

Memorandum of Conversation

Date: 18 July 2019

Time: 1430 central daylight time

Conversation Including: Rulon Vilcan; FAA Inspector

Conversation Regarding: CEN19LA147, N4861P



Summary & Factual Information from Conversation:

FAA Airworthiness Inspector Rulon Vilcan conducted multiple examinations of the airplane wreckage between May 30, 2019, and July 17, 2019. The right horizontal stabilizer and right elevator were substantially damaged. The airplane also exhibited damage attributable to it being towed to shore, recovered from the water, and saltwater immersion. The wings were removed for transportation. Both wings, flaps, and ailerons exhibited trailing edge damage attributable to straps used during the water recovery. The filler cap for the right wing fuel tank was not present during the examination (it was discussed that photographs provided by the pilot confirmed the filler cap for the right wing fuel tank was present before the airplane was recovered from the water). There was no fuel observed in either wing fuel. The left wingtip auxiliary tank contained about an ounce of fuel. The right wingtip auxiliary fuel tank was not recovered. The cockpit fuel selector valve was positioned to use fuel from the right wing fuel tank. The fuel reservoir tanks, located in the lower fuselage, contained murky water. Uncontaminated fuel was observed in the fuel strainer and drained from a fuel line between the engine's fuel manifold and engine fuel control unit.

The engine remained attached to the airframe mounts. The engine compartment did not exhibit evidence of fire damage or excessive heat. Engine control continuity was verified between the cockpit controls and their respective engine component. Examination of the engine did not reveal any crankcase or cylinder fractures. The intake and exhaust components appeared normal with no evidence of damage. The turbocharger rotated freely by hand. Both magnetos remained securely mounted to the engine and the ignition harness appeared undamaged.

After the spark plugs were removed, internal engine and valve train continuity were confirmed as the engine crankshaft was rotated through the propeller. Murky/oily saltwater discharged from the cylinders as the crankshaft was rotated. Compression and suction were observed on all six cylinders in conjunction with crankshaft rotation. The spark plug leads were contaminated by saltwater. Both magnetos produced an audible snap while the crankshaft was rotated, consistent with their respective impulse coupling functioning. The ignition key switch was seized in the off position. Both magnetos were grounded through their respective P-lead with the ignition switch seized in the off position. The alternator input shaft rotated in conjunction with the crankshaft rotation. The engine examination revealed no evidence of a mechanical malfunction or failure that would have precluded normal operation.

Examination of the airplane's electrical system revealed the battery's positive power cable was loose where it attached to the battery contactor (p/n S-1580A1) terminal. The nut used to secure the battery's positive power cable was significantly smaller

than the nut used on the terminal that secured two cables; one cable to the battery switch and the other cable to the starter motor contactor. Additionally, the loose positive battery cable component stack-up did not include any washers. The nut had backed off about 2 threads, which resulted in a loose cable connection (Figure 1).



Figure 1. Battery contactor terminal for the positive battery cable was loose (left photo). The battery contactor terminal for the battery switch and starter motor contactor cables was tight (right photo).

--- End of interview summary ---

I can attest that the above summary and factual information was taken on the above stated day, and is correct to the best of my knowledge:

Signed: _ Andrew Todd Fox _
Dated: _ 18 July 2019 _

Andrew Todd Fox
National Transportation Safety Board
Air Safety Investigator