



Aviation Investigation Final Report

Location:	Louisville, Kentucky	Accident Number:	ERA25LA031
Date & Time:	October 8, 2024, 14:55 Local	Registration:	N640MG
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that she rented the accident airplane to gain proficiency flying from the right seat and had asked the flight instructor to sit in the left seat during the flight. While maneuvering the airplane through the final approach leg of the traffic pattern, the pilot reported making control adjustments to recover from a low and slow approach to land. She attempted to initiate a go-around, but utilizing muscle memory from flying from the left seat, she inadvertently reduced throttle and pushed the yoke forward resulting in a hard landing. The airplane bounced and the pilot applied full power, after which the flight instructor then took control of the airplane. The flight instructor flew another traffic pattern circuit and landed the airplane without further incident.

The airplane's floorboards and internal structure were later found to be substantially damaged.

Both the pilot and the flight instructor reported that there were no preimpact 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 improper landing flare and control inputs, which resulted in a hard landing. Contributing was the flight instructor's delayed remedial action.

Findings

Personnel issues	Aircraft control - Pilot
Personnel issues	Incorrect action performance - Pilot
Aircraft	Landing flare - Not attained/maintained
Personnel issues	Delayed action - Instructor/check pilot

Factual Information

History of Flight

Landing	Hard landing (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	34,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	February 19, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 9, 2024
Flight Time:	292.3 hours (Total, all aircraft), 0.8 hours (Total, this make and model), 215.9 hours (Pilot In Command, all aircraft), 6.2 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	23,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	July 26, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 22, 2023
Flight Time:	482.4 hours (Total, all aircraft), 10 hours (Total, this make and model), 407.4 hours (Pilot In Command, all aircraft), 58.8 hours (Last 90 days, all aircraft), 39.1 hours (Last 30 days, all aircraft), 0.9 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N640MG
Model/Series:	172 M	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17265248
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	September 9, 2024 100 hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	49.1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	12065.3 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	O-320-E2D
Registered Owner:	WHISKEY GIRL AVIATION LLC	Rated Power:	150 Horsepower
Operator:	Kentucky Flight Training Center, LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LOU,540 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	16°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	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:	21°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Louisville, KY	Type of Flight Plan Filed:	None
Destination:	Louisville, KY	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	BOWMAN FLD LOU	Runway Surface Type:	Asphalt
Airport Elevation:	545 ft msl	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	3580 ft / 75 ft	VFR Approach/Landing:	Go around;Touch and go;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:	38.227984,-85.664157(est)

Administrative Information

Investigator In Charge (IIC):	Stratton, Lauren
Additional Participating Persons:	Louis Wiseheart; FAA/FSDO; Louisville, KY
Original Publish Date:	January 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=195413

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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](#).