



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

June 26, 2019

ENGINE EXAMINATION

ERA19LA063

This document contains 9 embedded photos.

(12 Pages)

1.0 EXAMINATION PARTICIPANTS:

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2.0 SUMMARY

Examination of N618G was conducted on June 26, 2019 at CMI, Mobile, AL. Examination of the engine revealed the left turbo turbine wheel was missing.

3.0 DETAILS OF THE INVESTIGATION

3.1 Engine Examination

The oil cooler, turbos, and oil hoses were removed. The engine exhibited multiple holes in the top of the case.

The left magneto had extensive internal thermal damage. Right magneto was undamaged.

The left turbo turbine side blades were not located. Field overhaul in May 2016 by ATC See WPR17LA137)

The crankshaft would not rotate due to multiple broken rods. Unable to check magneto timing. All connecting rods were loose from crankshaft except Nos. 1 and 6.

An unknown sealant was present on the starter adapter.

The oil sump was removed and exhibited numerous pieces of metal.

3.2 Engine Exam Photos



Figure 1: Engine

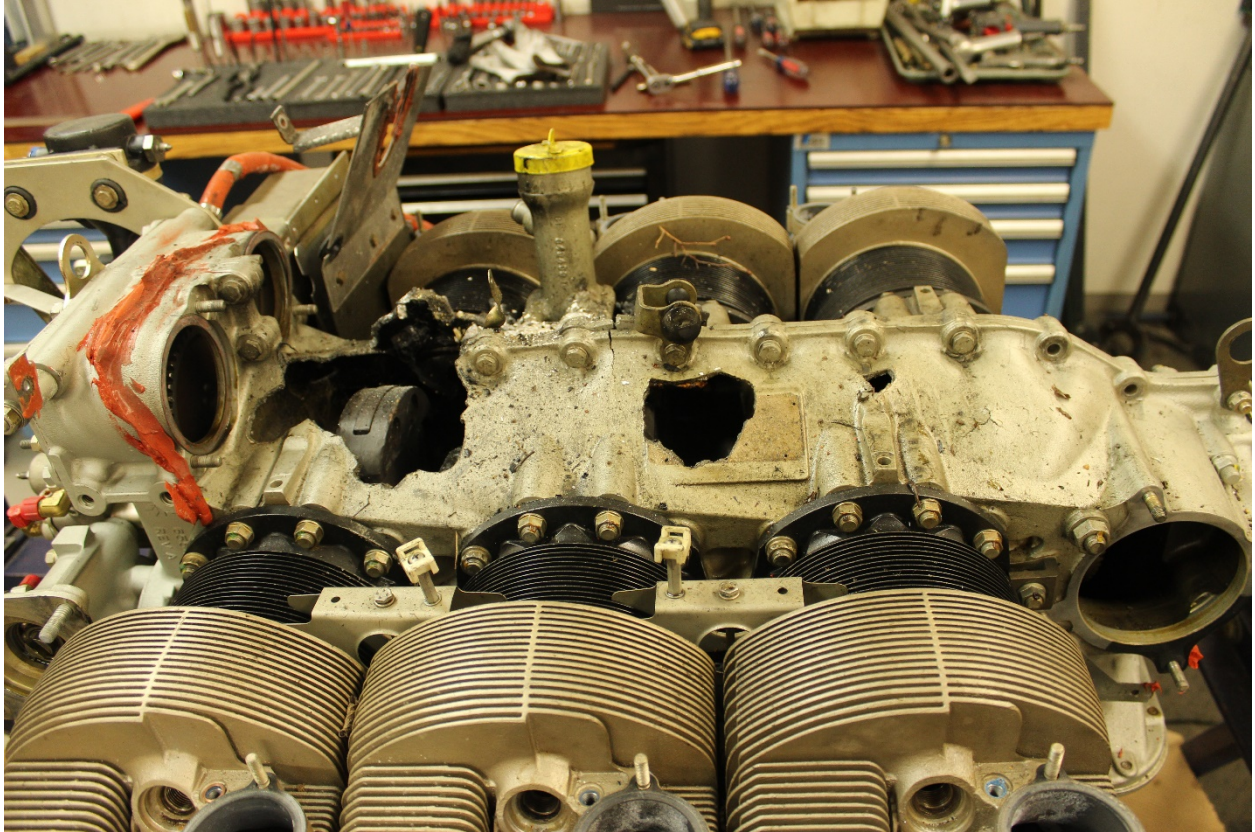


Figure 2: Top of engine.



Figure 3: Left and right magnetos.



Figure 4: Missing turbine wheel from left turbo.



Figure 5: Oil sump contents.



Figure 6: Left and right turbos.