

Inspector Statement
N1932G Engine Teardown
Kingsbury, TX
September 18, 2019



By

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SW-17



Registration: N1932G
Aircraft: Pietenpol Sky Scout
Class: Experimental
Engine: Ford Model A Conversion

On September 07, 2019 at Kingsbury, TX (85TE) aircraft N1932G lost engine power shortly after takeoff and impacted the terrain. A few hours later I arrived on scene to investigate. On Wednesday September 18, 2019, I performed oversight of an engine tear-down and a more thorough systems inspection of the aircraft to assist NTSB. Participants of the tear-down included aircraft owner Roger Freeman, Steve Fields and myself.

Reviewed the aircraft records. Aircraft had approximately 34 hours of flight time since its 1999 build. Engine had just been overhauled at a local automotive engine shop on 08/22/2019. Engine was installed back on the aircraft on 08/25/2019. To begin the investigation, attempted to manually rotate broken prop. Block was cracked from impact and prop was not able to rotate not more than approximately 1/8 of a turn due to crank shaft being bent from impact

damage. Removed and tested magneto, checked good and was able to get spark. Spark plugs were pulled and appeared good. All fuel lines inspected and found to be clear. Filters were clean with no debris. Verified fuel valve below tank was open. Fuel lines and valve were also inspected during initial investigation at accident site on Sept 07 and found to be clear and valve open. Removed engine valve cover, inspected valves, pistons, piston rods, no issues found. Clean oil was present with no abnormalities or metal shavings/foreign debris found. Oil pan removed. Other than impact damage, no or metal shavings/foreign debris was found. Carburetor was removed and inspected. Valve operated normally with no issues found. The carb heat hose was found to not be connected to the carburetor and had no secure attachment hardware which could cause the hose to easily become separated from the carburetor. This hose was also found not to be attached during the initial investigation at the accident site on Sep 07. Gascolator sediment bowl and filter screen was clean with no debris. Inspected fuel tank. Tank found to be damaged, possibly due to impact, and was broken at the welds. The fuel cap was inspected and found a cracked rubber seal that was hardened from age. Found fuel cap vent holes to be very small and partially obstructed by the seal which could cause inadequate fuel venting.

Issues found during the investigation to note:

- 1) The carb heat hose was found to not be connected to the carburetor and had no secure attachment hardware which could cause the hose to easily become separated from the carburetor. This hose was also found not be attached during the initial investigation at the accident site on Sep 07.
- 2) The fuel cap was inspected and found a cracked rubber seal that was hardened from age. Found fuel cap vent holes to be very small and partially obstructed by the seal which could cause inadequate fuel venting.

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