

National Transportation Safety Board

Office of Aviation Safety
Central Region



CEN21LA187

MEMORANDUM OF CONVERSATION

Mark Boyer, Aviation Mechanic (A&P/IA)

August 10, 2022

Interviewee: Mark Boyer (Aviation Mechanic; A&P/IA)
Date/Time: August 10, 2022 / 0832 to 0837 CDT
Location: Telephone Call
Investigator: Andrew Todd Fox, NTSB Air Safety Investigator

Investigator Fox called Mr. Boyer to provide an update on the engine test runs that were conducted the previous day at Safran Helicopter Engines, Grand Prairie, Texas.

Investigator Fox told Mr. Boyer that upon initial engine startup the mechanical “pop-up” fuel bypass indicator and fuel filter light (preclogging indicator) illuminated. The engine was immediately shut down and the main fuel filter was removed for inspection.

Investigator Fox told Mr. Boyer that the engine started without any indication of fuel system bypass or fuel filter warning after a brand-new main fuel filter was installed. However, during subsequent engine test runs, it was revealed that the gas generator could not maintain a constant 100% free-turbine speed (N_F) when the load was increased on the system. After multiple tests and component swaps, the right/left fuel manifolds were determined to be the cause of the drooping power condition. Investigator Fox told Mr. Boyer that the investigation team planned to bench test the right/left fuel manifolds to further document the fuel flow issue.

Investigator Fox told Mr. Boyer that red/brown particle contamination was observed in fuel drained from the fuel control unit (FCU) inlet filter. Investigator Fox asked Mr. Boyer if he would agree to having the FCU disassembled to check for any additional contamination. Mr. Boyer agreed to have the FCU disassembled because it would be beneficial to the investigation.

Investigator Fox also noted that, based on logbook documentation, Mr. Boyer replaced fuel filters on February 6, 2020, and February 18, 2021. Investigator Fox asked Mr. Boyer if they had been troubleshooting a fuel related problem before the accident flight. Mr. Boyer replied that they were not having any fuel related issues with the helicopter, but that he routinely replaces fuel filters because of their minimal cost.

Investigator Fox asked Mr. Boyer if they ever fueled the helicopter from a non-standard source, such as a steel barrel, or had to transport fuel to an off-airport location to refuel the helicopter. Mr. Boyer replied that they never fueled the helicopter from steel barrels or had to transport fuel to an off-airport location to refuel the helicopter.

Mr. Boyer was cooperative throughout the conversation.