

Robert
Senior Air Safety Investigator
Eastern Region Aviation

Date: **03/01/24**

Subject: **ERA24LA126**

Subject: **Juan Garcia, FAA FSDO, Miramar, FL**
Accident Site Examination

The following is an excerpt from Mr. Garcia's FAA Inspector Statement:

"Aircraft impacted ground at nose down attitude with two cut marks from propeller and propeller with hub assembly shearing off from crankshaft. There were no power bends in any of the three blades just rubbing off the propeller black paint to the bare aluminum metal from impact with golf course under side sandy soil, propeller hub compressed.

After initial impact aircraft left wing and wing tip impacted ground, compressing leading edge fracturing the fiber glass wing across top and underside from aft the internal fuel tanks to the wing tip. Inspection of wing found no fuel leaking and estimated 15 gallons of gas, fuel sample pulled found no contamination. The right wing was next to impact, shearing wing in the middle opening the internal wing tanks ejecting fuel. The six-foot section of wing found at 90°degrees with wing spear as the only section attached with 90°-degree shear. No remaining fuel found for sampling.

Engine was torn from aircraft but still attached to aircraft with multiple engine mount sheared and bent from impact. Aircraft was upright after accident, but engine was resting on left side. Engine sustain damage to exhaust system and exterior structure engine fiberglass cowls all found torn and sheared off with section scattered around crash side. Engine rear accessory section with components sustain major damage. Engine ducting and electrical wiring sustain major damage. Initial impact pushed engine and firewall into cockpit. Extensive damage to cockpit and fuselage structure

cracking and tearing aft of the firewall exposing aircraft recovery harness system bedded inside the fuselage structure.

Cockpit inspection found firewall and engine inside cockpit structure, instrument panel with extensive damage with majority of the instruments and monitors pushed out for cockpit instrument panel. Fuel nub found in the middle position, per Cirrus SR20 Pilot Operating Handbook (POH) Revision A FAA Approved 01/14/2013 there are only off for each tank and left or right fuel tanks selection. Fuel gauge was found with glass shattered and gauge damaged. The boost pump switch was found in the with Boost Pump on. The throttle was found between O and W in the throttle quadrant throttle indication POWER on the panel next to throttle. The mixture was found in rich position. The flaps selector was found in the down position 100% indication, but the aircraft accident found flaps for both the left and right flaps in the up position."

Todd Gunther
Senior Air Safety Investigator
Eastern Region Aviation

Date: **04/10/24**

Subject: **ERA24LA126**

Subject: **Wreckage Examination**
 Florida Air Recovery
 Jacksonville, FL

The wreckage was examined with representatives from Cirrus Aircraft and Continental Motors.

Flight control continuity was able to be confirmed from the flight control surfaces to the cockpit. The mixture control was found in the full rich position, and the power lever was found to be in about the three-fourths forward travel position. The wing flaps were in the up (0%) position.

The propeller displayed evidence of blade polishing and chordwise scratching and the separated crankshaft flange displayed a 45° shear type break. Oil was discovered in the engine rocker boxes and oil sump. Thumb compression and suction were obtained on all six cylinders. All the intake and exhaust valves were functional, and drive train continuity was confirmed from the front of the engine to the rear gears. Both magnetos would also produce spark, and no anomalies were noted with the fuel injection system.

Data were successfully downloaded from the airplane remote data module.