



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

February 5, 2020

Field Examination Report

WR20FA086

This document contains 08 embedded photos.

A. ACCIDENT

Location: Sonora, California
Date: February 5, 2020
Aircraft: Airplane Cessna 140A, Registration Number: N9474A, Serial #15295
NTSB IIC: Tealeye Cornejo

B. EXAMINATION PARTICIPANTS:

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C. SUMMARY

On February 5, 2020, at 1807 Pacific standard time, a Cessna 140A airplane, N9474A, impacted terrain near Sonora, California, while on approach for landing to the Columbia Airport (O22), Columbia California.

Visual meteorological conditions prevailed, and no flight plan had been filed for the cross-country flight. The airplane departed Harris Ranch Airport (3O8), Coalinga, California at 1701.

According to the pilots' wife, the purpose of the flight was to take the passenger to Pismo Beach, California, for a business meeting. The intent was to complete the trip during the day so as not to have to fly at night. The flight was expected to return to O22 by 1700 the day of the accident.

According to radar data, the flight departed O22 and was tracked to Oceano County Airport (L52), Oceano, California. The flight departed L52 at 1543 and flew toward New Coalinga Municipal Airport (C80), Coalinga, California. The flight then flew from C80 to 3O8.

Fuel records obtained from 3O8, indicated that the airplane was fueled with approximately 20 gallons of 100 low-lead aviation fuel at 1656.

A witness near the accident site reported that he was working on his ranch and the daylight was starting to fade, he estimated it was around dusk when he heard a loud bang. He looked toward the noise and saw the airplane for about 3 seconds before he heard another bang followed by silence. Prior to that he had heard the airplane's engine, it was not making unusual sounds, so he was not paying attention to it.

D. DETAILS OF THE INVESTIGATION

The first identified point of impact (FIPC) was a 50-foot pine tree about 300 ft south of the main wreckage; portions of the left wing were at the FIPC. The accident site was about 0.4 nautical miles from the approach end of runway 35.

The airplane came to rest inverted in-between two trees in a pasture at an elevation of 2,020 ft mean sea level (msl). The right wing separated and came to rest in low-lying branches. The left wing had partially separated and was wrapped around a tree.

The empennage and the tail section remained attached to the cabin area with the tail section raised and leaning against a tree. Flight control continuity was established from the cockpit to all flight control surfaces. Flight control separations were noted as overload due to the accident sequence.

The seatbelts were a 2-point restraint system and had been cut by first responders to aid in recovery of the pilot and passenger.

The engine remained attached to the firewall in its normal position on the airframe; however, the propeller separated and came to rest underneath the right side of the airplane.



Photo 1 - Accident Site Overview (NTSB)



Photo 2 - Rear View of Main Wreckage (NTSB)



Photo 3 - Left side view of main wreckage (NTSB)



Photo 4 – Right side view of main wreckage (NTSB)

AIRFRAME AND ENGINE EXAMINATION

Airframe:

Both fuel tanks had been breached with about one gallon of fuel drained from the LEFT fuel tank. The fuel as blue in color and tested negative for water contamination using Sar-Gel.



Photo 5 - Fuel Sample (Textron Aviation)

Engine:



Photo 6 - View of the engine (Textron Aviation)

The engine had partially separated from the airframe due to impact forces. There were no obvious holes in the engine case. The top spark plugs were and were oil coated. According to the Champion Aviation Check-A-Plug chart, the electrodes exhibited a worn out - severe appearance.



Photo 7 - Spark Plugs (NTSB)

Manual rotation of the engine from the accessory section obtained valve train and mechanical continuity. Thumb compression was obtained at all cylinders.

The throttle control cable to the carburetor had fractured at the base. The magnetos remained attached to their respective mounting pads; both magnetos produced spark at their respective leads. The oil screen contained a small amount of metal shavings and organic debris. The carburetor also had some organic matter in the inlet screen; the carburetor was disassembled with no anomalies noted.

Propeller:

The propeller blades were marked A and B for the purpose of the investigation. Blade A was straight and unremarkable. Blade B had chordwise scratches the length of the blade as well as a leading-edge gouge at the tip of the blade.



Photo 8 - Propeller Assembly (Textron Aviation)

Submitted by: Investigator T. Cornejo