

## SUMMARY OF FINDINGS

**Tealeye Cornejo**Air Safety Investigator (Field) **Western Pacific Region** 

**Date: November 25, 2015** 

Person Contacted: Mark Platt; Lycoming Engines

NTSB Accident Number: WPR17LA088

## Narrative:

The engine examination was done under the auspices of the Federal Aviation Administration and took place at the Kern Valley Airport, in Kernville, California, on June 28, 2017.

The crankshaft was rotated by hand utilizing the propeller. Thumb compression was observed in proper order on all four cylinders. Mechanical and valve train continuity was established. There was no evidence of a pre impact mechanical malfunction observed during the engine examination.

Engine: O-360-A4A, serial number L-21906-36A Total time: about 1,900 hours since field overhaul

Propeller: Sensenich, serial number 100349K

Two-bladed fixed pitch propeller blades remained attached to the spinner and hub at the crankshaft flange. The propeller blades exhibited leading edge gouging and torsional twisting as well as chordwise striations.

## Fuel system:

The carburetor was separated from its mounting flange. The fracture surface features exhibited overload signatures. The throttle and mixture controls were attached and secure at their respective control arms on the carburetor. Control continuity was established from the carburetor to the cockpit. The carburetor was disassembled; the float remained secure at its mounting area and was not damaged. The float pontoons were not damaged and there was no evidence of rubbing against the wall. The fuel inlet screen was free of debris.

All the fuel lines were found in place and secure at their respective fittings. There was no engine driven fuel pump as the fuel system is gravity fed. The carburetor and induction systems were examined and free of debris.

## Magnetos and Spark Plugs:

The left and right magnetos remained securely attached to the engine at their respective mounting pads. The ignition harness was secure at each magneto. Magneto-to-engine timing was within manufacturer's limits. Both magnetos were removed and rotated manually. Each magneto produced spark at the end of the respective spark plug lead, and the drives of each magneto remained intact and undamaged.

The spark plugs were removed. According to the Champion Spark Plugs chart AV-27 "Check-A-Plug" the spark plug electrodes exhibited coloration consistent with normal operation.