



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

AIRFRAME AND ENGINE EXAM REPORT

WPR17LA090

Accident Date: April 24, 2017
Exam Date: May 23, 2017

This document contains 7 embedded images.

A. ACCIDENT

Location: Banning, CA
Date: April 24, 2017
Aircraft: Cessna T201N, Registration Number: 6218Y
NTSB IIC: Michael Huhn

B. EXAMINATION PARTICIPANTS:

Howard Plagens	Mr. Fritz Beyer
Senior Air Safety Investigator	FAA Certificated Mechanic
National Transportation Safety Board	A&P & IA ratings
Desert Hot Springs, CA 92240	

C. BACKGROUND & SUMMARY

The pilot reported an engine power degradation and/or loss while in cruise at an unspecified altitude. The airplane was westbound, and reportedly destined for Corona Municipal Airport (AJO), Corona CA. The airplane landed short of runway 26 at Banning Municipal Airport (BNG), Banning, CA.

The airplane was placed in a third party hangar later on the day of the accident. Several days later the hangar was secured. The airplane was not insured, and the pilot was not available for interviews by, or information requests from, the investigation

Examination of the recovered airframe and engine was conducted on May 23, 2017, in the same hangar at BNG. The nose gear had separated/collapsed during the accident. The airplane was found resting on its main gear, in an approximately level pitch attitude, its nose supported by miscellaneous hangar equipment/articles.

No evidence of preimpact mechanical malfunction was noted during the examination of the recovered airframe and engine.

D. DETAILS OF THE INVESTIGATION

1.0 Airframe Examination



Figure 1 - Right Front View of Airplane



Figure 2 - Top Left Side of Engine

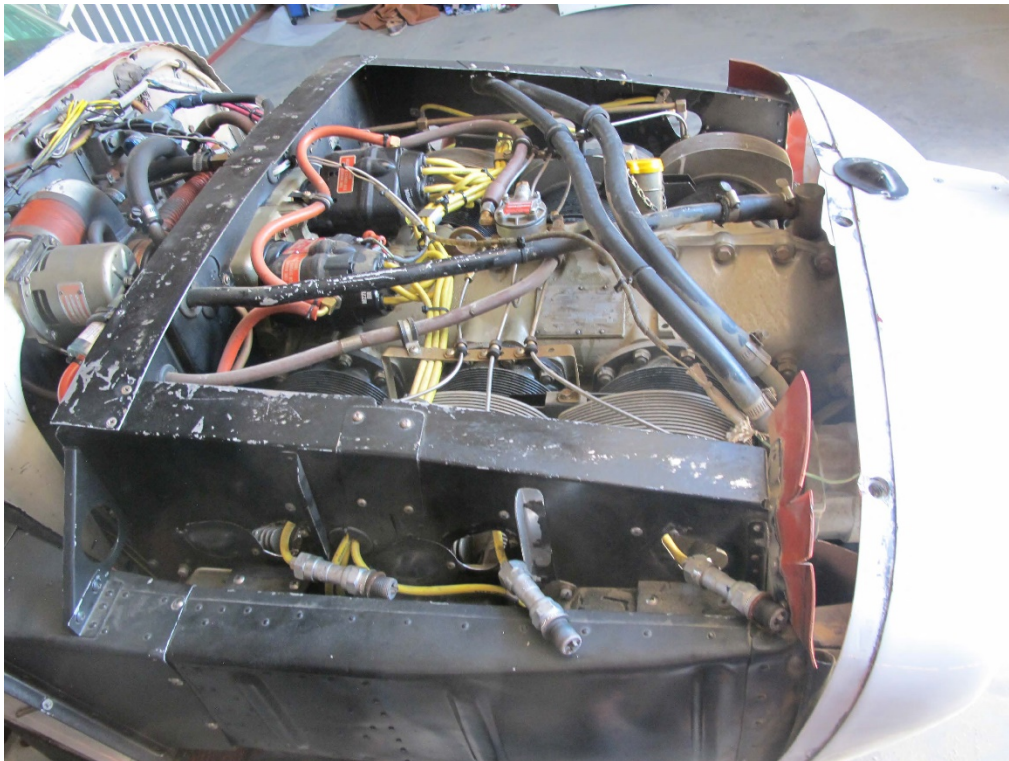


Figure 3 - Top Right Side of Engine

A wooden stick was dipped into the left wing fuel tank, and then removed; the stick came out dry. No fuel came out of the left wing quick drain port when activated.

Actuation of the gascolator drain handle in the engine compartment, did not result in any liquid being observed coming from the gascolator.

The fuel line from the fuel/air control unit to the fuel manifold valve was disconnected at the fuel manifold valve; no fuel was present in that line.

The fuel selector valve (FSV) handle was found in the OFF position. [To date the investigation has been unable to determine when or by whom the FSV was set to OFF.] The FSV handle was placed in the LEFT wing tank position, and less than an ounce of clear, blue fluid that smelled like aviation gasoline was obtained at the open line end discussed above. The auxiliary fuel pump was then turned on via a cockpit switch, and a clear, light blue fluid that smelled like aviation gasoline flowed out of the line. About 12 ounces of the fluid were collected before flow stopped.

The wooden stick was dipped into the right wing fuel tank, and it came out wet; the wet area of the stick measured about 4.5 inches long. A total of about 27 gallons of a light blue fluid that smelled like aviation gasoline was drained from the right wing tank.



Figure 4 - Right Wing Fuel Measurement

A sample of a clear, light blue fluid that smelled like aviation gasoline was drained from the left and right reservoir tanks on the bottom of the fuselage. [These tanks are situated between their respective main fuel tanks and the FSV.]

2.0 Engine Examination

The fuel manifold distribution valve ["spider"] was opened/disassembled, and clear, light blue fluid that smelled like aviation gasoline was present. The rubber diaphragm was pliable and not torn; the screen was clean and moist.



Figure 5 - Screen and Diaphragm of Fuel Manifold Distribution Valve

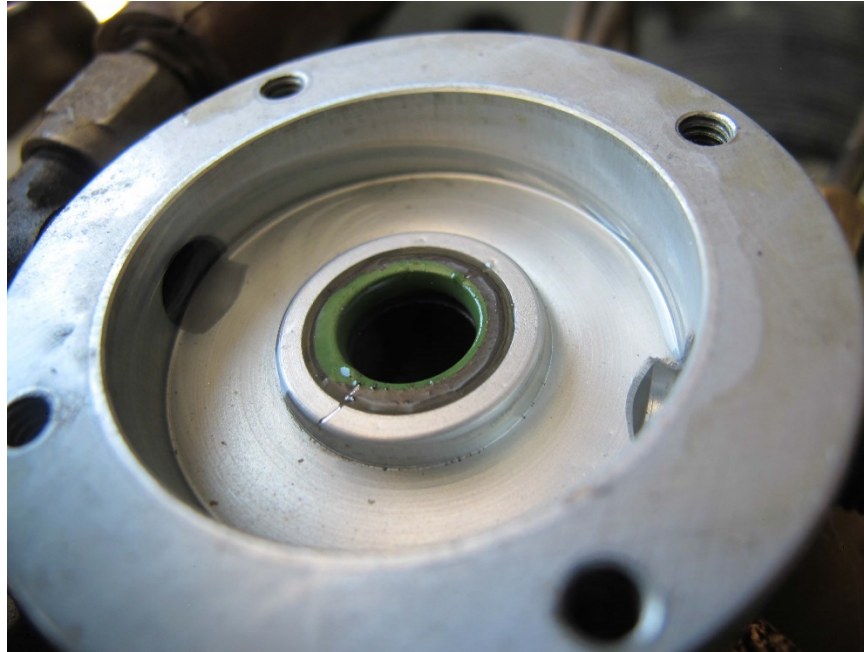


Figure 6 - Bottom of Fuel Manifold Distribution Valve

The engine remained in place on the airframe. The top spark plugs were removed. The center electrodes for all cylinders were elliptical and clean with no mechanical deformation. The spark plug electrodes were gray, which corresponded to normal operation according to the Champion Aviation Check-A-Plug AV-27 Chart.

The engine/crankshaft was manually rotated via the propeller, and the engine/crankshaft were observed to rotate freely. "Thumb" compressions were observed on all cylinders in proper firing order.



Figure 7 - Top Spark Plugs (Cyl Nos. 1-6, from Right to Left)

The spark plugs were reconnected to the ignition harness, grounded to the airframe, and the propeller was manually rotated. Spark was observed on all plugs in proper firing order.

Submitted by: Investigator Howard Plagens