

Synwood Electrics
2035 Park Road NW
Washington, D.C. 20010
12-7-2022

To Whom It May Concern,

I conducted a test for the integrity and functionality of the Lycoming engine mounted on N7261F, Piper PA28-140, at the West Ramp of Manassas Regional Airport (KHEF), at the request of NTSB Investigator Daniel Boggs and in the presence of FAA Avionics Inspector David Reese.

Upon arrival I noted that the aircraft was on the ground face forward with one propeller bent at 90 degrees rearward. I was able to jack, crib and support the aircraft into a position where it was safe to rotate the engine, however conditions would not allow a test operational run.

I removed the engine spark plugs and conducted a full rotational sweep through all cylinders with no obstruction and normal firing of impulse magnetos. I noted even and consistently sufficient compressions on all cylinders with appropriate intake and outflows. Although equipment was available, conditions did not permit an actual cylinder leak check. I removed cut and inspected the engine oil filter and did not observe and foreign material.

The engine electrical system was intact and functioning normally. I used a magneto test box connected to the engine Slick magneto "P" lead connections. I was able to test the Bendix ignition key switch system to the magnetos and trace proper grounding to the off position and correct operation through the "right, left and both" magneto positioning. The magneto to engine timing was in normal range and exhibited normal right to left offset. Given these results, the magnetos were not removed from the aircraft for further testing.

I collected fuel samples from the carburetor drain plug and the firewall drain sump and did not detect the presence of water or other contaminants .

There were no other engine abnormalities noted.

Sincerely,

John Marsh, AP/IA
Synwood Electrics