



# Aviation Investigation Final Report

<b>Location:</b>	Shelbyville, Tennessee	<b>Accident Number:</b>	ERA24LA181
<b>Date &amp; Time:</b>	April 15, 2024, 13:07 Local	<b>Registration:</b>	N73605
<b>Aircraft:</b>	Cessna 172M	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The student pilot was on a solo cross-country flight and was landing at the destination airport. While on final approach, he was high, so he reduced power. Upon touchdown, the airplane bounced several times (airport security camera video showed the airplane bouncing on the runway with increasing severity). The pilot attempted to recover but lost directional control of the airplane. The airplane nosed over after traveling off the right side of the runway resulting in substantial damage to the airplane's wings and vertical stabilizer. The pilot reported that there were no preimpact mechanical malfunctions or failures of 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 student pilot's improper recovery from a bounced landing, which resulted in a loss of directional control and subsequent runway excursion.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Landing flare - Not attained/maintained

## Factual Information

### History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing-flare/touchdown	Nose over/nose down

### Pilot Information

Certificate:	Student	Age:	37,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Unknown	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	64 hours (Total, all aircraft), 20 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N73605
Model/Series:	172M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17267574
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-E2D
Registered Owner:	JKG LLC	Rated Power:	150 Horsepower
Operator:	JKG LLC	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>	SYI, 800 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	13:15 Local	<b>Direction from Accident Site:</b>	0°
<b>Lowest Cloud Condition:</b>	Few / 4200 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.01 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 17°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Murfreesboro, TN (MBT)	<b>Type of Flight Plan Filed:</b>	
<b>Destination:</b>	Shelbyville, TN	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	BOMAR FLD/SHELBYVILLE MUNI SYI	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	799 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18/36	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5504 ft / 100 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	35.5594, -86.442472(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccarter, Lawrence
<b>Additional Participating Persons:</b>	Joseph Patterson; FAA/FSDO; Nashville, TN
<b>Original Publish Date:</b>	July 18, 2024
<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.nts.gov/Docket?ProjectID=194101">https://data.nts.gov/Docket?ProjectID=194101</a>

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](#).