



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

December 5-6, 2021

ACCIDENT SITE EXAMINATION SUMMARY

WPR22FA054

This document contains 13 embedded photos.

A. ACCIDENT

Location: Visalia, California
Date: December 4, 2021
Aircraft: Beech, V35, N7933M
NTSB Investigator-in-Charge: Eric M. Gutierrez

B. DETAILS OF THE INVESTIGATION

1.0 Airplane Accident Site Examination

GPS Location: 36.315469, -119.408685
Elevation: 290 ft mean sea level (msl)

Examination of the accident site revealed that the airplane impacted terrain about 1 mile southwest of the departure end of runway 30. The airplane came to rest on its left side, on a heading of about 265° magnetic, at an altitude of 290 ft msl.

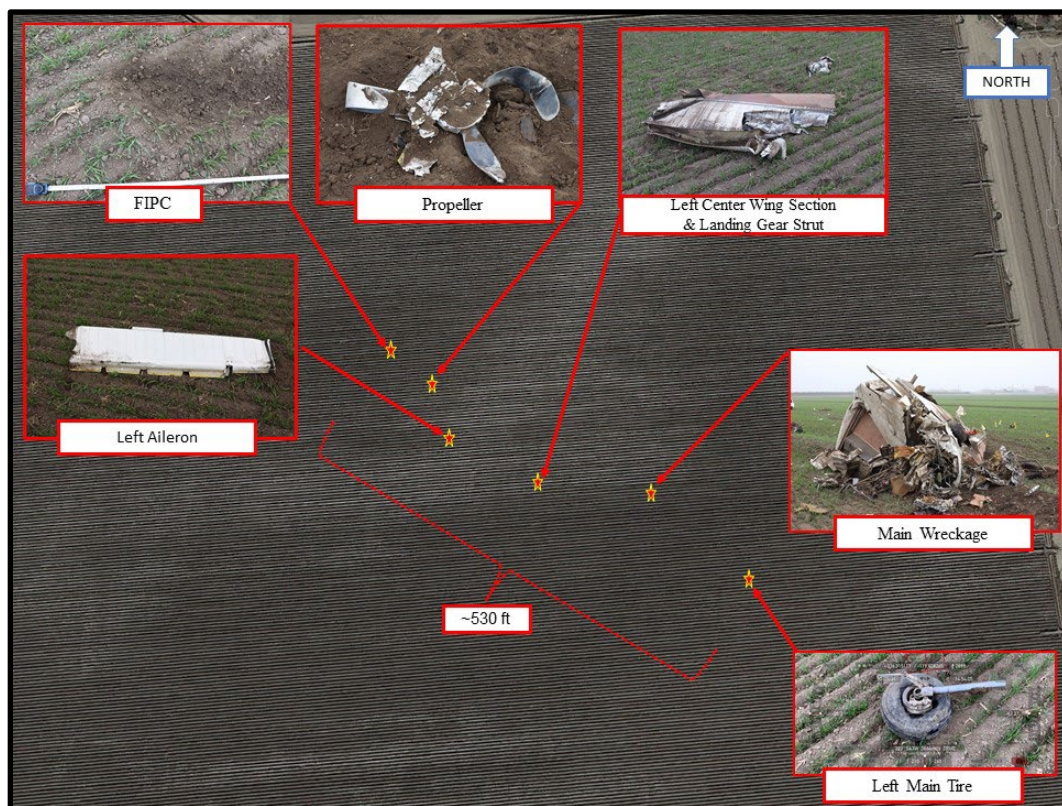


Figure 1: View of accident site diagram (photo courtesy of the NTSB)

The debris field was located on a flat, open wheat field, on a magnetic heading of 285° degrees from the main wreckage, about 345 ft in length and 200 ft wide. The first identified point of contact (FIPC) with terrain was a ground scar/impression that was 285° magnetic and about 345 ft from the main wreckage. The ground scar/impression was about 14 ft long, 22 inches wide and 3 in deep.



Figure 2: View of initial impact ground scar (photo courtesy of the NTSB)

The first identified piece of wreckage was located about 330 ft from the airplane wreckage and consisted of the airplane propeller and propeller hub. Throughout the debris path, various portions of aluminum wing skin, left wing fragments, left aileron, engine, propeller blades, propeller hub, exhaust system, foam, and Plexiglass were observed.



Figure 3: View of airplane propeller (photo courtesy of the NTSB)

2.0 Airframe Examination

Manufacturer: Beech

Model: V35

Serial Number: D-8265

Flight control continuity was not established due to impact damage and multiple separations of the flight control cables throughout the entire airplane.

The forward section of the fuselage was heavily impact damaged and separated. The engine, engine mount, nose landing gear, firewall, instrument panel, cockpit, flight controls, and seats were separated and located within the debris field. The cabin area was separated behind the rear seatbacks, tethered by various wires. The instrument panel was recovered with various instruments separated. The cabin door was located within debris field. The engine mount had several fractures, consistent with impact damage. The aft section of the fuselage exhibited buckling and compression crushing throughout.



Figure 4: View of airplane fuselage (photo courtesy of the NTSB)



Figure 5: View of airplane instrument panel (photo courtesy of the NTSB)

The left wing separated from the fuselage at the wing root and fragmented into numerous sections and was scattered throughout the debris field. Fragments of red navigational lens were identified near the beginning/middle/end of the ground scar. The pitot tube was located about 40 ft south-east of the initial ground scar. The left-wing aileron separated from the wing attachment points and was in the debris field, crushing and bending was observed at both ends. The left-wing flap was located with the main wreckage; crushing and bending was observed throughout the flap. The left main landing gear lift strut separated from the left-wing and was in the debris field. A portion of the center section of the left wing was located in the debris field; the fuel cap was found in place and secure.



Figure 6: View of airplane left wing (photo courtesy of the NTSB)



Figure 7: View of left main fuel tank cap (photo courtesy of the NTSB)

The right wing was partially separated at the wing root. The wing was twisted and came to rest in a leading-edge low attitude. The bottom side of the wing exhibited buckling and tearing of the skin from about mid span to the wing tip. Crushing and bending was observed throughout the wingspan. The right flap and aileron remained attached via their respective mounts. The flap was observed fully retracted. The right main landing gear remained attached via the wing mounts and was partly extended. The right-wing leading edge was displaced in a low attitude; the aileron control cable was observed exiting the fuselage near the wing root under significant tension. The right main fuel tank fuel cap was observed in place and secure.



Figure 8: View of airplane right wing (photo courtesy of the NTSB)



Figure 9: View of right main fuel tank cap (photo courtesy of the NTSB)

The empennage remained attached to the aft fuselage. The empennage was bent about 90° to the left and the left ruddervator came to rest along the aft fuselage. Both left and right ruddervators remained attached to their respective mounts. Crushing was observed on the left ruddervator leading edge near the root. Crushing and bending was observed on right ruddervator from mid

span to the top. Both ruddervator flight control cables remained attached to their respective mounts, the control cables were traced to the center of the fuselage, where they had separated from the flight controls. When the cables for the left and right ruddervator were manually pulled, corresponding movement was observed.



Figure 10: View of airplane empennage (photo courtesy of the NTSB)

3.0 Engine Examination

Engine Manufacturer: Continental
Engine Model Number: IO-550-B (6)
Engine Serial Number: 675444

The engine separated from the engine mount and came to rest adjacent to the main wreckage. All four engine mounts had fractured and separated from the firewall. All six cylinders remained attached to the engine case and exhibited impact damage. The Nos 4- and 6-cylinder rocker box covers were separated.

Both magnetos remained attached and did not exhibit impact damage. The fuel manifold valve remained attached to the engine and did not exhibit impact damage; however, the fuel lines going to the fuel injectors exhibited impact damage. The throttle body had separated from the engine and was in the OPEN position and exhibited impact damage. The intake and exhaust tubes separated and exhibited impact damage. The engine starter and propeller governor had separated from the engine and exhibited impact damage; they were both located in the debris field. The engine driven fuel pump and the starter adapter remained attached to the engine accessory case and were impact damaged.



Figure 11: View of airplane engine (photo courtesy of the NTSB)



Figure 12: View of throttle body (photo courtesy of the NTSB)

The airplane was equipped with a three blade Hartzell propeller; for the purposes of this report the propeller blades were labeled A, B, and C. The propeller hub along with all three blades separated from the engine Blade A exhibited S bending about mid span, with polishing along the leading edge, along with unidirectional striations on the cambered side of the blade. Additionally, blade A exhibited 2 distinct striations on the cambered side of the blade about mid

span. Blade B exhibited bending aft about mid span, with unidirectional striations on the cambered side of the blade. Blade C was fracture separated about mid span, with polishing along the leading edge and chordwise striations on the cambered side of the blade. The separated section was located about 20 ft from the propeller assembly, with a polished leading edge and chordwise striations on the cambered side of the blade.



Figure 13: View of airplane propeller (photo courtesy of the NTSB)

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

Submitted by: Eric M. Gutierrez