

N50JH Model "T Bird 2" post-accident engine evaluation
07/14/2020

Following a fatal accident EMI FSDO management requested my assistance to evaluate the engine function of aircraft N50JH. This request was made because I am an A&P Mechanic with Inspection Authorization and I have been trained and certified by the Rotax factory to service and maintain these types of engines. A witness on the ground had stated that the engine sounded rough before the accident.

Upon arrival I discovered the engine installed is a Rotax 618 with a warp drive ground adjustable propeller. The engine was intact and undamaged other than one of the 3 blades of the propeller was broken off. The engine was in overall poor condition regarding the standard maintenance items that require regular replacement such as cracked and brittle hoses, cracked and leaking carburetor intake boots, and chaffed wiring that was wrapped with electrical tape. There were other indicators throughout the aircraft of unairworthy and unsafe repairs and improper hardware that would suggest that the aircraft was not being maintained and repaired properly. However, the engine compressions were tested adequate and fuel was discovered in both carburetor bowls. The ignition system was also tested and working properly.

There is no evidence that the engine failed, or quit running for any reason.

The witness that heard the engine running poorly before the accident likely had no knowledge of the 2 stroke Rotax engines and that they have a unique sound similar to a snowmobile and could easily be mistaken for rough running during normal operation.

In conclusion;

It is my professional opinion that the aircraft engine was operating properly during the accident. I could find no evidence to suggest that the engine would not operate at the time of inspection if fueled and started.

Sincerely;

DONALD S BROWN
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Aviation Safety Inspector

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