



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

June 28, 2017

ACCIDENT SITE EXAMINATION SUMMARY

WPR17FA134

This document contains 6 embedded photos.

A. ACCIDENT

Location:	Arlington, AZ
Date:	June 27, 2017
Aircraft:	N731RV; Vans RV-7
NTSB Investigator-in-Charge:	Maja Smith
NTSB investigator onsite:	Andrew Swick

On June 27, 2017 about 0849 mountain standard time, an experimental Vans RV-7, airplane, N731RV, was destroyed when it impacted terrain about 10 miles southwest of Arlington, Arizona. The private pilot and passenger were fatally injured. The aircraft was registered to Harber William Lee and operated by the pilot under the provisions of *14 Code of Federal Regulations Part 91* as personal flight. Visual meteorological conditions prevailed and a flight plan had not been filed. The flight originated from Buckeye Municipal Airport, Buckeye, Arizona about 0800.

Initial examination of the accident site by the National Transportation Safety Board and a Federal Aviation Administration inspector revealed that the airplane had impact damage consistent with an inverted, left-wing-down, nose-down airplane attitude during the ground collision. The propeller blades revealed heavy gouging, chordwise scoring and material loss. The vertical stabilizer and rudder were not found during the examination of the accident site.

B. PARTICIPANTS

Andrew Swick-NTSB
Mark Pritchett-FAA-FSDO
Thom Dickerson-FAA-FSDO
Chris Kennedy-FAA-FSDO

C. SUMMARY

Examination of the accident site was conducted on June 28, 2017. All major structural components of the airplane were located at the accident site with exception to the vertical stabilizer and rudder. The wreckage was recovered to a secure location for further examination.

D. DETAILS OF THE INVESTIGATION

1.0 Accident Site Examination

Main Wreckage: N33 13.778', W112 53.966' – Elevation: 1,076 feet

Accident site was about 18 miles southwest of the departure airport (BXK).

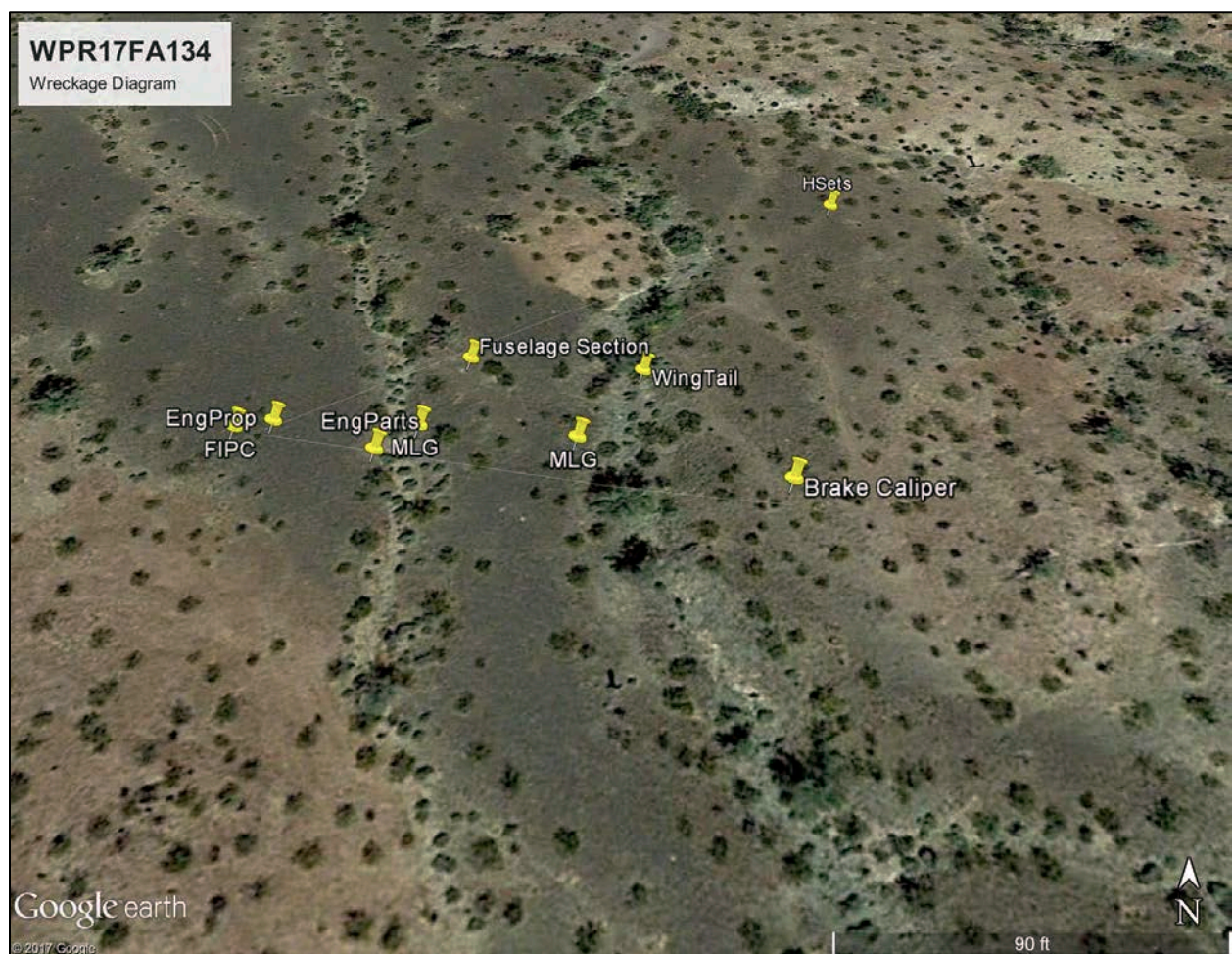


Figure 1-Wreckage Diagram

Examination of the accident site revealed that the airplane impacted level desert rocky terrain on the base of a north facing hill. The debris path contained two gullies running south to north. The airplane had been destroyed by high impact forces and spread out in a triangular pattern. The debris field was 264 feet long and 270 feet wide.



Figure 2-First Identified Point of Contact

The direction of the wreckage debris path was oriented a heading of a about 77 degrees magnetic from the first identified point of contact (FIPC) to the main wreckage. The FIPC was an area of disturbed ground about 10 inches wide and about 10 feet long, that contained red lens fragments. At the end of the area of disturbed ground was the impact crater, measuring about 4 feet in diameter, containing the propeller assembly and engine. One of the propeller blades revealed heavy gouging on the leading edge, and chordwise scoring. The other blade had forward bending at the midsection, leading edge scoring and missing material at the tip.



Figure 3-Main Wreckage

The main wreckage was found 146 feet from the FIPC and in the bottom of a 10-foot-deep gully. The main wreckage had impact damage and consisted of the horizontal stabilizers and both elevators, cabin area structure and the wing. The horizontal stabilizer and associated structure remained attached to the main wreckage by flight control cables and electrical wires. Flight control continuity was attained to the forward cabin area, through flight control cables and impact damaged control rods. The left aileron remained attached to the wing by its inboard attachment. The right aileron separated from the wing and was found near the main wreckage. Both flaps remained attached to wing and evidence to suggest that they were in the retracted position during impact. The right flap separated at its outboard attachment and was bent upwards at its midsection. The leading edge of both wings separated revealing the aft side surfaces of the fuel tanks. The leading edges of both wings had crush damage from the tip to the root. Both wing tips separated and attachment structure had impact damage. The right wing outboard section was bent downward. The forward side of the cabin floor area had crush damage.

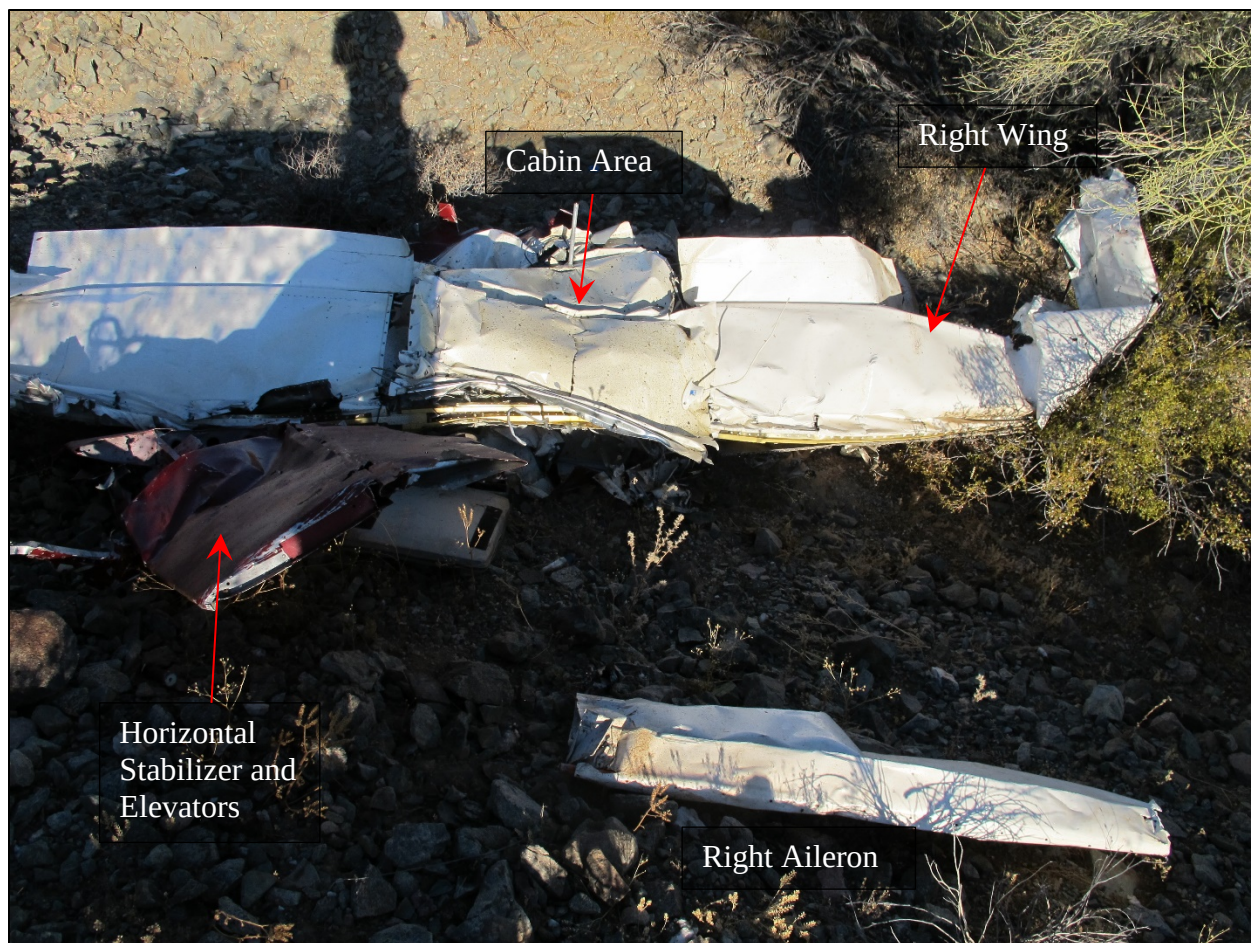


Figure 4-Main Wreckage



Figure 5-ELT

The ELT separated from the main wreckage and was found in sections throughout the debris field.



Figure 6-Horizontal Stabilizer and Elevators

The plexiglass canopy, vertical stabilizer and rudder were not found during the examination of the accident site. The vertical stabilizer support brackets were bent rearward.

The wreckage was relocated to a secured facility for further examination.