



# Aviation Investigation Final Report

<b>Location:</b>	Romeoville, Illinois	<b>Accident Number:</b>	CEN23LA256
<b>Date &amp; Time:</b>	May 23, 2023, 09:00 Local	<b>Registration:</b>	N674MA
<b>Aircraft:</b>	Cessna 172R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Hard landing	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The student pilot stated that during her initial solo flight, she attempted three landings. The first and second landing attempts resulted in go-arounds. During the third landing attempt, there was a "severe porpoise," and she felt the airplane "rushing down the runway uncontrollably." She "pushed down" to stop the porpoise because she felt that she was never going to be able to land. The airplane then impacted the runway surface and sustained substantial damage, which included damage to the fuselage. The pilot stated that the accident could have been prevented by performing a go-around instead of forcing the airplane onto the runway. There was no mechanical malfunction/failure of the airplane reported 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 attain/maintain a proper landing flare and failure to perform a go-around that resulted in an impact with the runway.

## Findings

<b>Aircraft</b>	Landing flare - Not attained/maintained
<b>Personnel issues</b>	Lack of action - Student/instructed pilot

## Factual Information

### History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

### Student pilot Information

Certificate:	Student	Age:	18,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 1 With waivers/limitations	Last FAA Medical Exam:	July 1, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	52.6 hours (Total, all aircraft), 52.6 hours (Total, this make and model), 0.3 hours (Pilot In Command, all aircraft), 31.3 hours (Last 90 days, all aircraft), 16.7 hours (Last 30 days, all aircraft), 1.6 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N674MA
Model/Series:	172R	Aircraft Category:	Airplane
Year of Manufacture:	1999	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	17280742
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	April 28, 2023 100 hour	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	8621.7 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	Lewis University	Rated Power:	160 Horsepower
Operator:	Lewis University	Operating Certificate(s) Held:	Pilot school (141)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LOT, 679 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	08:45 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Few / 20000 ft AGL	<b>Visibility</b>	9 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.15 inches Hg	<b>Temperature/Dew Point:</b>	20°C / 10°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Romeoville, IL (LOT)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Romeoville, IL	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	08:53 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Lewis University Airport LOT	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	679 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	9	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5500 ft / 75 ft	<b>VFR Approach/Landing:</b>	

## 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>	41.608097, -88.09639(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gallo, Mitchell
<b>Additional Participating Persons:</b>	Sandra Boerman; Federal Aviation Administration, Greater Chicago FSDO; Des Plaines, IL
<b>Original Publish Date:</b>	September 28, 2023
<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=192428">https://data.nts.gov/Docket?ProjectID=192428</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](#).