

Joshua Lindberg
Senior Aviation Accident Investigator
Aviation Safety - Central Region

Date: September 23, 2023
Subject: ANC22LA068 Accident Details
Contact: Greg Varner, FAA Inspector

9/23/23 - Greg Verner initial on-scene engine examination summary email

Here is a brief synopsis of the engine inspection on N6577A and to determine if there was fuel present in the carburetor. All work performed by the registered owner's mechanics with FAA ASI on scene.

Cowling was removed to gain access. No signs of oil leakage or compromise of the oil system was evident. The engine case halves were intact as was all cylinders. Both right side engine mount standoff brackets were broken as a result of the crash. Throttle & mixture linkage was intact and operational from cockpit controls to the carburetor. Main fuel line to carburetor was removed and fuel was present. Main fuel shutoff valve in cockpit was selected from OFF to BOTH and more fuel drained from main fuel line. (Approx 2oz)

The decision was made to remove carburetor from engine/intake manifold to determine if fuel was present in the carb and to gain access to main fuel gascolator. Carburetor was removed and it was noticed that fuel sprayed into to the carb venturi when the throttle linkage was moved indicating that fuel was present in the carb and the fuel accelerator pump was operating. The Gascolator was accessed and disassembled revealing a pinkish-red fuzz material on the strainer screen (see attached pics). Not enough material was present to obstruct fuel flow, but there was a foreign material present none-the-less. Minimal amount of debris was found in the fuel strainer.

It was not determined how much fuel was onboard the aircraft due to the amount of time the aircraft had sat at the crash site and at the angle it was resting in the hangar

during this inspection. From the pilot's account and pictures taken at the scene, the aircraft came to rest in a nose low, left wing down position and the possibility of fuel draining/leaking out was present and evident from fuel stains on the aircraft. There was a minimal amount of fuel noted in the tanks at this inspection.

It was determined that there was continuity for the fuel system from the main fuel shutoff valve in the cockpit to the gascolator/strainer screen, to the carburetor. Minimal fuel was present in all these components.

9/30/23 - Greg Varner follow up email

Nothing further was looked at to determine cause....With the amount of fuel drained from the main fuel sump/strainer, it is assumed the aircraft was out of fuel. Total remaining fuel onboard the aircraft was not drained due to the amount of time the aircraft sat at the accident site and it being unknown how much fuel had drained/leaked out while sitting. Pilot did state he was low on fuel when engine quit.

Due to the amount of time remaining to prepare for impact, the pilot said he only accomplished a couple of items to try and restart the engine, with no luck. When asked if he tried to prime to relight combustion, I stated he did not recall, but probably didn't.

Again, with the amount of fuel in the strainer and in main fuel manifold (which was less than a couple of ounces), it is assumed fuel starvation was the cause of engine stoppage.

No other abnormalities were noted with the engine. All noted damage was post accident.

END