

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



WPR24FA238

FIELD REPORT

July 13, 2024

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A. ACCIDENT

Location: Helena, Montana
Date: July 10, 2024
Time: 12:10 mountain daylight time
Airplane: N10122, Air Tractor AT-802

B. FIELD REPORT

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C. DETAILS OF THE INVESTIGATION

1.0 History of Flight

On July 10, 2024, about 1210 mountain daylight time, an Air Tractor AT-802A, N10122, was substantially damaged when it was involved in an accident near Helena, Montana. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 Public Use aerial firefighting flight.



Figure 1. Accident Airplane Flight Track. (Photo Courtesy of Flight Aware)

Automatic Dependent Surveillance-Broadcast (ADS-B) data showed the airplane's flight track from Coeur d'Alene to Hauser Lake near the accident location.

Witnesses to the accident attempted to render aid before the airplane sank.



Figure 2. Accident Airplane before it Sank. (Photo Courtesy of local law enforcement)

2.0 Accident Site

GPS Location: 46.66547° / -111.80897°

Elevation: 3,653 ft mean sea level (msl)

Examination of the accident site revealed that the airplane impacted a vertical rock face along the edge of a lake and came to rest upright and submerged approximately 20 ft offshore, adjacent to the rock face.

The debris field was contained in the area immediately below the impact with the vertical rock face and submerged near the wreckage. All major components of the airframe, the engine, and propeller assembly, except for one propeller blade, were located at the accident site except for the left aileron outboard segment including the counterweight and a segment of left elevator including the left elevator counterweight. The fuselage came to rest upright on an approximate heading of about 225° magnetic.

The wreckage was recovered to a secure location for further examination.



Figure 3. Accident Airplane Fully Submerged.

3.0 Airframe

N10122, 2013 Air Tractor AT-802

Serial Number: 802A-0495

Hobbs: 1812.2

The airplane remained mostly intact. The engine, both wings, the empennage and tail sections remained attached to the fuselage. Flight control continuity was established to all flight control positions.



Figure 4. Forward View of Airplane.

Wings

Left Wing

The left flap's control continuity was established from the flap actuator to the flap. The left aileron's wing mounted steel pushrod assembly was found with a separation. The outboard half of the left aileron and its counterweight separated from the wing.



Figure 5. Left side View of Airplane.



Figure 6. Left Side View of Airplane.

Right Wing

The right flap's pushrod was separated at the forward, threaded end of the pushrod.
The right aileron's control continuity was continuous from the control stick to the aileron.



Figure 7. Right Side View of Airplane.

Empennage and Tail

The empennage had slight accordion damage near the air conditioning plenum just aft of the cockpit.

The vertical and horizontal stabilizers remained attached to the empennage. The elevator remained attached at each of its connection points. The outboard section of the left elevator, which included its counterweight had separated. The rudder remained attached at each of its connection points. The elevator controls were continuous from the control stick to the elevator.

Rudder cable continuity was established from the rudder pedals to the rudder.



Figure 8. Rear View of Airplane.

Floats

The left and right floats detached from the airframe. The landing gear was in the retracted position. Both scoops were in the retracted position. One float was damaged/separated at the forward section. The other float remained intact.



Figure 9. View of Floats.

Cockpit

The cockpit remained intact.



Figure 10. View of Cockpit. (Courtesy of manufacturer)

Throttle: aft of the idle stop position.
Propeller: near the feather position.
Fuel Selector Lever: ground idle position.
Emergency jettison handle: stowed and locked.

4.0 Engine

Engine Manufacturer: Pratt & Whitney

Engine Model Number: PT6A-67F

Engine Serial Number: PCE-RZ0118

The engine remained attached to the airframe via the engine mounts and firewall. The lower arms of the engine mount were displaced up at a 45° angle.



Figure 11. View of Engine.

5.0 Propeller

Manufacturer: Hartzell

The propeller assembly separated from the engine. Three of the five blades remained attached in their respective hubs. Two of the five blades separated; one blade was not recovered. The three propeller blades that remained attached at the hub showed varying degrees of rotational/s-bending, nicks and gouges and chord wise scratching. Two of the blades were bent toward the cambered side and one blade was bent toward the face side. The one blade that separated from the hub was relatively straight with nicks and gouges.



Figure 12. View of the Propeller

6.0 Meteorological Information

METAR: KHLN 101753Z 05005KT 10SM CLR 32/09 A3005

Helena Regional Airport Automated Report July 10, 2024, 1753 Zulu, wind 050 @ 5 knots, 10 statute miles visibility, sky clear, temperature 32°C, dewpoint 9°C, altimeter setting 30.05.

DA calc = 6,402 ft

Submitted by:

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