

## NTSB MEMORANDUM FOR RECORD

Adam Gerhardt Air Safety Investigator Eastern Region, Office of Aviation Safety (ERA) National Transportation Safety Board

Date: June 14, 2020

NTSB Accident Number: ERA20LA160

## Narrative:

Representatives Todd Tuttle (Director of Safety, Haverfield Aviation), Stan Braun (Director of Maintenance, Haverfield Aviation), Jack Johnson (Rolls-Royce), and two Keystone Aviation line mechanic assisted with an examination and test run of the helicopter engine at Keystone Aviation, Coatesville, Pennsylvania.

## **ENGINE EXAMINATION AND TEST SUMMARY:**

The engine was removed from a crate. The tamper tape was intact.

The engine CHIP plugs, and engine oil filter were examined. There was a small amount of debris or fuzz noted on the two CHIP plugs that were within operational tolerances. The engine oil filter was saturated in oil and was free of debris.

A pneumatic leak check was performed on the engine and no anomalies were observed. There was very minor FOD damage on one compressor blade.

The engine was test run within an engine test cell. The engine produced idle through takeoff power, with no anomalies observed, and all parameters remained within tolerances throughout the test run.

For a portion of the test run, the positive pressure fuel supply was eliminated, to simulate conditions similar to an electrical fuel pump failure. The engine driven fuel pump-maintained power and produced takeoff thrust consistent with the previous data when positive fuel pressure was available.

An export of the data produced during the engine test run was retained and is on file.