No injuries were reported by either occupant.

Additional occupant information is located in <u>Appendix G</u>.

# AIRPLANE INFORMATION

Cirrus SR22-0256, registration number, N818GM, received its standard airworthiness certificate on July 10, 2002. The airplane was equipped with, STEC 55X Autopilot, Avidyne FlightMax MFD, Stormscope, GNS 430 x 2, GTX 327 Transponder, Sandel HSI, WX500.

SR22-0256 was previously owned by Franz E. Schnieder, Seabrook, Texas. It was recently sold to the current owner, Brian Matthew Lenzmeier. SR22-0256 underwent a pre-buy inspection with Clear Star Aviation of Addison, TX.

According to a Discrepancy Action Report for workorder 201331 (item #14), the #1 cylinder base o-ring was replaced at a Hobbs time of 1,330. It was noted that the exhaust header nuts on 2, 4, 6-cylinder side of the engine were shiny and new in appearance during the wreckage examination.

Last 100-Hour Service, May 2018 (1,330.0 hours) Last Annual maintenance inspection May 2018 (1,330.0 hours) Aircraft total hours at the time of the accident/incident – 1,333.2 Total Hours

Additional airplane information is located in Appendix I - K.

## INVESTIGATIVE TIMELINE

#### **Notification**

On September 30, 2018, at approximately 1300, Cirrus Air Safety Investigations Department, received an internal email notification from Keith Smith, Manager of Network Training, of the airplane accident.

## Examinations

On October 16, 2018, an examination was conducted at Air Salvage of Dallas. Cirrus Representative was Eric Settergren, Continental Representative was Michael Council, and the FAA representative was Kevin Taylor from the North Dallas FSDO.

## WRECKAGE & IMPACT INFORMATION

#### <u>Fuselage</u>

The following wreckage and impact descriptions are from the October 16, 2018, wreckage examination. Personnel present were: Kevin Taylor, FAA FSDO inspector; Michael Council, ASI for Continental Motors; and myself.

A hole was present on the forward right side of the lower engine cowling measuring roughly 6-8 inches in diameter. The appearance of the hole was consistent with a portion of the cowling having been consumed by fire. Thermal damage extended from approximately three inches aft



of the right air inlet to approximately the mid-point on the lower cowl. External thermal damage was limited to the lower nose cowl on the right side.

The right forward side of the firewall and various components in this vicinity exhibited thermal damage (figure 2). Numerous wires near the right side of the firewall had melted insulation. Numerous white areas consistent with electrical arcing were present with the most notable being near the battery one cables. Battery one exhibited thermal heat damage near its top right side. The magneto P-leads also had melted insulation and indications of electrical arcing present.



Figure 2 – Thermal Damage

The tail tie-down ring was separated from the empennage and impact damage was present on the bottom of the empennage at the tail tie-down's location.

## Wing

The Wings were cut outboard of the Main Landing gear to facilitate transportation from the impact site to the salvage yard. The wings were not at the Salvage yard inspection point, so they were not observed or photographed. The flap motor actuator shaft located in the fuselage indicated that the flaps were in the retracted or up position.

## **Stabilizers**

There was no observed damage to the Stabilizers. The pitch trim actuator was observed to be in the neutral position. Cable continuity was verified to be intact to the elevators and rudder.

