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Federal Aviation Administration
Greensboro Flight Standards District Office
1301 South Terminal Service Road
Greensboro, North Carolina



Aircraft Accident Inspector Report
Date of report: 04/17/2019
Accident aircraft: Piper PA-22-150,
N1933P, S/N 22-2684
Single Engine land plane
Location: Blanch, NC

On March 24, 2019 the subject aircraft crash landed in a clearing adjacent to the pilots private turf runway. The logistics and particulars of the accident are included in FAA Inspector Clint Festa report.

The aircraft was reported to loose engine power in the takeoff mode of flight. The pilot reports the engine stopped at 300 to 400 foot altitude. After a left turn, the aircraft contacted the top 2 or 3 feet of two trees at a relatively rapid decent rate and heavily damaged the aircraft upon landing. The aircraft contacted the ground with the nose landing gear. The nose gear appears to have collapsed and the engine contacting the ground hard. The left main landing gear was broken during the landing and was laying under the aircraft. The engine mount collapsed allowing the engine to contact the muffler and firewall, with the left side of the engine taking the most impact. The propeller sustained one blade bent aft approximately 10 to 15 degrees, and no visual damage to the other blade. The propeller flange portion of the crankshaft was bent approximately 30 degrees.

The fuel selector was off at the time of arrival to the accident scene. A first responder reported he discovered a strong aroma of fuel and turned the selector to the off position.

The left wing was bent upward at approximately a 35 degree angle 50% of the length of the wing and suffered major structural collapse including spar, ribs, stiffeners and skin damage.

The right wing was bent upward at approximately a 35 degree angle 350% of the length of the wing and suffered major structural collapse including spar, ribs, stiffeners and skin damage.

The following systems and Items were inspected with no discrepancies:

- The fuel filler cap areas were marked for 80/87 octane fuel.
- The throttle control was jammed, but an inspection of the carburetor proved the lever was jammed during the accident and engine against the firewall. After the carburetor was removed from the engine the throttle moved freely.
- The mixture control movement was smooth and reached the stops.

- Carburetor heat control was connected, but was jammed by the accident damage as well.
- After removing the air/carb heat box the lever was still jammed because of internal damage to the air box. After disconnecting the cable the control moved smoothly.
- The carburetor was broken in two pieces during the accident. The upper portion was still attached to the engine and the venturi was attached to this piece. The lower half still contained the float and the float operated smoothly. The float did not contain any fluids. The fuel valve was turned on the left tank position and fuel flowed freely from broken fuel connection. (broken from the accident). When the fuel was turned on the right position, no fuel was present. It is believed the right tank was selected when the accident occurred and the broken fuel line allowed the right tank to drain empty.
- The left tank contained an undetermined amount of fuel but was estimated to about ¼ tank. Some of the left tank fuel was lost after the accident and before the examination
- The air filter was a foam type filter and was in good condition. Although the air box and filter did contain dirt from the accident.
- The propeller was then removed and the engine was rotated through at least 4 complete revolutions. Compression was observed by the turning resistance for each cylinder. All spark plugs were then removed and the crankshaft then rotated smoothly.
- The valve covers were removed and all valves appeared to operate normally.
- The magnetos were removed and operated by hand with the impulse coupling. Each spark plug fired except for two plugs that were filled with oil due to the severe angle of the engine after the accident allowing oil to bypass the rings into the combustion chambers. Clean plugs were placed in these positions to verify the firing of these positions.
- Removed the oil strainer. The strainer proved clean with no debris in the strainer or housing.
- The oil level was full and in generally clean condition.
- The muffler was removed and no defects were found. The muffler appeared to be in very good condition.
- Flight control cables were connected but could not be operated because of accident damage.
- An A.D. applies to this aircraft to install a placard, “do not take off with right fuel tank selected when less than 1/3 tank in the tank” This placard was installed.
- An A.D. is issued to the fuel tank selector valve to inspect for detents. An operational check proved satisfactory. The valve was also disassembled and inspected with no defects or debris noted.
- The fuel strainer was removed and found to be clear of debris and clean. A small amount of fuel was present on the bowl.

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