

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA23FA317

WRECKAGE EXAMINATION FACTUAL REPORT

July 30, 2023

A. ACCIDENT

Location: Springfield, Ohio
Date: July 29, 2023
Time: 1206 EDT
Airplane: Bell 206-L4, N652HA

B. WRECKAGE EXAMINATION FACTUAL REPORT

NTSB IIC: Leah D. Read, Sr. ASI
NTSB

NTSB (On-Site): Adam Gerhardt, Sr. ASI
NTSB

Party Members: Andrew C. Porter
(FAA, Cincinnati FSDO)

Additional Participants: Kyle Martin, Vice President Helicopters Applicators, +2
Employees

C. SUMMARY

On July 29, 2023, about 1206 eastern standard time, a Bell 206-L-4 helicopter, N652HA, was involved in an accident near Springfield, Ohio. The commercial pilot was fatally injured. The helicopter was operated as an agricultural spraying flight conducted under the provisions of Title 14 *Code of Federal Regulations* Part 137.

D. DETAILS OF THE EXAMINATION

The NTSB was notified of the accident on July 29, 2023, and arrived on-scene on the morning the next day. The NTSB investigator, one FAA Inspector, and three representatives from the operator documented the accident site and wreckage. The wreckage was recovered to AMF Aviation, Springfield, Tennessee, on July 30, 2023.

High tension power lines spanned the length of the corn field being overflown. The four lines ran across the field toward the northeast oriented on a heading of 030 degrees. The middle two high tension lines had been severed. The end of the separated lines exhibited splayed ends, fraying, and cuts. The top line, which was a guy wire, and the bottom high tension line, were undamaged and remained running across the field. One power line structure holding the lines was also damaged, and its top area had fallen to the ground. The two middle lines were estimated to be about 75-100 ft above ground level.

The helicopter came to rest on its right side oriented on a heading of about 360 degrees. The tail boom had separated near the aft portion of the fuselage and was found forward of the main wreckage. The main wreckage was located about 150 ft east of the powerlines. Debris was located along a flight path of about 090 degrees.

A 3 ft section of both main rotor blades remained attached to the main rotor mast. The remainder portion of the main rotor blades were found co-located with the fuselage. The main rotor blades exhibited a variety of gouges, knicks, and creases. The forward windscreen had been largely fragmented and was no longer present. Fragments of the windscreen were located in the debris path.

The bottom wire strike protection unit was largely free from impact related damage and was free from scraping. The top wire strike protection unit was bent over to the left. There were some areas of scraping observed. Both skids remained attached to the fuselage and sustained impact related damage. Several scratches and gouges were observed at multiple locations along the fuselage and skids. Scratching was observed on the main rotor mast.

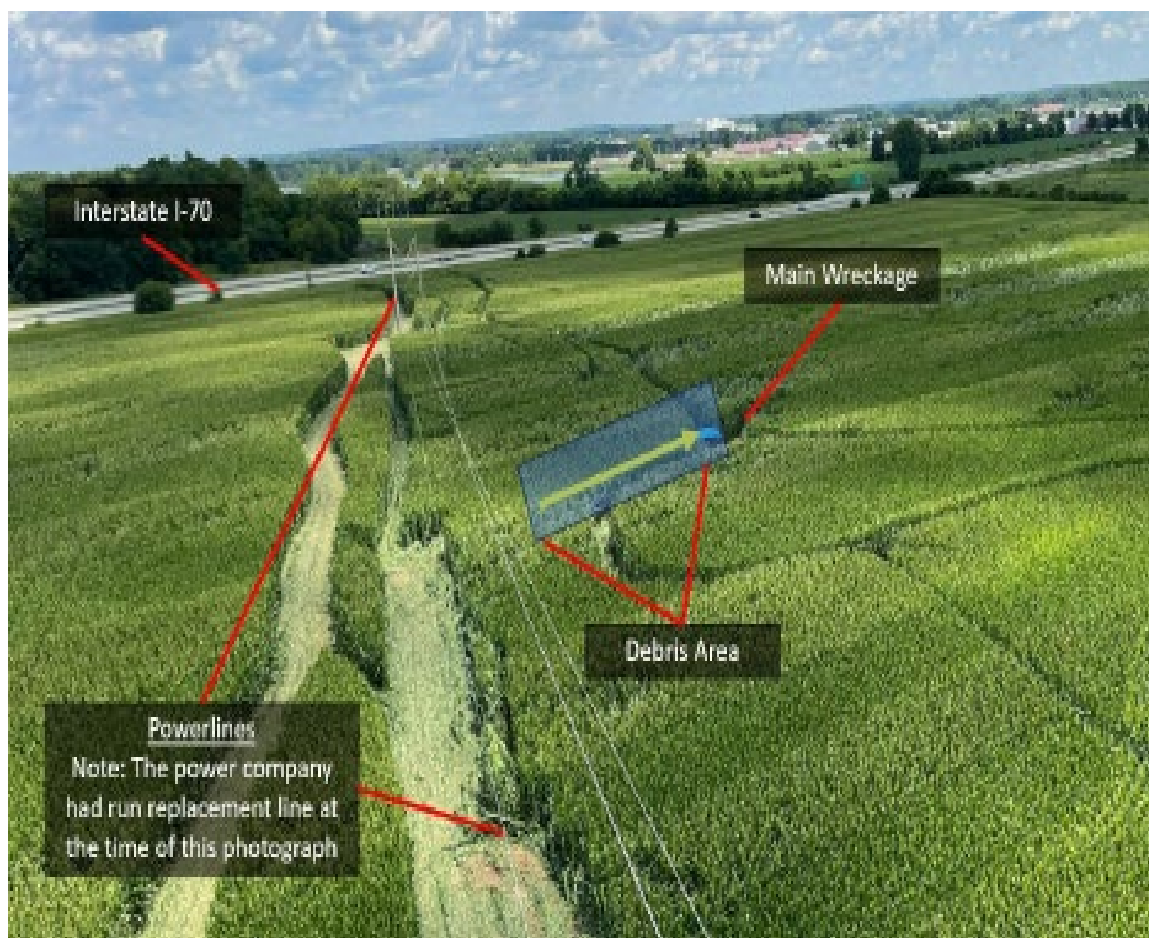
The right cyclic remained attached, the left cyclic was not installed. When the cyclic was moved by hand in all directions, applicable push rod linkage movement was observed at the main rotor mast. The tail rotor pedals remained intact. When they were moved by hand, the respective push rods moved at the tail boom area.

The collective had broken from its attachment area due to overload. When a rod was re-inserted at the collective attachment area, and moved by hand, corresponding movement was observed at the main rotor drive shaft. Within the tail boom section that had separated, control continuity and drive shaft continuity was observed to the tail rotor.

The tail rotor drive shaft connection area near the engine was observed to have been pulled aft from its gear attachment area and impact related damage was noted along the tail rotor drive shaft. The tail rotors remained attached and displayed minimal impact damage. The fuel tank was viewed via the right side fill port and a significant amount of fuel remained in the tank. There was no evidence of fuel leakage at the site. A fuel sample showed the fuel was clear and free of water or debris. The hour meter inside the cockpit displayed 553.6 hours.

The spray pump was found with the main wreckage. Only fragments of tubing that belonged to the spray system remained attached to the helicopter. Fragments of the spray system tubing were located in the debris path.

An AG-Nav GUIA Platinum Console (PN AAP771-J, SN 771200017) was located in the cockpit, largely free of damage. The unit was retained for data extraction at the NTSB Records Laboratory in Washington, DC.





View westerly, from the main wreckage, looking back at the powerlines and debris field



Note: One new cable in the middle had been run across the field after the accident

Submitted by:

Adam Gerhardt/Leah D. Read
Senior Air Safety Investigators