

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23FA084

N963MA - AIRFRAME AND ENGINE EXAMINATION REPORT

January 19, 2023

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A. ACCIDENT

Location: Yoakum, Texas
Date: January 17, 2023
Time: 1035 Central Time
Airplane: N963MA, Piper PA-46-350P JetProp DLX

B. N963MA - AIRFRAME AND ENGINE EXAMINATION REPORT

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C. DETAILS OF THE EXAMINATION

1.0 Accident Site

The airplane came to rest in an open, flat field in Yoakum, Texas. The field is private property and is used for cattle grazing. The airplane came to rest next to a barb-wire fence. There was no evidence of the airplane impacting any obstacles (such as trees, towers, wires, or buildings). The accident site elevation was 290 feet above mean sea level.

There was no postimpact fire.

The airplane impacted the initial impact point on a 45° heading. From the initial impact point to the second impact point, it was 34 feet and 4 inches.

29°18'22" N 97°6'41" W
Yoakum, TX
290ft Elevation

The airplane impacted the second impact point on a 30° heading. The second impact point was a crater that was 7 feet long, 8 feet wide, and 2 feet deep. From the second impact point to the final impact point, it was 75 feet and 6 inches.

29°18'22" N 97°6'41" W
Yoakum, TX
290ft Elevation

The airplane came to rest at the final impact point on a 145° heading.

29°18'23" N 97°6'40" W
Yoakum, TX
290ft Elevation

All the major structural components were located at the accident site.

There were no ground injuries and no injuries to any animals on the property.

Per the Texas Department of Public Safety, there were no known witnesses to the accident sequence and there was no known video footage of the accident sequence from nearby homes or businesses. The Texas Department of Public Safety provided the NTSB overhead drone photographs of the accident site.

The pilot records were not found in the wreckage.

The wreckage was recovered by Lone Star Retrieval and transported to Air Salvage of Dallas in Lancaster, Texas.

2.0 Airframe Examination (Piper PA-46-350P, serial number 4636453)

Both wings were separated from the accident sequence. The cockpit area sustained impact damage, while the cabin and empennage were attached and appeared intact. The cockpit, underside of the fuselage, and both wings sustained substantial damage.

All fracture surfaces observed were consistent with overstress signatures.

The nose wheel was found separated. The main landing gear was found extended. The landing gear handle was showing as extended.

The left side cabin door was found open (the top and bottom portions) when the group arrived at the accident site.

The right-side overhead cabin exit door was found closed and secured when the group arrived at the accident site.

Blighting of the grass from fuel under the fuselage and both wings was noticed. A strong odor consistent with fuel was noticed at the accident site. Fuel samples were obtained from the two wing tanks and the header tank. All three samples were consistent in appearance and smell with JET-A fuel, with no major contamination present.

Fuel amount removal from the left and right tanks was about 7 gallons in each, for a total of 14 gallons. The wing tanks are considered "wet wings." The header tank had about 2 gallons in it. The fuel in each tank were consistent in appearance and smell with JET-A fuel, with no major contamination present.

Flight control continuity was established up to the cockpit area. Flight control continuity in the cockpit could not be determined onsite due to impact damage.

The flap setting was retracted based on the flap handle and the flap indicator (showing zero). The flap actuator was not examined at the accident site.

The airframe fuel system was examined with no issues noted. All fuel tank caps were found installed on their respective ports. The left-wing tank appeared to be breached from the accident sequence. The right-wing tank appeared to be intact, along with the header tank.

Airframe to engine control continuity was not established onsite due to the impact damage sustained in the cockpit area.

Both cockpit seats and restraints, along with all four cabin seats and restraint systems (including the inertia reels) were examined and function checked with no issues noted.

The throttle quadrant was destroyed from accident sequence and exact positions at the time of the accident could not be determined. Both yokes were found intact and connected. Both sides of pedals were found crushed from the accident sequence.

The cockpit consisted of all-glass avionics suite with several backup instruments.

The standby cockpit altimeter setting was found at 30.28.

The Hobbs Meter was at 1,714.8 hours.

The anti-collision light switch was found in the on position.

An oxygen bottle was found installed behind the right-side cockpit seat, along with two sets of oxygen breathing apparatus.

The stall warning system was not examined at the accident site.

Various circuit breakers were found extended throughout the cockpit from the accident sequence. Due to the impact damage sustained, it could not be determined what, if any, circuit breakers, may have been extended before the impact sequence.

Per the Texas Department of Safety, the 406 MHz ELT was operating, and it was turned off by first responders. The ELT was removed from the airframe by first responders.

Various personal bags were found and they all weight about 30 pounds total.

The airframe data plate was identified, and the serial number was confirmed.

An Avidyne FlightMax system and an Electronics International MVP-50 units (along with the separate torque and ITT indicators) were removed and submitted to the NTSB Vehicle Recorders Laboratory for further work.

The two wing-based anti-collision lights were removed and shipped to the NTSB Materials Laboratory for further work.

3.0 Engine Examination (Pratt & Whitney Canada PT6A-35, serial number

PCE-RR0275)

The engine and engine accessories appeared intact.

A visual examination was performed on the engine and engine accessories. All lines and connections appeared to be intact.

No fluid leaks were noticed on the engine and the engine accessories.

The engine data plate was identified, and the serial number was confirmed.

4.0 Propeller Examination (MT Propeller, serial number MTV-16-1-E-C-F-R(P) 190792)

The four-blade wood propeller was destroyed from the accident sequence.

The spinner was found attached, but with impact damage.

All four wood blades were separated at the blade root. Various wood blade remnants were collected at the accident site.

5.0 Maintenance Records Review

The maintenance records were not located at the accident site. The historical FAA airworthiness and registration records were retrieved.

Submitted by:

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Investigator-In-Charge