



SUMMARY OF FINDINGS

Tealeye Cornejo

Air Safety Investigator (Field)

Western Pacific Region

Person Contacted: David Lowther and David Jensen FAA Inspectors – Oakland Flight Standards District Office
NTSB Accident Number: WPR21LA119

Narrative:

February 24, 2021

According to Nut Tree airport ops they received a shipment of fuel from EPIC on the morning of February 22, 2021. 42 airplanes had refueled since receiving the morning shipment from EPIC. The accident airplane refueled at 1444, with 25 airplanes refueled after the accident airplane. According to Nut Tree airport ops, the accident airplane was refueled with 28.74 gallons of fuel.

The airplane had not flown for 8-10 years. An annual was performed by Sterling Aviation and returned to service on November 17, 2017; Sterling Aviation reported that the ground only run ups were normal. The past two annuals were performed by an airframe and powerplant mechanic with inspection authorization. The last annual was performed on February 14, 2021.

On-scene and follow up from the FAA

According to the FAA, the right wing had multiple leading-edge dents and substantial impact damage to the wing tip. The right wing and right cowling and a portion of the body contacted the front bumper of the car. One of the propeller blades had a forward curled tip. The nose wheel assembly sheared off to the right of the airplane. The tail cone and tie down contacted the ground.

The initial FAA inspection of the aircraft was conducted approximately 40 hours after the accident at the LVK airport. The aircraft had been relocated from the accident site on Interstate I-580 to the north GA ramp at the LVK airport. Inspectors present were David Lowther (OPS-IIC), and David Jensen (AW) The aircraft was positioned upright on the extended main landing gear. The nose gear collapsed during the accident. Initial inspection of the aircraft indicated impact on the right lower portion of the nose of the aircraft and the right-wing leading edge and right wingtip. The nose gear collapsed to the right, perpendicular to the centerline of the aircraft due to impact with an automobile and appeared to be broken away from the actuator. The landing gear extension mechanism in the Mooney is a manual Johnson Bar type of landing gear actuator. Further inspection of the nose gear and firewall indicated damage to the firewall. The inspectors were unable to determine if wing spar damage was present due to the impact along the right wing.

FUEL: The inspectors checked the fuel quantity with a JZ Air Universal 11 Fuel Hawk dipstick that was not calibrated for the Mooney M20E. The dipstick indicated to the 10-line in the right-wing tank, and the 5-line on the left-wing tank. Due to the nose down position of the aircraft the exact determination of the fuel quantity was not possible.

The fuel present in the fuel tanks was the correct type (Avgas 100LL (blue)) and appeared to be clean. The inspectors drained samples of fuel from the manual drain on the fuel selector in each tank position. The fuel drained from the fuel selector in the right tank position contained a small quantity of water. The fuel drained from the fuel selector in the left position appeared to be uncontaminated. The inspectors did not remove the U-shaped inspection panel to check the gascolator for fuel contamination.

ENGINE: The inspectors checked the engine oil. There appeared to be a sufficient quantity of oil and there was no evidence of loss of oil on the engine or the airframe. The inspectors removed the cover of the fuel distribution manifold (spider) and found fuel in the spider indicating that the engine did not suffer fuel starvation prior to engine failure. The inspectors carefully rotated the propeller through four cycles and felt weak but even compression in each cylinder. The inspectors did not remove the spark plugs nor attempt to remove and inspect any other parts of the engine.

PROPELLER: One propeller tip was curled forward due to wind milling. The other propeller tip did not appear to be damaged in the impact.