



NATIONAL TRANSPORTATION SAFETY BOARD
Office of Aviation Safety

Engine Examination

A. ACCIDENT ERA22FA386

Location: French Lick, IN
Date: August 27, 2022
Time: 2104 Eastern Daylight Time (EDT)
Operator/Pilot: Robert Charles Flick
Aircraft: Beechcraft B-35
Engine: Continental, E-185 sn 26791-D-4-8-R
Registration: N8741A

B. ENGINE EXAMINATION PARTICIPANTS:

IIC: Peter Wentz
 National Transportation Safety Board
 Ashburn, Virginia

Participant: Jennifer Barclay
 Textron Aviation Inc.
 Wichita, KS

Participant: Kurt Gibson
 Textron Aviation Inc.
 Wichita, KS

C. ENGINE EXAMINATION LOCATION:

AMF Aviation LLC
Springfield-Robertson County Airport (M91)
4432 Airport Road
Springfield, TN 37172
August 31, 2022

D. SUMMARY

On August 27, 2022, about 2104 eastern daylight time, a Beechcraft B-35, N8741A, was destroyed when it was involved in an accident at French Lick Municipal Airport (FRH) French Lick, Indiana. The air transport pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91. The airframe and engine were recovered from the accident site and transported to a secure location, photographs 1 shows the engine before examination.



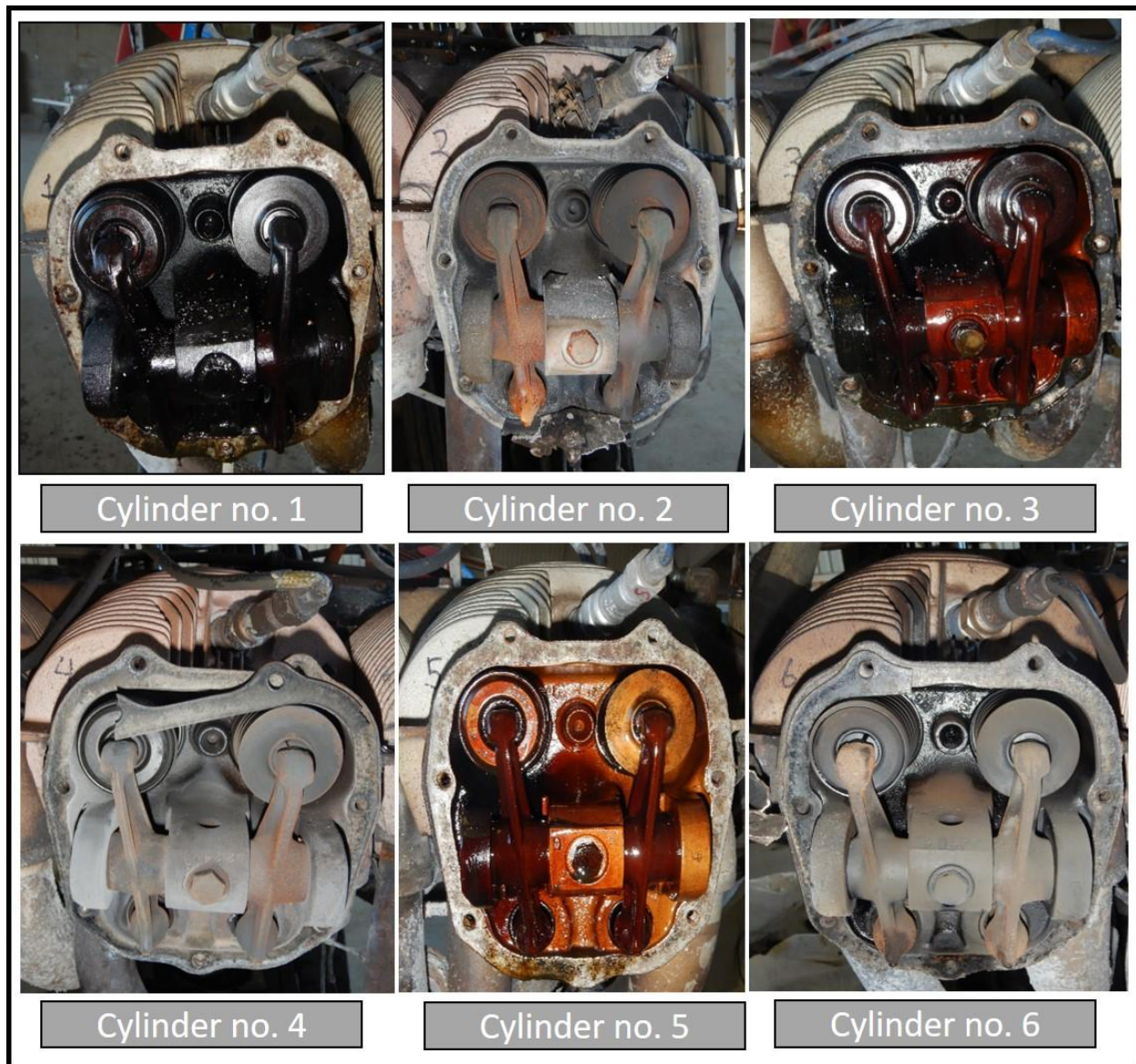
Photograph 1 – Accident airplane engine at recovery facility.

E. DETAILS OF THE EXAMINATION

The accident engine was a Continental, E-185 sn 26791-D-4-8-R. The engine was exposed to extreme heat due to a post-crash fire. The engine was hung from a forklift for the examination. The group attempted to rotate the crankshaft by rotating the propeller but were unsuccessful due to thermal damage to the engine. The pressure carburetor, accessory housing, oil sump, fuel pump and vacuum pump was not recovered from the accident scene. The engine components that were accounted for showed signs of thermal damage.

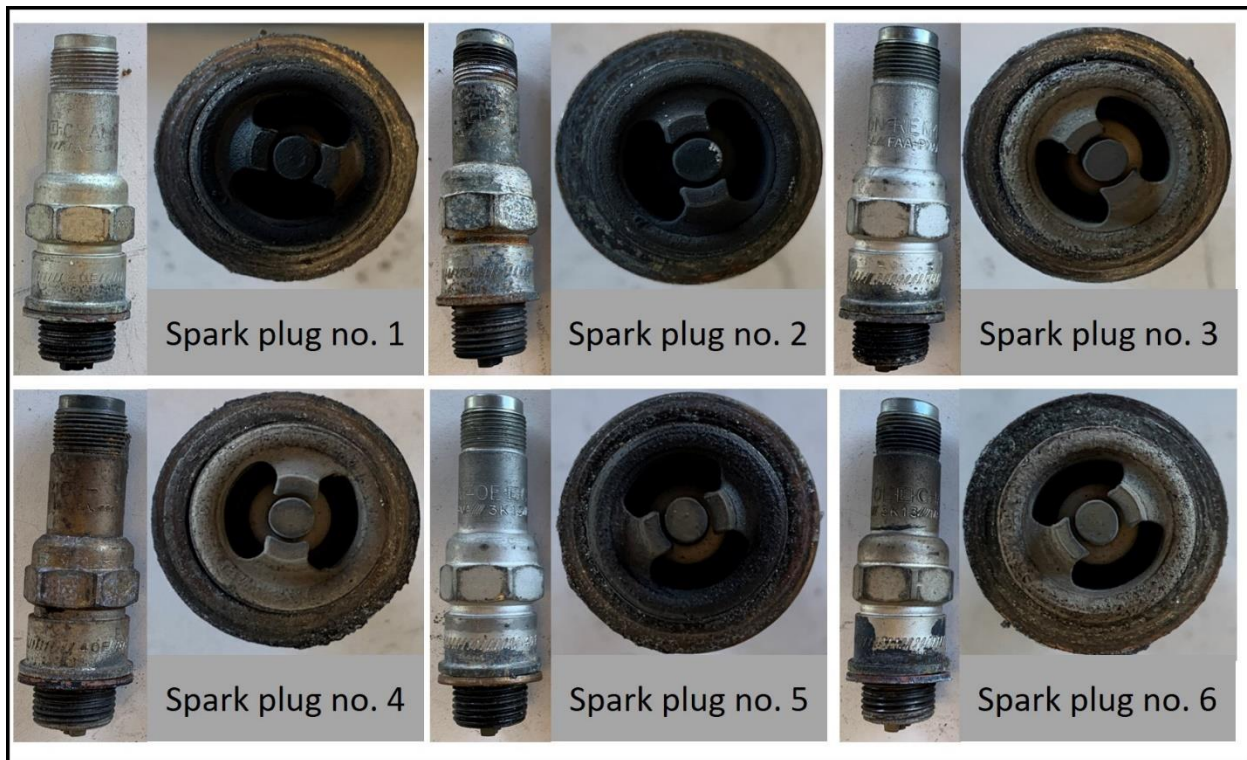
Both propeller blades were found at the accident site; one blade was curled aft at the tip and remained secure in the hub. The second propeller blade was separated from the hub and exhibited S-bending at the outer 1/3 of the blade.

The rocker covers were removed exposing the cylinder valves stems, springs and rocker arms.



Photograph 2 –Cylinders

The top spark plugs were removed from each cylinder head for examination. The spark plugs were Champion REM 40 E.



Photograph 3 –Champion REM 40 E top spark plugs removed from the accident engine.



Photograph 4 –Champion REM 40 E top spark plugs removed from the accident engine.

Both magneto's were located near the engine at the accident site but could not be identified, as right or left. Both show signs of thermal damage and could not be operationally tested



Photograph 5 –Magneto's



Photograph 6 –Engine left heat exchanger and tailpipe



Photograph 7 –Engine right tailpipe



Photograph 8 –Oil pump gear



Photograph 9 –Air-oil separator



Photograph 10 –Oil filter



Photograph 11 –Generator



Photograph 12 –Starter