

Memorandum of Conversation



Date: October 7, 2015

Time: 1030 central daylight time

Conversation Including: Rick Anderson, FAA Inspector

Conversation Regarding: CEN15LA421, N215DG

Duration of Call: 20 Minutes

Summary & Factual Information from Conversation:

Inspector Anderson reported that, according to Textron Lycoming Special Service Publication No. SSP-885-1, the original canister-type oil filter assembly had been modified for a spin-on oil filter; however, the modification had not been completed in accordance with the installation instructions and, as such, an incorrect oil filter had been used. Although the correct heli-coil insert had been installed in the adapter, the specified converter stud was not installed. The missing converter stud was designed to engage the adapter's heli-coil and retain the oil filter adapter plate. Without the installed converter stud, the use of the specified female-threaded oil filter was not possible. As such, the use of an oil filter with a male-threaded stud had been used. A visual examination revealed that the heli-coil insert threads were damaged and pulling out of the adapter. Additionally, the oil-filter used on the accident engine, which incorporated a male-threaded stud, would have only engaged a few of the heli-coil threads. Additional examination of the heli-coil insert revealed evidence of cross-threading of the threads.

A review of the engine maintenance logbook established that the incorrect oil filter adapter modification, and corresponding incorrect oil filter, had likely been in use since the last engine overhaul, which was completed in September 1997. The engine, a Lycoming O-320-H2AD, serial number L-3317-76, had accumulated 627 hours since the last overhaul. The most recent oil change was completed on June 22, 2015, during the most recent condition inspection. The engine had accumulated 12 hours since the last oil change. The pilot reported that 3.4 hours after the condition inspection he noted a minor leak from the oil filter assembly. He corrected the leak by replacing the adaptor plate gasket and reinstalling the oil filter. The engine had accumulated 8.6 hours since the repair.

--- End of conversation 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: _ 10/07/2015 _

Andrew Todd Fox
National Transportation Safety Board
Air Safety Investigator