



# Aviation Investigation Final Report

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

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## 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

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**Not determined**

(general) - Unknown/Not determined

## Factual Information

### History of Flight

<b>Approach</b>	Loss of engine power (partial) (Defining event)
<b>Approach</b>	Attempted remediation/recovery
<b>Emergency descent</b>	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 produce rated horsepower. Postaccident examination revealed no airframe or engine anomalies that would have precluded normal operation.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	February 9, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	May 14, 2015
<b>Flight Time:</b>	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

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

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CIRRUS DESIGN CORP	<b>Registration:</b>	N927DS
<b>Model/Series:</b>	SR22 NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2003	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	0497
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	March 23, 2016 Annual	<b>Certified Max Gross Wt.:</b>	3400 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1246.5 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-550-N
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	310 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 5500 ft AGL	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Dallas, TX (RBD )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Alexandria, LA	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:30 Local	<b>Type of Airspace:</b>	Class E

## Wreckage and Impact Information

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

## Administrative Information

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

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](#).