



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

August 29, 2018

WRECKAGE EXAMINATION SUMMARY

WPR18FA237

This document contains 6 embedded photos.

A. ACCIDENT

Location: Descanso, California
Date: August 22, 2018
Aircraft: N1682G, American Champion-7KCAB
NTSB Investigator-in-Charge: Andrew Swick

On August 22, 2018, about 1615 Pacific daylight time, a Champion 7KCAB, N1682G, was involved in an accident about 8 miles northwest of Descanso, California. The certified flight instructor (CFI), and commercial pilot receiving instruction were fatally injured. The airplane operated by the CFI as a Title 14 *Code of Federal Regulations* Part 91 instructional flight.

Information provided by family members of both pilots revealed the purpose of the flight was for spin training as part of the commercial pilot receiving instruction's training to become a flight instructor. The CFI operated two Champion airplanes, providing spin training and tailwheel endorsements.

Review and analyzing of Federal Aviation Administration radar data showed a primary radar target depart SEE and proceed in a northeasterly heading, climbing to about 3,200ft above ground level (agl) across areas of rising terrain. The target continued in a northeasterly heading at a level altitude before radar contact was lost near the accident site. Throughout the last few minutes of the target track, altitudes varied between 2,000 to 2,400ft agl.

The wreckage was recovered by Air Transport on August 24, 2018 and transported to Air Transport in Phoenix, Arizona for further examination.

B. PARTICIPANTS

Andrew Swick-NTSB IIC (onsite August 24, 2018)
Scott Worthington-FAA-FSDO (onsite August 23, 2018)
Jerry K. Mehlhaff Jr.-American Champion Aircraft (Party Member)
Mark W. Platt-Lycoming Engines (Party Member)

C. SUMMARY

The follow-up examination of the wreckage was conducted on August 29, 2018, at the facilities of Air Transport in Phoenix, Arizona. The engine and airframe examination revealed no preimpact anomalies that would have precluded normal operation.

D. DETAILS OF THE INVESTIGATION

1.0 Airframe

The wreckage was laid out on the floor and impact damaged items were identified and placed in their relative position.



Figure 1-Wreckage Examination



Figure 2-Empennage and aft fuselage.

The empennage remained attached to the aft fuselage and had impact damage. Flight control cables were identified, and cable connections were examined. The flight controls surfaces had impact damage and moved freely on their attachments.



Figure 3-Right wing

The right wing had extensive impact damage revealing the internal structure. Aileron cables and the aileron bellcrank showed overload signatures. The left wing tank remained in the wing and had deformation, consistent with fuel in the tank at the time of impact. The fuel tank cap was secured and the seal undamaged.



Figure 4-Left wing

The left wing was separated from the fuselage during the relocation of the wreckage. The left wing tank remained in the wing and had deformation, consistent with fuel in the tank at the time of impact. The fuel tank cap was secured and the seal undamaged.



Figure 5-Wing fuel tanks

The fuel strainer remained attached to the firewall and was disassembled. The screen was clear of debris and no contaminants were found in the bowl. The fuel selector had impact damage and its internal position was not known. Several fuel lines were separated from the main wreckage. The fuel header tanks separated from the main wreckage and was crushed.

2.0 Engine

The airplane was equipped with a Textron Lycoming IO-320-E2A engine rated for 150 horsepower at 2,700 rpm. The engine was equipped with a 2-blade, Sensenich propeller. The engine was examined by the manufacturer and no evidence of preimpact mechanical malfunctions were observed.



Figure 6-Engine