



# Aviation Investigation Final Report

<b>Location:</b>	Angola, Indiana	<b>Accident Number:</b>	CEN22LA107
<b>Date &amp; Time:</b>	January 20, 2022, 19:00 Local	<b>Registration:</b>	N42VR
<b>Aircraft:</b>	CIRRUS DESIGN CORP SR20	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The cross-country flight was being conducted by a flight instructor and pilot in conjunction with an instrument rating course from a Part 141 flight school. According to the flight instructor, upon reaching the decision altitude, they transitioned to a visual descent to the runway. During the descent, the airplane impacted trees and the flight instructor assumed control of the airplane and continued to the runway for landing. The airplane sustained substantial damage to the fuselage, right wing, and both horizontal stabilizers.

The pilot stated that after terminating use of the view limiting device and she transitioned to visual references, she continued to glance back at the glideslope indicator, which showed that they were low on the approach. Shortly thereafter, a tree appeared in front of them, about the same time as they felt the impact. She stated that the precision approach path indicator (PAPI) would not turn on and there was not a current Notice to Air Mission (NOTAM) for the outage.

The pilot reported no mechanical malfunctions or anomalies 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 ensure adequate terrain clearance during an approach. Contributing to the accident was the flight instructor’s delayed remedial action when the airplane descended too low after transitioning to a visual descent to the runway.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Student/instructed pilot
<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained
<b>Personnel issues</b>	Delayed action - Instructor/check pilot
<b>Personnel issues</b>	Monitoring equip/instruments - Instructor/check pilot

## Factual Information

### History of Flight

<b>Approach-IFR final approach</b>	Collision with terr/obj (non-CFIT) (Defining event)
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### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	23,Female
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	October 4, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	September 30, 2021
<b>Flight Time:</b>	335 hours (Total, all aircraft), 260 hours (Total, this make and model), 278 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Student pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	20,Female
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	November 12, 2019
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	August 17, 2020
<b>Flight Time:</b>	132 hours (Total, all aircraft), 43 hours (Total, this make and model), 131 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CIRRUS DESIGN CORP	<b>Registration:</b>	N42VR
<b>Model/Series:</b>	SR20	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2006	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1673
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	December 11, 2021 Annual	<b>Certified Max Gross Wt.:</b>	3000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	7141 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental Motors
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	I0360-ES27B
<b>Registered Owner:</b>	BOARD OF TRUSTEES OF WESTERN MICHIGAN UNIVERSITY	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	BOARD OF TRUSTEES OF WESTERN MICHIGAN UNIVERSITY	<b>Operating Certificate(s) Held:</b>	Pilot school (141)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>	KGWB,880 ft msl	<b>Distance from Accident Site:</b>	20 Nautical Miles
<b>Observation Time:</b>	18:35 Local	<b>Direction from Accident Site:</b>	178°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 4500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	340°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.5 inches Hg	<b>Temperature/Dew Point:</b>	-7°C / -13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Battle Creek, WI (KBTL)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Angola, IN	<b>Type of Clearance:</b>	VFR flight following
<b>Departure Time:</b>	18:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	TRI-STATE STEUBEN COUNTY ANQ	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	995 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	05	<b>IFR Approach:</b>	RNAV
<b>Runway Length/Width:</b>	4540 ft / 75 ft	<b>VFR Approach/Landing:</b>	Straight-in

## 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>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	41.638739,-85.084952

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Williams, David
<b>Additional Participating Persons:</b>	Josh Osman; FAA; Grand Rapids, MI
<b>Original Publish Date:</b>	June 14, 2022
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=104554">https://data.ntsb.gov/Docket?ProjectID=104554</a>

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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](#).