



# **Aviation Investigation Final Report**

**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**

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

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# **Factual Information**

# **History of Flight**

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

### **Pilot Information**

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)		

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# **Aircraft and Owner/Operator Information**

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

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°
<b>Lowest Cloud Condition:</b>	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

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# **Wreckage and Impact Information**

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)

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#### **Administrative Information**

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:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.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.

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