

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN22FA347

EXAMINATION NOTES

July 31, 2022

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A. ACCIDENT

Location: Ute, IA
Date: July 30, 2022
Time: 1300 (Local)
1800 (UTC)
Airplane: Air Tractor AT-502

B. EXAMINATION NOTES

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C. SUMMARY

The on-scene examination of N501MW, an Air Tractor AT-502 airplane the collided with a transmission wire and impacted a road near Ute, Iowa. The pilot was fatally injured, and the airplane was substantially damaged.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

The airplane wreckage came to rest on a paved road, upright, facing a magnetic heading of 130°. The field that the pilot was spraying was to the east of the accident site and was bordered on three sides by power lines. Damaged power lines were located on the western edge of the field. Portions of the left wing were scattered around the powerlines and to the north of the wreckage. The airplane engine was driven near vertical into the edge of a paved road about 7 yards west of the damaged powerlines. A post-impact fire consumed a majority of the left wing, fuselage, and empennage.

2.0 Airframe Examination

All airplane components were located at the accident site.

2.1 Flight Control Continuity

Rudder and elevator controls were traced from the cockpit area back towards the flight control surfaces. Ailerons push-pull rods were continuous through the right wing. The left ailerons were thermally damaged and partially consumed by fire. The rod ends appeared to be connected prior to the accident.

3.0 Engine Examination

The engine was photo documented and visually examined. Engine controls in the cockpit were all in the forward position.

4.0 Propeller Examination

Three of the four propeller blades remained attached to the propeller hub. One blade was fractured from the hub. Two of the blades that remained attached, and the separated blade all displayed deep chordwise scratches on the blade backs and gouges on their leading edges. One blade had s-bending.

5.0 Pilot Information

The pilot is reported to have become an agricultural pilot in the later 1990s. He would have had about 20 years of agricultural flying experience.

6.0 Aircraft Information

The pilot's wife reported that the pilot told her there was a crack in the wing of the airplane. The operator reported that there was a crack in the left wing about 5.5 ft outboard from the fuselage and 16 inches forward of the leading edge spar. The crack measured about 3 inches long and ran lengthwise on the wing.

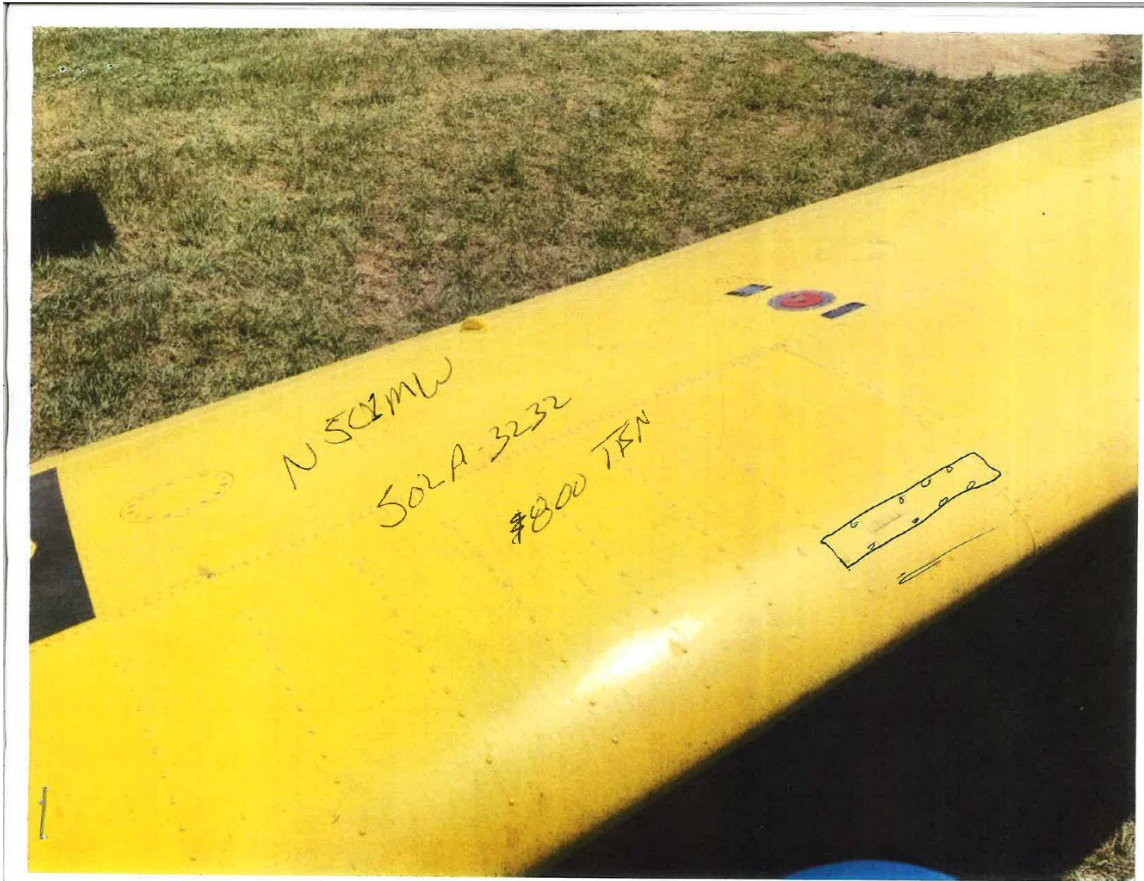


Figure 1 Photo of Crack (Photo From Operator)

Air Tractor engineering reviewed the information on the crack. They recommended that they "stop drill" the crack and repair with a vinyl patch until a sheet metal patch could be installed. Engineering reported there were no structural issues suspected with the crack.

7.0 Meteorological Information

Using NOAA Solar Calculator put the position of the sun 65° above the southwest horizon (163° from the accident site).

Submitted by:

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