



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Eastern Region

AIRFRAME AND ENGINE EXAMINATION

CASE NUMBER: ERA19LA267

AIRCRAFT: Grumman G-164B, N8386K

EXAMINATION PARTICIPANTS:

Eric Alleyne
Air Safety Investigator
National Transportation Safety Board

SUMMARY

Examination of the recovered airframe and engine was conducted on 12/11/2019 at the

DETAILS OF THE INVESTIGATION

The pilot reported that, he was departing for on the first flight of the day to conduct aerial seeding with 2,000 lbs of wheat seeds. After liftoff, he noticed that the engine began to vibrate, but the rpm seemed normal. The pilot made a right turn and the engine started to lose power and then "quit." During the landing, the airplane nosed over, and a post-crash fire ensued.

Airframe Examination

Examination of the airframe revealed the Examination of the wreckage by a Federal Aviation Administration inspector revealed that the airplane came to rest inverted in a cornfield. The airplane's fuselage and both the upper and lower wings were buckled. Examination of the cockpit, firewall and the engine accessories revealed they were fire damaged.

Engine Examination

Examination of the engine revealed the No. 8 exhaust seal was found replaced. The push rod had a witness mark on the edge of the rod that showed it was not fully seated in the cap on the rocker side. Examination of the No. 9 push rod seal revealed it was brittle and did not appear that it was replaced as noted in the logbooks. The No. 9 valve was stuck in the open position. All the cylinders were borescope and did not show any signs of scoring internal damage. Valvetrain continuity was observed on the master rod, pistons, pushrods, and rockers.