

Aviation Investigation Final Report

Location:	Moberly, Missouri	Accident Number:	CEN22LA148
Date & Time:	March 15, 2022, 15:00 Local	Registration:	N8585S
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that, during touchdown, the airplane bounced twice before he added power, and landed without further incident. A postaccident examination revealed the underside of the fuselage sustained substantial damage. The student pilot reported that there were no preimpact mechanical malfunctions or failures with the airframe or engine 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 landing flare, which resulted in a bounced hard landing.

Findings	
Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Landing flare - Not attained/maintained
Personnel issues	Decision making/judgment - Student/instructed pilot

Factual Information

History of Flight

Landing-flare/touchdown

Hard landing (Defining event)

Student pilot Information

Certificate:	Student	Age:	36,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
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:	December 14, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 15, 2022
Flight Time:	36 hours (Total, all aircraft), 27 hours (Total, this make and model), 2 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8585S
Model/Series:	182 J	Aircraft Category:	Airplane
Year of Manufacture:	1965	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18256685
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 17, 2021 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4693.73 Hrs at time of accident	Engine Manufacturer:	Continental Motors
ELT:	Installed, not activated	Engine Model/Series:	0-470 -R
Registered Owner:	On file	Rated Power:	230 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None
Operator Does Business As:	On file	Operator Designator Code:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMBY,867 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:55 Local	Direction from Accident Site:	110°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 4900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	18°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Moberly, MO	Type of Flight Plan Filed:	None
Destination:	Moberly, MO	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Omar N. Bradley Airport MBY	Runway Surface Type:	Concrete
Airport Elevation:	867 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	Full stop;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:	39.464394,-92.428394(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Thomas Davis; FAA Kansas City FSDO; Kansas City, MO
Original Publish Date:	July 5, 2022
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=104815

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.