



## **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety  
Western Pacific Region

October 23, 2018

### **AIRFRAME / ENGINE EXAMINATION SUMMARY**

**WPR18LA199**

This document contains 0 embedded photos.

## **A. ACCIDENT**

Location: Hyrum, Utah  
Date: July, 19, 2018  
Aircraft: Cub Crafters Inc., CC19-180, N70DD  
NTSB Investigator-in-Charge: Joshua Cawthra

## **B. DETAILS OF THE INVESTIGATION**

### **1.0 Airframe and Engine Examination**

Examination of the recovered wreckage revealed that the engine, a Lycoming O-360-C1G, S/N L-43007-361, was separated from the airframe to facilitate wreckage recovery. Recovery personnel reported that no fuel was recovered from the airframe wing tanks, nor was any fuel observed in the engine inlet fuel line.

All accessories remained attached to the engine. One of the two composite propeller blades was splintered / displaced aft. The number 1 spark plug was impact damaged (top / ignition lead separated). The top spark plugs were removed and exhibited signatures consistent with normal operation. The left and right magnetos were removed. When the magneto drive shafts were rotated, spark was produced on all four posts of each magneto.

The engine driven fuel pump was removed and disassembled. The internal components of the fuel pump were unremarkable. The propeller was rotated by hand and thumb compression / suction was obtained on all four cylinders. Equal movement of all intake and exhaust rocker arms was observed. The induction system and exhaust system were impact damaged and free of restrictions.

The carburetor was removed. The throttle and mixture arms moved stop to stop freely by hand. The fuel screen was free of debris. The carburetor was disassembled and examined. The internal floats were intact, no liquid was observed within the float bowl, and the needle valve and seat were unremarkable.

The left and right wing sight gauge tubes and ports were free of debris. Air was applied to both the left and right wing fuel outlet fittings and air expelled from the engine inlet fuel line. No blockages were noted throughout any of the left or right wing fuel vents or fuel lines. Neither the left or right fuel tank was breached.

No evidence of any preexisting mechanical anomaly that would have precluded normal operation was observed.

Submitted by: Joshua Cawthra