Aviation Investigation Final Report

Location:	Kennesaw, Georgia	**Accident Number:**	ERA25LA118
Date & Time:	January 28, 2025, 21:05 Local	**Registration:**	N1159K
Aircraft:	Cessna 172	**Aircraft Damage:**	Substantial
Defining Event:	Landing area undershoot	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

According to the flight instructor, the student pilot had previously completed three-night landings to a full stop and taxi back during the dual instructional flight. On the fourth attempt, the instructor elected to simulate a loss of engine power. While on final approach, the student pilot aligned the airplane with the runway centerline, and the flight instructor thought that the airplane would be able to reach the runway threshold. As the airplane approached the runway, the instructor described that the airplane was in a “flat position” and struck the ground, short of the runway. The nose landing gear was displaced upwards and aft which resulted in substantial damage to the airplane’s lower firewall. The flight instructor reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The student pilot and instructor stated that they believed that the runway end identifier lights were not operating during their flight and that only the two outer left and right green lights were illuminated for the entirety of the flight, including the preceding three landings, which factored into their depth perception for touchdown. During correspondence with the student pilot following the accident, he provided an annotated aerial image where he circled the lights he believed to be inoperative at the time of the accident. According to the airport manager, the lights referenced by the student, which appeared to be the runway end and edge lighting, were operational at the time of the accident.

Probable Cause and Findings

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

The student pilot’s failure to maintain an appropriate glide path and the flight instructor’s inadequate monitoring of the landing approach, which resulted in the airplane contacting the ground short of the runway.

Findings

Personnel issues	Identification/recognition - Student/instructed pilot
Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Monitoring other person - Instructor/check pilot

Factual Information

History of Flight

Approach	Simulated/training event
Landing	Landing area undershoot (Defining event)
Landing	Abnormal runway contact
Landing	Landing gear collapse

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	66,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane; Helicopter	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	**Toxicology Performed:**	
Medical Certification:	Class 1 Waiver time limited special	**Last FAA Medical Exam:**	January 27, 2025
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	September 22, 2024
Flight Time:	4405 hours (Total, all aircraft), 1943 hours (Total, this make and model), 3560 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	28,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	September 19, 2023
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	52 hours (Total, all aircraft), 52 hours (Total, this make and model), 5 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N1159K
Model/Series:	172 S	**Aircraft Category:**	Airplane
Year of Manufacture:	2006	**Amateur Built:**	
Airworthiness Certificate:	Normal; Utility	**Serial Number:**	172S10357
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 25, 2024 100 hour	**Certified Max Gross Wt.:**	2550 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	7143.9 Hrs at time of accident	**Engine Manufacturer:**	Lycoming Engines
ELT:	C91A installed, not activated	**Engine Model/Series:**	IO-360-L2A
Registered Owner:	CAVU AERO LLC	**Rated Power:**	180 Horsepower
Operator:	CAVU AERO LLC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	RYY,1040 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	18:49 Local	**Direction from Accident Site:**	267°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.03 inches Hg	**Temperature/Dew Point:**	7°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kennesaw, GA	**Type of Flight Plan Filed:**	None
Destination:	Kennesaw, GA	**Type of Clearance:**	VFR
Departure Time:		**Type of Airspace:**	Class D

Airport Information

Airport:	COBB COUNTY INTL/MCCOLLUM FLD RYY	**Runway Surface Type:**	Concrete
Airport Elevation:	1040 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	27	**IFR Approach:**	None
Runway Length/Width:	6295 ft / 100 ft	**VFR Approach/Landing:**	Full stop;Simulated forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	34.013458,-84.588072(est)

Administrative Information

Investigator In Charge (IIC):	Enders, Ryan
Additional Participating Persons:	Clint Ellerbee; FAA/FSDO; Atlanta, GA
Original Publish Date:	August 21, 2025
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=199695

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.