

September 6, 2012

Accident Investigation: N21214

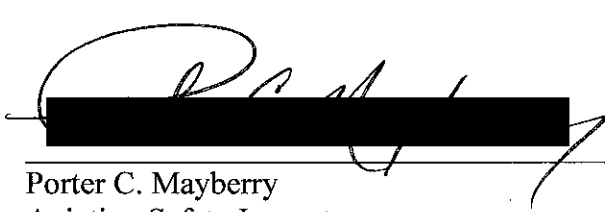
Inspector: Porter C. Mayberry CE-17 FSDO

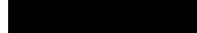
On 09/05/2012 I conducted an examination of the engine components with the assistance of Mr. Ralph Sinclair (A&P IA) at Samuels Field in Bardstown KY. The following items were Inspected/Checked:

1. Engine Controls- The mixture control was free of obstructions and operated normally. The throttle control was free of obstructions and operated normally.
2. Propeller- Although the propeller was damaged in the impact, it was able to rotate freely. While turning the propeller, the impulse coupling operational check was good. Due to the position of the aircraft and damage to the nose wheel strut, I felt it would be unsafe to attempt to start the engine, however we did use the starter to turn the engine over a few times to ensure the starting system was working as it should.
3. Engine- While rotating the propeller, we performed a compression check of the #2 and 3 cylinders, and found compression to be normal. We removed and checked both the right and left magnetos, and found them to be functioning normally. P-leads were inspected and operating as designed. The spark plugs were clean and providing spark. We checked the magneto switch with a voltmeter and it was functioning properly.
4. Wiring- There was no visible signs of shorting, smoke, or bare wires noted during the inspection.
5. Fuel- Performed a fuel sample of both tanks and there was no indication of any contaminants. When the aircraft wings were removed for transport to the hanger from the field, the right fuel tank had 17 gallons, and the left fuel tank had 6 gallons. We checked the gascolater, the screen was clear of any obstructions and the bowl had fuel. The fuel line to the carburetor fuel inlet line (when removed from the carburetor), had no fuel. The finger screen to the carburetor was clean and free of any obstructions.
6. Battery- Used a voltmeter to determine the battery was charged. Voltmeter reading indicated 12.2 volts. The battery posts were clean and battery cables were secured and tightened.
7. Ducting and Scat Hose- All ducting and scat hoses were secure and free of any obstructions. The carburetor air box was damaged during impact but was still attached to the carburetor.

8. Firewall- The firewall suffered significant damage due to the nose strut departing the aircraft on impact. Although the engine mount area appeared to be undamaged, the area between the two bottom engine mounts suffered significant damage and was torn. Also, there was damage noted at the bottom airframe rails just aft of the firewall. The firewall also indicated slight warping in various locations.
9. Wings- While there was no damage noted to the wing root area of either wing; both suffered damage in the accident. The left wing tip cover was damaged and the outboard bottom of the left wing had damaged from coming in contact with the phone line. Also, there was a significant dent from the initial impact on the lower part of the leading edge, outboard lower section of the left wing. The right wing had significant damage from the second rib outboard. (Once the left wing came in contact with the phone line, the right wing struck the ground). Until the right wing skin is removed, it is not clear whether the right wing spar has any damage, it is apparent however, the outboard (2ea) ribs are damaged.

Note: I have copied all photos of the accident to a cd, and will forward a copy to the appropriate NTSB official. **END**



Porter C. Mayberry
Aviation Safety Inspector
CE-17 FSDO
Louisville KY.
Phone: 
FAX: 

09/06/2012
Date