

Memorandum of Conversation

Date: 9 October 2019

Time: 0900 central daylight time

Conversation Including: Aaron deVogel; FAA Inspector

Conversation Regarding: CEN19LA199, N170MV



Summary & Factual Information from Conversation:

On October 3, 2019, and October 8, 2019, FAA Inspector DeVogel examined the amateur-built Zenair CH750 STOL, N170MV, that crashed on June 29, 2019. The wreckage examination was conducted at AMF Aviation, LLC, Springfield, Tennessee.

Inspector DeVogel stated that the experimental engine is equipped with a fully-electronic ignition and fuel injection system that is controlled by an engine control unit (ECU). Additionally, the airplane was equipped with an electric fuel selector valve that replaced the manual fuel selector.

Inspector DeVogel stated that the fuel line between the fine fuel filter and the engine contained fuel, and there were no obstructions observed to the fuel line or the filter assembly. Fuel was also present in the return line to the fuel tanks. The fuel anti-return valve was installed in the correct direction and functioned as designed.

Inspector DeVogel stated that both fuel pumps functioned when connected to a 12 volt battery source. A continuity test confirmed that both fuel pumps were wired properly to the pump control switch panel. There was no evidence of any worn wires, burnt wires, or loose connections. The fuel shutoff valve was on, and the fuel tank selector switch was positioned to use fuel from the left tank. The fuel tank selector switch was wired correctly to an electric selector valve located under and behind the right seat, and a functional test confirmed the fuel selector valve operated correctly.

Inspector DeVogel stated that the engine crankshaft was rotated through the propeller to confirm internal engine and valve train continuity. The No. 3 cylinder exhaust rocker moved freely, but the exhaust valve was stuck open. A borescope inspection of the No. 3 cylinder did not reveal any mechanical issues or interference between the piston and the stuck exhaust valve. The No. 3 cylinder and head were removed to extract the stuck exhaust valve. The stuck exhaust valve had to be hammered out of the valve guide; however, after being extracted from the cylinder head, the No. 3 exhaust valve stem did not appear bent when rolled on a flat surface. A borescope inspection of the crankshaft and camshaft did not reveal any anomalies or mechanical damage. The fuel injectors were removed from each cylinder and ejected a clean spray pattern when tested with an injector test kit.

--- 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: _ 9 October 2019 _

Andrew Todd Fox
National Transportation Safety Board
Air Safety Investigator