



# Aviation Investigation Final Report

<b>Location:</b>	Greenwood, Indiana	<b>Accident Number:</b>	CEN23LA307
<b>Date &amp; Time:</b>	July 12, 2023, 16:55 Local	<b>Registration:</b>	N701DE
<b>Aircraft:</b>	Cessna 172N	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

While performing a soft-field takeoff, the student pilot lost directional control of the airplane during the takeoff roll. He attempted to correct with the application of rudder and brake inputs but was unsuccessful, and the airplane came to rest upright in a ditch adjacent to the runway. The airplane sustained substantial damage to the right wing. The student pilot reported no preaccident mechanical failures or malfunctions 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 student pilot's failure to maintain directional control during takeoff.

## Findings

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

## Factual Information

### History of Flight

Takeoff	Loss of control on ground (Defining event)
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### Pilot Information

Certificate:	Student	Age:	44,Male
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 Without waivers/limitations	Last FAA Medical Exam:	April 21, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	34 hours (Total, all aircraft), 31 hours (Total, this make and model), 7 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N701DE
Model/Series:	172N	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17268367
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A4M
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KIND,792 ft msl	<b>Distance from Accident Site:</b>	11 Nautical Miles
<b>Observation Time:</b>	16:54 Local	<b>Direction from Accident Site:</b>	303°
<b>Lowest Cloud Condition:</b>	Few / 5500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 25000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	16 knots / 23 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.88 inches Hg	<b>Temperature/Dew Point:</b>	30°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Greenwood, IN	<b>Type of Flight Plan Filed:</b>	
<b>Destination:</b>	Greenwood, IN	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	Indy South Greenwood Airport HFY	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	822 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	19	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5102 ft / 75 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 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>	1 None	<b>Latitude, Longitude:</b>	39.628585,-86.087893(est)

## Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	Edward DeCastro; FAA; Indianapolis, IN
Original Publish Date:	September 28, 2023
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=192631">https://data.nts.gov/Docket?ProjectID=192631</a>

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