



Aviation Investigation Final Report

Location:	Winston-Salem, North Carolina	Accident Number:	ERA23LA375
Date & Time:	September 18, 2023, 09:15 Local	Registration:	N1451U
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that during the second solo landing of the day she experienced a slight balloon, and once the airplane settled on the runway it was in a “partial crab to the right.” Upon touching down, she over corrected to the left and the airplane departed the runway surface into the grass. While in the grass the airplane struck a runway sign, which resulted in substantial damage to the left wing and the left horizontal stabilizer. The solo student pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane 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 loss of directional control upon landing which resulted in substantial damage to the left wing and left horizontal stabilizer.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact
Landing	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion

Pilot Information

Certificate:	Student	Age:	52,Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 27, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	24 hours (Total, all aircraft), 24 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1451U
Model/Series:	172 M	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17267118
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	August 14, 2023 100 hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	43.2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	11470.7 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, not activated	Engine Model/Series:	O-320-E2D
Registered Owner:	PIEDMONT FLIGHT INC	Rated Power:	160 Horsepower
Operator:	PIEDMONT FLIGHT INC	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	INT,957 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	08:54 Local	Direction from Accident Site:	139°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	18°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Winston-Salem, NC	Type of Flight Plan Filed:	None
Destination:	Winston-Salem, NC	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	SMITH REYNOLDS INT	Runway Surface Type:	Asphalt
Airport Elevation:	969 ft msl	Runway Surface Condition:	Dry
Runway Used:	4	IFR Approach:	None
Runway Length/Width:	3938 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.138127,-80.22637(est)

Administrative Information

Investigator In Charge (IIC):	Young, Joshua
Additional Participating Persons:	Shane Graham; FAA/FSDO; Greensboro, NC
Original Publish Date:	November 9, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=193093

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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](#).