



RECORD OF FAA INSPECTOR'S ONSITE INSPECTION

Date: May 31, 2018

Person reporting: Thomas Savickas, FAA Airworthiness Inspector

Subject: WPR18LA125 - onsite FAA inspector's notes

The FAA aviation safety inspector for the accident, Thomas Savickas, who was assigned to the FAA's Allentown Flight Standards District Office, Allentown, Pennsylvania, responded to the accident site the day after the event. His assessment of the damage, which was provided to the NTSB IIC, revealed the following:

Aircraft was being moved for an annual inspection, this was the first flight of the year after sitting outside for about 6 months. The pilot attempted the first takeoff and developed an engine problem and turned back and landed at the airport. The engine was decoupled, and a fuel line was replaced due to the one on the aircraft looking like a hose that was purchased at an auto parts store. The carburetor was checked to ensure there wasn't a rodent nest inside the air intake. The pilot ran the engine for 1 minute at full power and decided the engine sounded good and performed a second take off. This time the engine stopped, and the pilot could not make it back to the airport. The only place to land the aircraft was into the lake at the end of the runways.

Aircraft was submerged in 44 feet of water for about 24 hours.

I was not able to be at the airport for the aircraft recovery. I inspected the aircraft two days after recovery.

The aircraft had sustained major damage to the underside of aircraft, there was a large tear in the fabric from the fire wall to behind the aft seat. The right wing was barely attached to the fuselage. The front lower left side was crushed from the water impact.

Before I arrived on scene both wings were removed from the fuselage, both fuel tanks had been drained completely. The left main landing gear leg was torn from the fuselage so aircraft was resting on right wheel and belly of aircraft.

I started to perform a visual inspection of the aircraft. During the inspection I noticed the aircraft propeller was straight with no signs of damage. The aircraft log books were located inside the aircraft cabin.

Once I was finished looking at the aircraft, I began to inspect the aircraft engine. I removed the top four spark plugs and noticed all four plugs showed signs of wear (the electrodes were all egg shaped). Once the top four plugs were removed, I performed a compression and exhaust test using my thumb to cover the spark plug hole while moving the propeller in the direction of rotation. The number 4 cylinder felt different than the other 3 cylinders on the exhaust portion of the test. I performed the test a second time and everything felt good on the number 4 cylinder. I removed the lower spark plugs and they showed the same wear as the top spark plugs. I removed both magnetos and looked at the back of the engine. Everything looked ok from my perspective. At this point I needed the assistance of Lycoming to verify I did not miss anything.

May 21, 2018, I met with a Lycoming representative to perform a more in-depth inspection of the engine. The Lycoming representative performed the same compression and exhaust check as I did with the same outcome. The representative removed both intake and exhaust manifolds. The intake manifolds looked fine, the number 2 exhaust manifold had a clear jerry like substance inside the tube which neither of us could identify. The representative removed the carburetor and noticed the butterfly valve linkage was loose as if a bushing was bad. He removed the fuel screen in the carburetor and noticed the screen was covered with debris. The fuel gascolator was removed and the filter was checked, the filter was clean with no obstruction. Both magnetos were tested and both produced sparks at all leads. When the representative was finished looking over the engine, we tested the fuel tank vent system in both wings. Both wing fuel tanks seemed to work properly. That was the extent of our inspection on Bellanca N8737V.

These notes were compiled by Inspector Thomas Savickas, Airworthiness Inspector with the Allentown Flight Standards District Office, Allentown, Pennsylvania.

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