

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN24FA221

FIELD NOTES

June 16, 2024

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A. ACCIDENT

Location: Morton, Texas
Date: June 14, 2024
Time: 0840 CDT
1340 UTC
Airplane 1: AT-502B, N2030K
Airplane 2: AT-502B, N8525V

B. FIELD NOTES

IIC	Zane Brown NTSB Coeur d'Alene, Idaho
Investigator	Cory Maxon NTSB Aurora, Colorado
Party Member	Dakota, Lowe Air Tractor Olney, Texas
Party Member	Nick Miller Air Tractor Olney, Texas

C. SUMMARY

On June 14, 2024 about 0840 central daylight time, Air Tractor AT-502B, N2030K and Air Tractor AT-502B N8525V were involved in a midair collision while conducting agricultural spray operations. The pilot in N2030K sustained serious injuries and the pilot of N8525V was fatally injured. The airplanes were operated as a Title 14 *Code of Federal Regulations* Part 137 agricultural.

Debris from both aircraft were scattered across about a 700 ft by 400ft area on about a 160° heading that covered the cotton field the pilots were conducting spray operations on, as well as an adjacent cotton field to the south.

Power lines were found along the eastern edge of the field and a center pivot irrigation system was in the field to the north of the main wreckage. A center pivot irrigation system was located in the field containing the main wreckage of both N8525V and N2032K. There were no signs of damage to surrounding obstacles.



D. ON SITE EXAMINATION OF WRECKAGE

I. N2032K

Air Tractor AT-502B, Serial Number 502B-2749, Manufactured: 2011
33°38'1.39"N 102°39'59.54"W MAGNETIC HEADING: 036°



Airframe

A ground scar that contained wing tip fragments and pieces of navigation light glass was found about 42 ft northwest of the main wreckage

Left Wing

The left wing tip and outboard aileron tip were impact separated. Outboard portion of the left wing was found beneath the left wing and exhibited accordion crushing along the leading edge. The left composite wing tip and nav light were also found near the main wreckage. The left flap was damaged but intact. The leading edge of the wing exhibited accordion crushing across the full span.

Right Wing

The right wing exhibited impact damage and was bent aft and upward. The right wing was separated midspan and the aileron was not attached. The separated portion of the right wing was not located at the main wreckage site but found northwest of the wreckage. The right flap was found attached to the right wing.

Fuselage/Empennage

The aft fuselage was intact and bent upward , and showed crushing damage. The empennage was intact, and all control surfaces remained intact. The wire deflector remained attached. The right horizontal stabilizer leading edged displayed impact deformation.

Cockpit

The cockpit remained intact with shattered forward facing windows. The instrument panel was intact with some engine instruments being separated from the panel. The flight controls remained intact. The aircraft was equipped with inflatable restraints that were deployed. The restraints were found unlatched as the pilot was reported to self-extricate.

Landing Gear

The right main landing gear exhibited black checkered transfer on the forward facing edge. The landing gear remained intact. Both gear remained attached to the tubular structure, and the structure had separated from the rest of the fuselage.

Hopper

The Hopper was destroyed.

Engine

The engine compartment was destroyed. The engine was bent in a U shape at the combustion chamber. Two compressor hubs were liberated from the engine and found near the main wreckage with some blades still attached. The remaining blades displayed spanwise bending and chordwise breaks consistent with engine power at the time of impact. The engine case displayed torsional twisting along its axis.

The propeller was found separated from the flange about 15 feet from the main wreckage. Two blades remained attached to the hub and exhibited "S" bending. The third blade was separated from the hub at the root and exhibited "S" bending.

Control Continuity

Rudder and Elevator and trim controls were found continuous to the flight controls.

Flaps were continuous through impact separations.

Ailerons were continuous through impact separations.

Control continuity was established to all flight controls through breaks consistent with impact forces.

II. N8525V

Air Tractor AT-502B, Serial Number 502B-2568, Manufactured: 2004

33°38'0.42"N 102°40'4.62"W MAGNETIC HEADING: 310°



Airframe

Left Wing

The left wing was mostly intact with minor skin deformation. The wing exhibited crushing damage on the leading edge mid span near the stall vane, the stall vane was not present. A portion of the composite left wing tip trailing edge was impact separated.

The Aileron and flap showed deformation and were still attached to the wing.

The spray boom exhibited forward bending. The three boom hangers were connected to boom and all exhibited forward bending.

Right Wing

The right wing was partially intact and exhibited impact crushing on the leading edge. The wing was separated near flap and aileron hinge connection. The lower wing skin was bent downward and showed impact crushing. The right flap was connected to the wing with a portion of the outboard trailing edge of the flap torn away. The right aileron was impact separated and not located at the main wreckage.

The right boom was found separated near the main wreckage. It was bent in a "U" shape with the outward end up and had yellow paint transfer.

Fuselage

The fuselage was crushed, and impact separated. The aft fuselage and empennage were located about 30 feet south of the main wreckage. Portions of the fuselage skin were separated and found near the main wreckage site.

The aft fuselage exhibited impact crushing and was twisted upward and counterclockwise. The upper aft fuselage showed black transfer signatures.

Empennage

The horizontal and vertical stabilizers were intact. The right horizontal stabilizer exhibited impact crushing and was bent up and rearward. The rudder was pushed past the right limit and the right trailing edge of the elevator penetrated through the rudder. The top portion of the vertical stabilizer containing the wire deflector was impact separated and found attached to the main wreckage.

Cockpit

The cockpit sustained significant damage and was impact crushed. The instrument panel was folded over with multiple instrument gauges separated from the panel. The aircraft was equipped with inflatable restraints that were deployed. The restraints

were intact and unlatched. The belts were unlatched by first responders during extrication. Flight controls remained intact with impact damage.

Landing Gear

The landing gear remained intact. Both gear remained attached to the tubular structure, and the structure had separated from the rest of the fuselage.

Hopper

The hopper was destroyed by the impact.

Engine

The engine compartment was impact crushed with portions of the cowling cracked and separated. The skin under the air intake exhibited black transfer signatures. The engine case displayed torsional twisting along its axis consistent with power during impact.

The propeller hub showed deformation and cracking near the propeller roots. Portions of the propeller blades were impact separated and found in the initial impact crater. Two blades remained attached to the hub, and the third was separated from the root and was found about 20 feet from the wreckage. All three propeller blades exhibited span wise twisting.

Control Continuity

Control continuity was established to all flight controls through breaks consistent with impact forces.

Submitted by:
Cory Maxon
NTSB Air Safety Investigator