



MEMORANDUM

Daniel P. Boggs
Air Safety Investigator
National Transportation Safety Board
Office of Aviation Safety - Eastern Region

Date: October 3, 2018,
NTSB Case Number: ERA18LA259

On October 3, 2018, I performed an engine exam on N6469P. the top spark plugs were removed, and the propeller was rotated by hand. thumb compression was established on 1-2-3 cylinders. Compression was not present on the #4 cylinder. A lighted boroscope was used to looking inside the cylinders. It was revealed that the #4-cylinder exhaust valve was fractured off. No portions of the fractured valve were present in the cylinder. The fracture features of the remaining valve stem were consistent with fatigue. The piston, cylinder head, and cylinder walls were gouged consistent with repeated contact with the exhaust valve. The rest of the engine was intact and showed normal signs of wear.

Dan Boggs
Air Safety Investigator
NTSB