



## **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety  
Western Pacific Region

September 15 - 16, 2018

# **AIRFRAME AND ENGINE EXAMINATION**

**WPR18FA261**

## **A. ACCIDENT**

Location: Rochester, Washington  
Date: September 14, 2018  
Aircraft: Experimental Gruber Beelzabub, Registration Number: N382T  
NTSB IIC: Tealeye Cornejo

## **B. EXAMINATION PARTICIPANTS:**

Tealeye Cornejo  
Air Safety Investigator  
National Transportation Safety Board  
[REDACTED]  
Federal Way, WA 98001

John Osborne  
Aviation Safety Inspector  
Federal Aviation Administration  
[REDACTED]  
Des Moines, WA 98198

Stephen Ratcliff  
Aviation Safety Inspector  
Federal Aviation Administration  
[REDACTED]  
Des Moines, WA 98198

## **C. SUMMARY**

The airframe and engine were examined at the accident site and a secure facility. No evidence of preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

## **D. DETAILS OF THE INVESTIGATION**

### **1.0 Airframe Examination**

The entire airplane was in a forested area within the debris path; it came to rest in a nose-down attitude against a tree. The left wing and left horizontal separated from the airframe and came to rest in a tree about 500 ft from the main wreckage. A landing gear wheel separated and was located on the road adjacent to the forested area. The tailwheel remained attached at its normal position.

The fabric covered airplane skin had been torn away from the undercarriage and exposed the flight control tubes. The control tubes remained intact and connected via their associated hardware.

The fuel tank had been breached, but the smell of fuel was present along with fuel-scorched foliage.

The engine had separated from the airframe and came to rest in its relative normal location at the nose of the airplane. There were no obvious holes in the crankcase. The propeller assembly remained attached to the engine.

The follow up examination established flight control continuity via the flight control cables. The landing gear bungees remained in place and undamaged. The two-bladed Curtiss propeller remained attached to the crankshaft. One propeller blade was bent midspan with a portion of the tip missing. The other propeller blade was relatively straight with bending at the outboard tip.

## **2.0 Engine Examination**

The engine was a Jacobs Aircraft Engine Company R755-9. It was a seven-cylinder air-cooled radial engine. Examination of the engine revealed no obvious holes in the crankcase. The engine was manually rotated establishing mechanical and valve train continuity. The fuel strainer was removed and was free of debris.

Submitted by: T. Cornejo