

MEMORANDUM FOR RECORD

Robert Gretz Senior Air Safety Investigator Eastern Region Aviation

Wreckage Examination Date: November 7, 2019

Location: Anglin Aircraft Recovery NTSB Accident Number: ERA19FA251

Narrative:

The airframe and engine were examined by the NTSB Investigator-In-Charge, an NTSB Fire & Explosion Specialist, and an Air Safety Investigator from Cirrus Design.

None of the wires in the instrument panel or on the engine exhibited any chafing, sooting, melting or evidence of electrical arcing. The following components were opened and their respective circuit boards were examined: PFD, MFD, Avidyne 540, Avidyne 440, Blower Motor, Avionics Cooling Fan, XM Receiver, EGPWS, ADS-B Receiver, Data Acquisition Unit, Heat Sync, Turn Coordinator, Directional Gyro, and Mode S Transponder. None of their circuit boards exhibited any evidence of arcing, sooting, melting or electrical damage. Additionally, the cockpit switches and circuit breakers were examined an no anomalies were noted.

Examination of the engine revealed that the three-blade propeller remained attached to the crankshaft. Two propeller blades exhibited chordwise scratches and tip curling, and one of those blades was also twisted. The third propeller blade was bent aft. The Nos. 1, 2, 3, 5, and 6 intake tubes were separated from the top of their respective cylinder. The top spark plugs were removed, their electrodes were intact, with the exception of the No. 4 spark plug, which exhibited impact damaged. The electrodes exhibited corrosion, consistent with submersion in the water at the bottom of the ravine. The engine driven fuel pump was removed and its drive coupling was intact. Due to impact damage, the crankshaft could only be rotated about 90°; however, camshaft and crankshaft continuity was established to the rear accessory section of the engine.