

SYNOPSIS OF ADDITIONAL INVESTIGATION
10/28/2016
CEN17LA021
N8681
DELBERT VOEGELE-ZENITH CH-750, S/N 75-8681

On 10/28/2016 additional investigation was conducted at the Wentworth Aircraft facility in Lakeville, MN. The investigation consisted of the following:

- Engine data tag was located. Data tag indicates the engine is a Rotax 912ULS, s/n 44300002.
- Continuity throttle, choke and carburetor heat control systems was found to be satisfactory.
- Both carburetor bowls were removed and found to be clean and contain fuel (at least ½ full). Both floats in each of the carburetor bowls appeared to operate freely.
- The intake fuel line was removed from the fuel pump (located at the right front of the engine). The “fuel bulb” (resembles ones typically used on boat outboard motor fuel lines) was squeezed and a substantial amount of fuel was collected in a container at the disconnected fuel line.
 - There is a canister type fuel filter located between the fuel bulb and the disconnected line, so the fuel filter appeared to let fuel flow freely.
 - The collected fuel was yellow in color and had the aroma of “aged” automobile fuel.
- The fuel system has 2 additional “fuel bulbs” located just aft of the cabin doors, 1 on each side in the lines from the wing tanks.
- The fuel system has 2 fuel selector valves in the cockpit. These are ¼ turn valves and one is from the right wing tank and one from the left wing tank.
 - The fuel lines from each of these valves route into a “T” fitting just forward of the left front seat. There is a fuel line from the “T” fitting that goes through the firewall to an electric fuel pump on the forward side of the firewall. The output line from the electric fuel pump goes to the “fuel bulb” in the engine compartment mentioned earlier.
 - All of the fuel lines appeared to be flexible fuel lines.
 - Both valves appeared to operate freely.
 - Both valves were checked by removing the fuel lines before the “T” fitting and squeezing each of the fuel bulbs. A small amount of fuel was emitted from each line so the lines all appeared to be clear.
- The top spark plugs were removed from each of the cylinder.
 - The spark plugs appeared to have some age to them and had a bit of corrosion on them at the electrode end.
 - The electrode gap on the plugs did not appear to be consistent. 3 appeared to have a substantial gap and 1 appeared to have a fairly narrow gap as compared to the other 3. The gaps were not measured.
- With the top spark plugs removed, the engine was turned using the propeller.
 - The engine appeared to rotate freely with no unusual noises or resistance.
 - All 4 cylinders appeared to have sufficient compression checked by turning the propeller and placing a finger in each spark plug hole.
 - While turning the engine, there was fuel emitted from both carburetors where the bowls had been removed, so the engine driven fuel pump appears to work.

No additional checks were conducted at this time.

David Nelson
Aviation Safety Inspector
MSP-FSDO
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