



## RECORD OF EXAMINATION

**Mitchell Gallo**  
**Aviation Accident Investigator**  
**Central Region**

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**Date: July 19, 2014**  
**Person Contacted: Michael Huhn**  
**NTSB Accident Number: CEN13LA258**

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### **Narrative:**

The number 1 propeller blade was part number I-80VSA-1 and serial number ZJ26152; the number 2 blade was part number I-80VSA-1 and serial number ZL26036; the number 3 blade was part number I-80VSA-1 and serial number ZL26038. The propeller hub was part number B3D36C431-C and serial number 051726. All three propeller blades were able to be rotated by hand pressure while within the hub. The blades did not exhibit bending/twisting. The number 1 blade had two leading edge dings/gouges located near the outboard 1/4 span. The number 2 blade had a ding/tear near the tip. The number 3 blade had a dent/gouge located near 1/4 span. The blades were removed from the hub and all three pitch change links were fractured, and the fracture features were consistent with overstress. No other internal components exhibited damage. A liquid consistent with water along with oil was present when the piston assembly was removed from the cylinder.

The governor, part number DC290 D1F/T8, serial number 051824 was missing four of its cap screws. Oil drained from the governor did not contain liquid consistent with water. Four cap screws were installed onto the governor in preparation for a bench test. The test results indicated that the maximum governor speed was 2,350 rpm (specification limit was 2,275 rpm). The pressure relief valve regulated pressure to 305 psi.

Flow testing of governor revealed an input oil pressure of 50 psi and an output oil pressure of 124 psi. The flow value was 5.9 quarts/minute (minimum limit was 5.0 quarts/minute, no maximum limit value). An internal leakage rate test revealed the leakage rate was 2 quarts/hour (maximum limit was about 10 quarts/hour).

Mitchell Gallo  
Air Safety Investigator