

National Transportation Safety Board

Office of Aviation Safety

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CEN23FA352

AIRCRAFT EXAMINATION

August 8, 2023

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A. ACCIDENT

Location: Caddo Mills, Texas
Date: August 7, 2023
Time: 1545 cdt
Airplane: N5610E, 1959 Cessna 150

B. AIRCRAFT EXAMINATION

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C. SUMMARY

On August 7, 2023, about 1545 central daylight time, a Cessna 150 airplane, N5610E, was destroyed when it was involved in an accident near Caddo Mills, Texas. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* (CFR) Part 91 personal flight.

The airplane came to rest on the Caddo Mills Municipal Airport (7F3), Caddo Mills, Texas. The airplane was resting upright, about 200 feet north and 330 ft east of the departure end of runway 18. The airplane was about 40 feet north of the edge of the taxiway connecting the departure ends of runways 18 and 13. There was a postimpact fire that consumed the cabin section of the airplane.

The pilot had recently received a United States pilot certificate based on his foreign held pilot certificate. The ratings on the U.S. certificate included single and multiengine land airplanes. He had recently received instruction in the accident airplane to comply with insurance requirements. The circumstances of the accident flight were not known except that the pilot operated the airplane from 7F3 alone.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

The airplane came to rest on the Caddo Mills Municipal Airport, Caddo Mills, Texas. The airplane was resting upright, about 200 feet north and 330 ft east of the departure end of runway 18. The airplane was about 40 feet north of the edge of the taxiway connecting the departure ends of runways 18 and 13. An impact mark was found in the turf at the south edge of the taxiway that was consistent with the nose wheel impact, and the nose wheel and fractured nose wheel fork were found near this impact mark. There was another impact mark on the pavement adjacent to the nose wheel impact that was consistent with the impact from the airplane's fuselage. The relative position of these marks was consistent with a nose low impact. A third impact mark on the pavement west of the other two marks was consistent with an impact of the left wingtip. The left wingtip was bent upward at the leading edge. This was consistent with a left-wing low impact. There were linear abrasion marks in the pavement leading from the three impact locations across the pavement and to the wreckage. There was burned vegetation around the wreckage and along the edge of the taxiway.

2.0 Airframe Examination

2.1 Fuselage

The fuselage aft of the cabin was predominately intact and the horizontal and vertical stabilizers remained attached. The rudder and elevator remained attached to the tail surfaces. The tail surfaces and aft fuselage exhibited little damage.

The cabin section of the fuselage from the baggage compartment to the firewall was mostly consumed by fire. The cabin sides and roof were consumed by the fire and the lower fuselage structure was bent and crushed. The main landing gear was still attached to the fuselage and bent rearward.

The engine mount was still attached to the firewall. The engine accessory case was melted.

The propeller was still attached to the engine and one blade was relatively straight while the other was bent rearward with chordwise scratching on the bent tip.

The wings were located adjacent to the fuselage in their appropriate location.

2.2 Empennage

The horizontal and vertical stabilizers remained attached to the aft fuselage and the rudder and elevator remained attached to the tail. The empennage had little damage.

2.3 Wings

The left wing was mostly intact with fire damage at the root end of the wing next to the fuselage. The outboard tip of the left wing was bent upward at the leading edge consistent with a nose low, left-wing low impact. The aileron and flap remained attached to the left wing. The upper end of the left-wing strut remained attached to the wing.

The right wing was mostly intact with fire damage at the root end of the wing next to the fuselage. The aileron and flap remained attached to the left wing. The upper end of the right-wing strut remained attached to the wing.

2.4 Landing Gear

The main landing gear was still attached to the fuselage. Both main wheels and axles had separated from the landing gear. The nose wheel and fork was found near the initial impact location. The metal fork was fractured due to impact.

2.5 Cockpit

The entire cockpit was consumed by fire.

2.6 Fuel/Fuel System

Both wing fuel tanks were visible through the burnt root end of the wings. The remainder of the fuel system was mostly consumed by fire. The fuel strainer screen was found and it was clear of contamination. The right fuel tank inlet screen had melted material on the inside of the screen consistent with post-impact fire accumulation and the left fuel tank inlet screen was clear. The fuel shutoff valve was found in the on position.

2.7 Other Systems

The airplane flight control system was examined. All primary flight control cables (aileron, elevator and rudder) were intact from the cockpit controls to the respective control surfaces with the exception of a single break in the aileron balance cable. The break in this cable was consistent with overload failure. The flap control cables were intact from the flaps to the flap actuator handle.

3.0 Engine Examination

The engine accessory case had almost completely melted due to the post-impact fire. The magnetos were partially melted precluding functional testing. The upper spark plugs were removed with no discrepancies noted. The propeller could only be partially rotated by hand due to the position of the airplane at the accident

scene. The rotation was enough to determine movement of all the pistons within their cylinders confirming continuity of the crankshaft. During the partial rotation, it was noted that the rear crankshaft gear was not rotating. The 4 attaching bolts and the dowel pin that interfaces the gear to the crankshaft were broken. The gear, with one half of the dowl in it, and the four bolts were retained.

4.0 Propeller Examination

The propeller was still attached to the engine crankshaft. One blade was straight with little damage. The other blade was bent aft and had some chordwise scratching.

5.0 Pilot Information

The pilot was a Brazilian citizen that held a Brazilian pilot certificate. He had been issued a United States private pilot certificate by the Federal Aviation Administration. The FAA pilot certificate listed ratings for single and multi-engine land airplanes.

6.0 Aircraft Information

The airplane was a 1959 Cessna model 150. I was a 2-seat high wing strut braced monoplane with a tricycle landing gear. It was powered by a Continental O-200 engine producing 100 horsepower.

7.0 Meteorological Information

The weather conditions recorded at the Majors Airport, Greenville, Texas, about 9nm east of the accident site were:

KGVT 072035Z AUTO 12010KT 10SM CLR 36/23 A2995 RMK AO2 TSNO
T03620225

Submitted by:

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NTSB IIC