Aviation Investigation Final Report

Location:	Gordonville, Florida	**Accident Number:**	ERA17LA201
Date & Time:	June 11, 2017, 12:00 Local	**Registration:**	N592BC
Aircraft:	CIRRUS DESIGN CORP SR22	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot stated that he had "disoriented" himself by holding the airport diagram "upside down" as the airplane approached the destination airport. Once oriented, he turned the airplane onto the downwind leg of the traffic pattern, noticed the airplane was "high," and disconnected the autopilot. During the final approach, the airplane was descending rapidly, and the pilot added power to complete the landing. However, nothing happened because he had not properly set the mixture control, which resulted in a loss of engine power once he advanced the throttle. With little time and altitude remaining, the pilot was unable to regain engine power before the airplane struck the ground about 1/2 mile from the runway threshold. A postaccident test-run and examination of the engine revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's failure to properly configure the mixture control for landing due to disorientation because he had the airport diagram upside down, which resulted in a total loss of engine power.

Findings

Aircraft	Mixture control - Incorrect use/operation
Personnel issues	Use of equip/system - Pilot
Personnel issues	Visual illusion/disorientation - Pilot

Factual Information

History of Flight

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

On June 11, 2017, about 1200 eastern daylight time, a Cirrus SR22, N592BC, was substantially damaged when it impacted a power pole, trees, and terrain while on approach to Bartow Municipal Airport (BOW), Bartow, Florida. The private pilot, who was also the owner of the airplane, was seriously injured. Visual meteorological conditions prevailed and no flight plan was filed for the flight which departed Gainesville Regional Airport (GNV) about 1120. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91.

The pilot was not immediately available due to his injuries, but was later interviewed by a police detective. During that interview, the pilot stated that he had "disoriented" himself by holding the airport diagram "upside down" as the airplane approached BOW. Once oriented, he turned the airplane on to the downwind leg of the traffic pattern, noticed he was "high" and disconnected the autopilot. During the final approach, the airplane was descending "rapidly" and the pilot added power to complete the landing, but "nothing happened" as he "hadn't reset [the] mixture." According to the pilot, he lacked the time and the altitude to "remedy the problem."

In a telephone interview, an air traffic controller stated that the accident airplane contacted the tower north of BOW and was instructed to report entering a left base for landing on runway 9L. Instead, the pilot reported the airplane was on a left downwind for runway 9L and was cleared to land. There were no further communications from the pilot. The final radar target was recorded about 1 mile from the threshold of runway 9L at 700 feet and 130 knots groundspeed. The airplane came to rest in a church yard about 1/2 mile from the threshold of runway 9L.

On-scene examination of the wreckage by a Federal Aviation Administration (FAA) inspector revealed substantial impact damage to the entire airframe, but no fire damage. There was evidence of fuel, and control continuity was established from the cockpit to the flight control surfaces. Initial visual examination of the engine did not reveal any anomalies. The engine was forwarded to the manufacturer for a detailed examination. Flight and multifunction displays, as well as components from the autopilot system were retained for examination in the NTSB recorders laboratory.

The pilot held a private pilot certificate with a rating for airplane single-engine land. His most recent FAA third class medical certificate was issued on March 9, 2011. The pilot reported 750 total hours of flight experience on that date.

The four-seat, low-wing, tricycle-gear airplane was manufactured in 2005 and was powered by a Continental IO-550, 310-horsepower engine. The airplane's hobbs meter displayed 2101.6 aircraft hours. The maintenance records were not reviewed, and the maintenance history could not be verified. The

aircraft recovery company in possession of the airplane requested the maintenance records from the owner. He reported that the records were "in a storage facility" and that he could not access them due to his injuries. A copy of the most recent annual inspection forwarded by the pilot's attorney revealed the inspection was completed October 28, 2016 at 2065.3 total aircraft hours.

At 1545, weather reported at BOW included a broken ceiling at 3,000 ft, wind from 050° at 4 knots, and 10 statute miles of visibility. The temperature was 27° C, the dew point was 21° C, and the altimeter setting was 30.15 inches of mercury.

The engine was removed from the airframe and placed in a test cell at the engine manufacturer's facility in Mobile, Alabama. The engine started immediately, accelerated smoothly, and ran continuously at all power settings with no anomalies noted.

Pilot Information

Certificate:	Private	**Age:**	61,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:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	March 9, 2011
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	750 hours (Total, all aircraft), 100 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	CIRRUS DESIGN CORP	**Registration:**	N592BC
Model/Series:	SR22 NO SERIES	**Aircraft Category:**	Airplane
Year of Manufacture:	2005	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	1519
Landing Gear Type:	Tricycle	**Seats:**	
Date/Type of Last Inspection:	October 28, 2016 Annual	**Certified Max Gross Wt.:**	
Time Since Last Inspection:	36 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2065 Hrs as of last inspection	**Engine Manufacturer:**	CONT MOTOR
ELT:		**Engine Model/Series:**	IO-550 SERIES
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:	BOW,125 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	11:45 Local	**Direction from Accident Site:**	270°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Broken / 3000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	50°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	27°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ganesville, FL (GNV)	**Type of Flight Plan Filed:**	None
Destination:	Bartow, FL (BOW)	**Type of Clearance:**	None
Departure Time:	11:20 Local	**Type of Airspace:**	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious	**Latitude, Longitude:**	27.945554,-81.798614(est)

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	Rob Lasky; FAA/FSDO; Orlando, FL Brad Miller; Cirrus; Duluth, MN Kurt Gibson; Continental; Mobile, AL
Original Publish Date:	April 4, 2019
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=95342