



National Transportation Safety Board Aviation Accident Final Report

Location:	Greenfield, IN	Accident Number:	CEN10CA289
Date & Time:	06/01/2010, 1340 EDT	Registration:	N1448Z
Aircraft:	Cessna 172S	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that she was practicing touch-and-go landings when the accident occurred. During her first touch-and-go, the airplane bounced after a hard landing. She attempted to correct for the bounced landing, but the airplane's nose landing gear impacted the runway before the main landing gear. The airplane stabilized onto all three landing gear and she proceeded with the next takeoff. No anomalies were experienced with the two subsequent landings. A postflight inspection of the airframe revealed substantial damage to the engine firewall and fuselage floor structure. The pilot reported that there were no preimpact mechanical malfunctions or failures that would have precluded normal operation of the airplane.

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 recovery from a bounced landing.

Findings

Aircraft

Personnel issues	Aircraft control - Pilot (Cause)
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Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event) Abnormal runway contact
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Pilot Information

Certificate:	Private	Age:	27, Female
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last Medical Exam:	04/01/2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	11/14/2009
Flight Time:	95 hours (Total, all aircraft), 95 hours (Total, this make and model), 2 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N1448Z
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	172S9891
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	05/28/2010, Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1508 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	DLRM, LLC.	Rated Power:	180 hp
Operator:	DLRM, LLC.	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KGEZ, 803 ft msl	Observation Time:	1353 EDT
Distance from Accident Site:	16 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	180°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 3200 ft agl	Temperature/Dew Point:	26°C / 18°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	29.94 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greenfield, IN (KMQJ)	Type of Flight Plan Filed:	None
Destination:	Greenfield, IN (KMQJ)	Type of Clearance:	None
Departure Time:	1330 EDT	Type of Airspace:	Class G

Airport Information

Airport:	Mount Comfort Airport (KMQJ)	Runway Surface Type:	Asphalt
Airport Elevation:	862 ft	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	5500 ft / 100 ft	VFR Approach/Landing:	Touch and Go; 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		

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox	Adopted Date:	10/21/2010
Additional Participating Persons:	Daniel L Fowler; Federal Aviation Administration, Indianapolis FSDO; Indianapolis, IN		
Publish Date:	10/21/2010		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=76196		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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