



The National Transportation Safety Board

Office of Aviation Safety
Central Region
Memorandum for the Record
Engine Examination Factual
Findings
CEN16LA064
Sulphur Louisiana
November 24 2015

The engine was examined on August 8 2017 at the facilities of Air Salvage of Dallas in Lancaster, Texas. The examination was conducted under the supervision of the FAA. The following findings were reported:



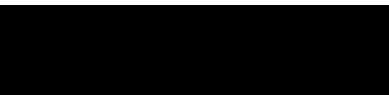
- The engine remained attached to the airframe and had no external damage, except for impact damage to the intake air box. The throttle and mixture controls were hooked up. All of the cylinders had chrome markings.
- The top spark plugs, and rocker covers were removed. The crankshaft was rotated by hand using the propeller. Continuity was confirmed to all cylinders and to the rear of the engine. Good thumb compression was confirmed on cylinders one through five. The cylinders were examined with a lighted

boroscope and the number six cylinder had heavy corrosion on the intake valve between the valve and the valve seat, so that the valve could not properly seat. The remainder of the cylinders had dark deposits on the cylinder domes and pistons.

- The aircraft had been modified with a STC allowing the use of auto gas.
- The magneto impulse couplings snapped at top dead center on the number one cylinder.
- Spark Plugs: Champion, RWM-40E. The top spark plugs were removed and examined. They had normal wear when compared to the Champion Check-A-Plug comparison card, and dark deposits in the electrode areas.
- Carburetor: Marvel Schebler, MA-4-5, PN-10-3859-1, SN-MF-V-AI. The carburetor was not damaged. Rust and water were observed in the fuel inlet line. The inlet screen was wet with water and corrosion. The unit was disassembled, and the bowl was about half full of water and the bowl was also heavily corroded. The float and needle valve were intact and were free to move.



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