Aviation Investigation Final Report

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

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

Factual Information

History of Flight

Approach-IFR final approach	Collision with terr/obj (non-CFIT) (Defining event)

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	23,Female
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):		**Restraint Used:**	4-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	**Toxicology Performed:**	
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	October 4, 2021
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	September 30, 2021
Flight Time:	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

Certificate:	Private	**Age:**	20,Female
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	November 12, 2019
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	August 17, 2020
Flight Time:	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

Aircraft Make:	CIRRUS DESIGN CORP	**Registration:**	N42VR
Model/Series:	SR20	**Aircraft Category:**	Airplane
Year of Manufacture:	2006	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	1673
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	December 11, 2021 Annual	**Certified Max Gross Wt.:**	3000 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	7141 Hrs at time of accident	**Engine Manufacturer:**	Continental Motors
ELT:	C126 installed, not activated	**Engine Model/Series:**	IO360-ES27B
Registered Owner:	BOARD OF TRUSTEES OF WESTERN MICHIGAN UNIVERSITY	**Rated Power:**	200 Horsepower
Operator:	BOARD OF TRUSTEES OF WESTERN MICHIGAN UNIVERSITY	**Operating Certificate(s) Held:**	Pilot school (141)

Meteorological Information and Flight Plan

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

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	41.638739,-85.084952

Administrative Information

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