denver, Colorado

C. ACCIDENT SUMMARY

On July 1, 2020, about 1932 central daylight time, a Piper PA-28-140 airplane, N6530W, was involved in an accident near Bridgeport, Texas. The pilot and two passengers were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

E. DETAILS OF AIRCRAFT EXAMINATION

The NTSB did not respond to the accident site. The airplane was recovered to Air Salvage of Dallas following the accident. A post-recovery engine examination was conducted by NTSB investigators on September 17, 2020.

Summary of Aircraft Examination

F. SUMMARY OF EXAMINATION¹

Airframe – Piper PA-28-140 (s/n 28-20609)

The airplane was damaged consistent with collision with trees/vegetation during the forced landing. The left wing exhibited leading edge crushing damage. A portion of the leading edge was crushed aft to near the spar. An adjacent skin panel seam was separated.

The recording tachometer indicated 2,702.84 hours at the time of the exam. The hour (Hobbs) meter indicated 1,971.1 hours.

Engine – Lycoming O-320-E2A (s/n L-14752-27A)

The engine remained secured to the engine mount. The mount was damaged. The engine assembly appeared intact and undamaged. All engine accessories and fuel/oil lines appeared intact and secure. Engine control continuity was confirmed. The engine contained about 7 qts of oil at the time of the exam. The oil appeared clean and free of sediment or debris.

Internal engine continuity was confirmed via crankshaft rotation. Compression and suction were obtained at all cylinders. Magneto timing was measured at 31° and 28° for the left and right magneto, respectively.² The magnetos produced spark across all leads. The spark plugs were undamaged. They appeared worn but operational. The carburetor was securely attached to the engine. It appeared intact and undamaged. The fuel screen was intact and free of debris. The gascolator was intact and contained blue-tinted fluid consistent with 100-low lead aviation fuel. The fluid was clear and free of sediment or debris.

The carburetor heat duct and shroud, as well as the muffler, appeared intact. The duct and shroud were removed from the engine. A fragment of compacted dirt was recovered from inside the duct. The inside surface of the shroud exhibited residue consistent with dirt/mud accretion. The engine exhaust tube common to the carburetor heat shroud exhibited a discoloration consistent with debris accretion. The discolored area on the exhaust tube coincided with the residue observed on the inside of the carburetor heat shroud. In addition, the outboard end of the muffler exhibited a similar dirt/mud residue. Borescope examination revealed a small amount of debris within the No. 4 cylinder, which appeared consistent with compacted dirt recovered from the carburetor heat duct. The cylinders, pistons, and valves appeared otherwise unremarkable.

The oil filter was securely installed and appeared undamaged. The safety wire was intact. The filter housing was dated “9/15/17” and the indicated tachometer time was “2701.58” hours.

----- end of summary -----

¹ Directions related to accident site placement and component damage/deformation are with respect to an intact airframe unless otherwise noted.

² Engine specification for magneto timing was 25° before top dead center (TDC).