



Aviation Investigation Final Report

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|--------------------------------|-----------------------------------|-------------------------|-------------|
| Location: | Sand Creek, Wisconsin | Accident Number: | GAA19CA074 |
| Date & Time: | November 21, 2018, 10:45 Local | Registration: | N579CP |
| Aircraft: | Cirrus SR22 | Aircraft Damage: | Substantial |
| Defining Event: | Loss of engine power (total) | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Ferry | | |

Analysis

The pilot reported that, during a ferry flight, while climbing the airplane to cruise altitude, the engine temperatures increased quickly and that the engine then surged. The pilot added that he "switched" the boost pump, adjusted the mixture lever, and then deployed the ballistic parachute system at 3,500 ft mean sea level. During the off-airport landing in a field, the airplane impacted an irrigation sprinkler system.

The airplane sustained substantial damage to the fuselage.

Postaccident examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed that two air lines were disconnected and that there were no torque lines on the lines. According to the FAA inspector, the pilot and a mechanic who had conducted the airplane's last maintenance reported that the airplane had been flown 7 hours since the last maintenance. The mechanic had replaced three cylinders during the maintenance, which required removal of the air lines. It is likely that, during the maintenance, the mechanic did not properly secure the air reference line, which led to a loss of engine power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The mechanic's failure to properly secure the air reference line, which resulted in a loss of engine power.

Findings

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| Aircraft | (general) - Incorrect service/maintenance |
| Aircraft | Fuel press sensor - Incorrect service/maintenance |
| Personnel issues | (general) - Maintenance personnel |
| Personnel issues | Post maintenance inspection - Pilot |
| Personnel issues | Preflight inspection - Pilot |
| Environmental issues | (general) - Contributed to outcome |

Factual Information

History of Flight

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|----------------|---|
| Enroute | Miscellaneous/other |
| Enroute | Loss of engine power (total) (Defining event) |
| Landing | Miscellaneous/other |
| Landing | Collision with terr/obj (non-CFIT) |

Pilot Information

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|----------------------------------|---|--|-----------------|
| Certificate: | Commercial; Flight instructor | Age: | 49, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 2 Without waivers/limitations | Last FAA Medical Exam: | August 29, 2018 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | April 4, 2018 |
| Flight Time: | (Estimated) 4200 hours (Total, all aircraft), 3500 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|------------------------------|---------------------------------------|-----------------|
| Aircraft Make: | Cirrus | Registration: | N579CP |
| Model/Series: | SR22 Undesignat | Aircraft Category: | Airplane |
| Year of Manufacture: | 2008 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 3291 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | November 14, 2018 Annual | Certified Max Gross Wt.: | 3400 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1425 Hrs at time of accident | Engine Manufacturer: | TCM |
| ELT: | Installed | Engine Model/Series: | IO-550-N-51B |
| Registered Owner: | On file | Rated Power: | 310 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|-------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | KRPD,1105 ft msl | Distance from Accident Site: | 13 Nautical Miles |
| Observation Time: | 16:35 Local | Direction from Accident Site: | 345° |
| Lowest Cloud Condition: | Scattered / 9500 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | | Visibility (RVR): | |
| Wind Speed/Gusts: | 8 knots / | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | 50° | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 30.37 inches Hg | Temperature/Dew Point: | -7°C / -12°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Cumberland, WI (UBE) | Type of Flight Plan Filed: | IFR |
| Destination: | Akron, OH (CAK) | Type of Clearance: | IFR |
| Departure Time: | 10:30 Local | Type of Airspace: | Class G |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|---------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 45.204723,-91.691665(est) |

Administrative Information

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|--|---|
| Investigator In Charge (IIC): | Swenson, Eric |
| Additional Participating Persons: | Nikolas Halatsis; FAA; Minneapolis, MN |
| Original Publish Date: | September 26, 2019 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=98684 |

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).