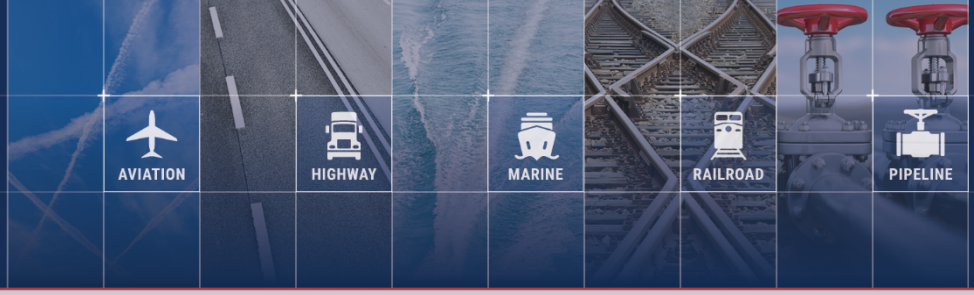

Aviation Investigation Final Report

Location:	Alexandria, Louisiana	**Accident Number:**	CEN16LA143
Date & Time:	March 23, 2016, 16:00 Local	**Registration:**	N927DS
Aircraft:	CIRRUS DESIGN CORP SR22	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot and flight instructor departed on a cross-country flight. The flight was uneventful until the descent to the destination airport. The pilot indicated that, during the descent, he reduced the engine throttle and noticed some "shaking from the engine." After troubleshooting, he realized the engine would not have sufficient power for the airplane to land at the airport. Due to the unsuitable terrain for an off-airport landing, the pilot chose to activate the ballistic parachute system. The airplane descended to the ground under the parachute canopy and sustained substantial damage to the fuselage during the impact with terrain.

Postaccident examination revealed no airframe or engine malfunctions or failures that would have precluded normal operation. A functional test of the engine revealed the engine accelerated normally without any hesitation, stumbling, or interruption in power and demonstrated the ability to produce rated horsepower. Thus, the reason for the partial loss of engine power could not be determined based on the available information.

Probable Cause and Findings

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

The partial loss of engine power for reasons that could not be determined based on the available information.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Approach	Loss of engine power (partial) (Defining event)
Approach	Attempted remediation/recovery
Emergency descent	Collision with terr/obj (non-CFIT)

On March 23, 2016, about 1600 central daylight time, a Cirrus SR22 airplane, N927DS, impacted terrain following the deployment of the ballistic recovery system (BRS) parachute near Alexandria International Airport (AEX), Alexandria, Louisiana. The pilot and flight instructor were not injured. The airplane was registered to Rucks Aviation, LLC and operated by a private individual under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight.

According to the pilot, he and the flight instructor departed Dallas Executive Airport, Dallas, Texas, and were en route to AEX. The flight was uneventful until the descent into AEX. During the descent, he reduced the engine throttle and noticed some "shaking from the engine." After some brief troubleshooting, he realized the engine would not make sufficient power for a landing at AEX. Due to the unsuitable terrain for an off-airport landing, the pilot elected to activate the BRS. The airplane descended to the ground under the parachute canopy sustained substantial damage to the fuselage during the impact.

Seven gallons of fuel were drained from the right wing fuel tank, and 23 gallons of fuel were drained from the left wing fuel tank. The fuel selector was found in the right fuel tank position.

The engine was placed in a manufacturer's test cell for a functional test. According to the manufacturer, the engine experienced a normal start on the first attempt without hesitation or stumbling in observed RPM. The engine was tested at various power settings for about 25 minutes including rapid throttle applications. Throughout the test phase, the engine accelerated normally without any hesitation, stumbling, or interruption in power and demonstrated the ability to produced rated horsepower. Postaccident examination revealed no airframe or engine anomalies that would have precluded normal operation.

Pilot Information

Certificate:	Private	**Age:**	43,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Unknown
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 9, 2015
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	May 14, 2015
Flight Time:	90 hours (Total, all aircraft), 11 hours (Total, this make and model), 90 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	**Age:**	Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	Unknown
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	CIRRUS DESIGN CORP	**Registration:**	N927DS
Model/Series:	SR22 NO SERIES	**Aircraft Category:**	Airplane
Year of Manufacture:	2003	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	0497
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	March 23, 2016 Annual	**Certified Max Gross Wt.:**	3400 lbs
Time Since Last Inspection:	2 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1246.5 Hrs at time of accident	**Engine Manufacturer:**	CONT MOTOR
ELT:	Installed, not activated	**Engine Model/Series:**	IO-550-N
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:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Scattered / 5500 ft AGL	**Visibility**	
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Dallas, TX (RBD)	**Type of Flight Plan Filed:**	VFR
Destination:	Alexandria, LA	**Type of Clearance:**	None
Departure Time:	14:30 Local	**Type of Airspace:**	Class E

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	31.480556,-92.731666(est)

Administrative Information

Investigator In Charge (IIC):	Liedler, Courtney
Additional Participating Persons:	Randy Otillio; FAA; Baton Rouge, LA Bradley Miller; Cirrus Aircraft; Duluth, MN Mike Council; Continental Motors, Inc.; Mobile, AL
Original Publish Date:	August 10, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=92962