

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23FA038

EXAMINATION SUMMARY

November 21, 2022

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A. ACCIDENT

Location: Decatur, Texas
Date: November 18, 2022
Time: 1510 central standard time
Aircraft: Cessna 421C (s/n 421C1050), N6797L

B. PARTICIPANTS

Investigator-in-Charge (IIC) Timothy Sorensen
Senior Aviation Accident Investigator
National Transportation Safety Board
Denver, Colorado

Party Coordinator Baker Nase
Aviation Safety Inspector
Federal Aviation Administration – Flight Standards
Irving, Texas

Party Coordinator Kurt Gibson
Air Safety Investigator
Textron Aviation
Wichita, Kansas

C. ACCIDENT SUMMARY

On November 18, 2022, at 1510 central standard time, a Cessna 421C airplane, N6797L, was destroyed when it was involved in an accident near Decatur, Texas. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

An on-scene examination was conducted on November 19th and 20th, by the NTSB investigator-in-charge with the assistance of the FAA and Textron Aviation party representatives.

D. EXAMINATION SUMMARY

1.0 Accident Site

The accident site was located in a pasture at an elevation of about 980 ft. The left wing outboard of the engine nacelle was separated and located near a utility pole. The separated wing section exhibited a semi-circular impression near the wing tip consistent with an in-flight impact to the pole. The airplane came to rest about

165 ft northeast of the utility pole. The debris path was oriented on an approximate 050° bearing, and the airplane came to rest upright on an approximate 288° heading. Burned vegetation was present over the debris path from the initial impact with the utility pole to the main wreckage. A post impact fire partially consumed the left wing, left and right engine nacelles, and a small portion of the cabin.

2.0 Airframe Examination

The forward fuselage was deformed in the area of the cockpit and aft of the cabin. In addition, the aft fuselage was deformed immediately forward of the empennage. At the time of the exam, the main cabin door was open, and the emergency exit was secure. The cockpit instrument panel and throttle quadrant were dislocated from their normally installed positions relative to the fuselage.

The inboard portion of the left wing, including the engine nacelle, remained attached to the fuselage at the wing root. The outboard portion of the left wing was separated at the engine nacelle and located near the power line support pole. The leading edge exhibited a leading-edge impression near the wing tip consistent with impact to the support pole. The wing exhibited thermal damage consistent with the post-impact fire. The aft portions of the engine nacelle and left-wing flap were consumed. The left aileron remained attached to the wing section. The right wing remained attached to the fuselage. The inboard portion of the wing, including the engine nacelle, exhibited thermal damage consistent with the post-impact fire.

Aileron control continuity was confirmed from the cockpit to the left wing and from the cockpit to the right aileron control surface. The left aileron cross-over (balance) cable was intact, included the swagged end fitting; however, the cable had pulled out of the left aileron bellcrank. The left aileron control cable was frayed and separated near the bellcrank. The outboard cable segment remained attached to the bellcrank. Both discontinuities were consistent with the impact damage and left outboard wing separation. The aileron trim actuator corresponded to an approximate 3° tab up (neutral) position.

Elevator and rudder control continuity were confirmed from each control surface to the cockpit. The elevator trim actuator corresponded to an approximate 7° tab up position which was within the takeoff range. The rudder trim actuator corresponded to an approximate 1° tab left (neutral) position.

Left- and right-wing flap control continuity were confirmed from the flap motor chains to the bellcranks. The flap actuator corresponded to a flaps retracted position.

The left main fuel tank was partially consumed by the postimpact fire. The left engine nacelle was discolored consistent with the post-impact fire but appeared otherwise intact. No fuel was visible in the nacelle tank at the time of the on-scene examination. The right main fuel tank appeared intact, and about 1 gallon of fuel was

drained from the tank during recovery of the airplane. The fuel appeared consistent with 100LL and no water or sediment was observed. The caps for the left and right main fuel tanks, and for the left engine nacelle fuel tank, were securely installed. Both fuel strainer bowls contained minor debris which appeared consistent with dirt and metallic material. The fuel screens exhibited a small amount of debris.

The left and right engine cockpit fuel selectors were both positioned to the "RIGHT MAIN" fuel tank. The left fuel selector valve, located in the engine nacelle, was in the "OFF" position at the time of the exam. The right fuel selector was in the "RIGHT" fuel tank position and was unobstructed when air was blown through the valve.

The landing gear were retracted. When the aircraft was lifted for recovery both the main landing gears were free to extend. Further examination revealed that both the left and right main landing gear up-locks were fractured consistent with impact.

The recording hour (Hobbs) meter indicated 2024.5 hours.

3.0 Engine Examination

The left engine remained in place relative to the left wing, and the engine mounts were broken consistent with impact forces. The aft portion of the engine exhibited thermal damage consistent with the post-impact fire. The oil sump and exhaust were crushed upward. The turbocharger exhibited thermal damage but appeared otherwise intact. It was free to rotate.

The right engine remained in place relative to the right wing, and the engine mounts were broken consistent with impact forces. The aft portion of the engine exhibited thermal damage consistent with the post-impact fire.

Both engines were retained for further examination.

4.0 Propeller Examination

The left propeller remained secured to the engine. Each blade was retained by the hub. The first blade appeared intact with no obvious damage. It was positioned at or near low pitch. The second blade was bent aft about 30° over the entire span with minor scraping and abrasion damage. It was positioned at high pitch (near feather position). The third blade was bent aft about 45° near the blade root and was positioned near low pitch.

The right propeller remained secured to the engine, and each blade was secured by the hub. Each blade was in the feathered position at the time of the exam; however, all blades could be rotated by hand. The first blade was bent forward (relative to the face of the blade) over the entire span and exhibited chordwise scratching. The second blade was bent forward (relative to the face of the

blade) about 15° over the outboard one-quarter span and exhibited minor scratches near the blade tip. The third blade was bent aft (relative to the face of the blade) about 100° of outboard one-half span.