



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Western Pacific Region

August 23, 2018

HEATER ASSEMBLY EXAMINATION

WPR17FA066

This document contains 1 embedded photo.

WPR17FA066

Riverside, California

February 27, 2017

1641 PST

Cessna T310Q – N1270P

EXAMINATION PARTICIPANTS

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HEATER ASSEMBLY MODEL INFORMATION

The heater assembly data plate was not present on the unit and is presumed to have been destroyed during the postcrash fire.

DISASSEMBLY AND EXAMINATION

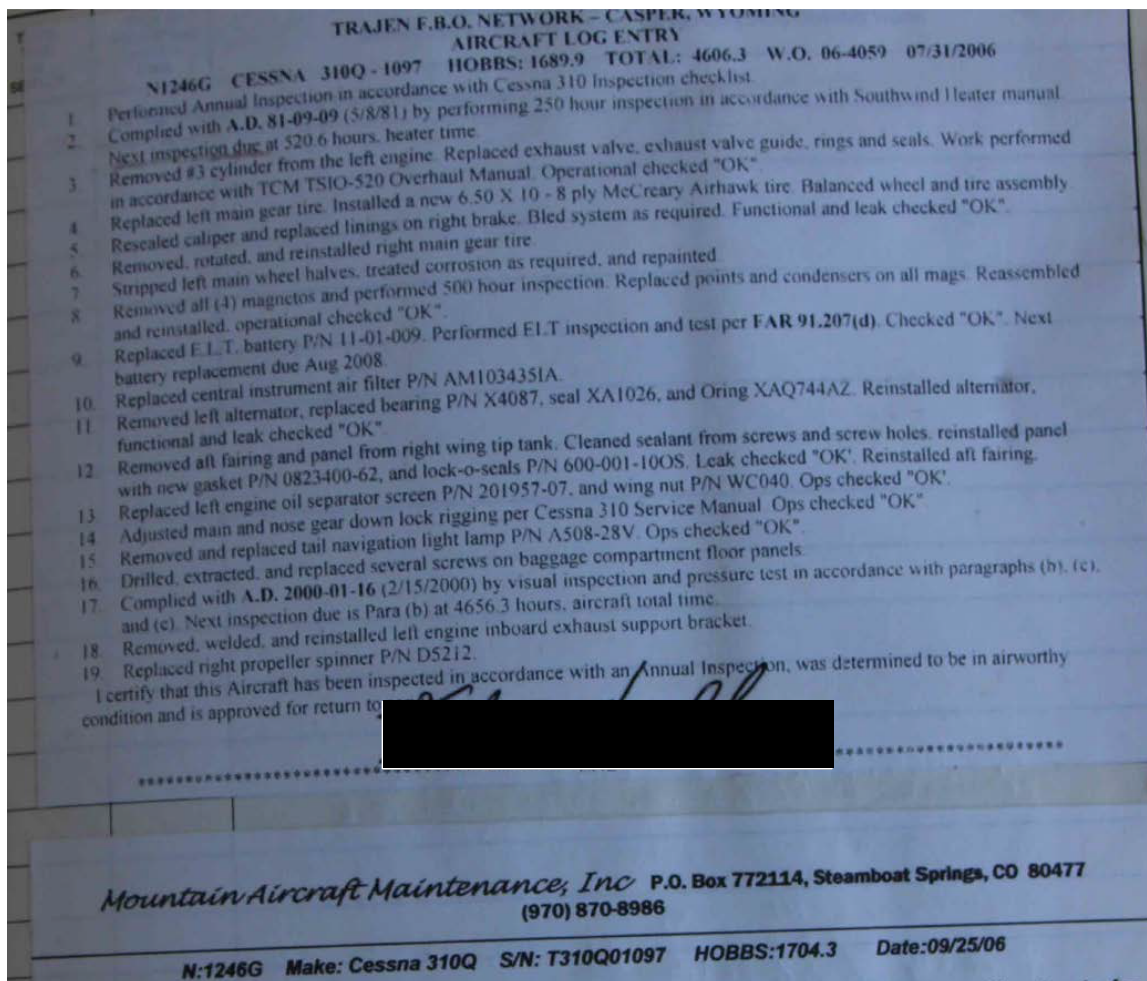
The heater assembly outer shroud was thermally damaged by postcrash fire. The heater fan was separated from the outer shroud and also displayed thermal damage. A 9 volt battery was

subsequently used to supply power to the unit, which turned continuously. The igniter box, spark plug, and fuel nozzle were then removed to facilitate a pressure test of the exchange assembly.

Once the drain line and exhaust were secured, an air line was secured to the fuel port and the exchange assembly was submerged in a tub of water. It was noted that the screws that secured the attachment plate to the assembly were loose, but exhibited fire damage. A continuous supply of air was used to pressurize the combustion chamber within the assembly. The unit was in a vertical position with the attachment plate end of facing up. Trace amounts of air leaked from two of the attachment points on the plate. The unit was then re-positioned with the attachment plate face down, which did not reveal any leaks.

The fuel nozzle exhibited some thermal damage, but was intact. The spark plug center rod was canted, but the plug showed evidence of combustion. The burner assembly displayed a fanlike burn pattern that widened away from the ignition source.

Logbooks: page 59 of pdf file has yellow tag that references South Wind Heater at 70.5 hours. Page 9 references 250 hour inspection. Next inspection due at 520.6 hours.



Photograph 1: Last Recorded Inspection of Heater

