

N16071

S/N 15073455

Engine Model O-200

Engine S/N 205223-9-A

I, Jeff Davis (PMI ATL FSDO SO-11), traveled to Atlanta Air Salvage July 26, 2023 to assist Hal Ingram (APAI ATL FSDO SO-11) to observe a basic engine examination that was involved in and aircraft accident N16071.

On arrival the engine was still attached on the aircraft. The mechanic employed by Atlanta Air Salvage ask if he could remove the engine from the airframe, myself and Inspector Ingram concurred. Once the engine was removed and safe for the evaluation the valve covers were removed. The propeller rotated and verified continuity of the crankshaft and cylinders. #2, #3 and #4 valve movement was verified. # 1 cylinder aft valve would not move.

Removed upper spark plugs and they appeared to be operational. Rotated engine and verified that each spark plug lead fired with engine rotation which also verified the magnetos were operating.

Performed borescope of cylinders and found the walls of # 1 & # 4 to be pitted. # 2 & # 3 did not appear to have corrosion.

Rotated prop to verify cylinder compression and found #2, #3, and #4 to have compression. #1 cylinder did not have compression.

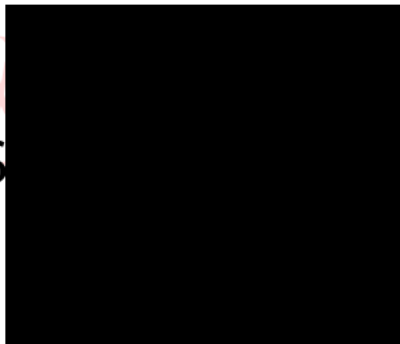
Removed oil filter and did not find any contamination in oil or filter element.

Removed air filter and found it to be clean and would allow air flow as needed.

Removed carburetor, the condition appeared to be operational. The floats moved freely and no contamination was noted. Fuel was not present in the carburetor due to aircraft being inverted after the crash.

The aircraft fuel supply is a gravity fed system. A visual inspection was performed. No visual defects were noted.

JEFFREY
M DAVIS



Memorandum for Record

Accident Investigation for N16071 12 July 2023

Engine Inspection Continental Model O-200 / Engine S/N 205223-9-A

On July 26, 2023 I, along with Inspector Jeff Davis (PMI ATL FSDO SO-11) traveled to Atlanta Air Salvage to monitor and record data for an accident investigation of Cessna 150 N16071 that occurred on July 12, 2023.

We arrived at the scene and performed a walk around of the destroyed aircraft. The engine compartment was destroyed and the engine needed to be removed to perform a safe evaluation. We concurred with Atlanta Air Salvage's request to remove the engine from the wreckage for the examination. After removal, a thorough visual inspection was performed. Covers were removed and the prop was manually rotated to observe proper mechanical motion. Cylinders 2, 3, and 4 performed properly. The exhaust valve on the #1 cylinder was frozen.

Spark plugs were removed, visually inspected, and verified they were operational. Manual engine rotation was used to verify the spark plug fired correctly which also verified magneto operation. Compression was tested in all four cylinders by manual prop rotation. Cylinders 2, 3, and 4 had compression. The #1 cylinder did not.

A borescope inspection was performed on all four cylinders. Cylinder walls on #1 and #4 cylinders were pitted. The #2 and #4 cylinders appeared free of corrosion and serviceable.

The oil filter was removed from the element and opened to inspect the element. There was no contamination found and oil flow appeared normal.

The air filter was also removed and inspected. It was clean and free of obstructions.

Removed and inspected the carburetor. Floats moved freely and there was no contamination. The aircraft's fuel system is gravity fed. No defects were noted.

HAL MICHAEL
INGRAM

