



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Grand Forks, ND	<b>Accident Number:</b>	CEN09CA404
<b>Date &amp; Time:</b>	07/02/2009, 0830 CDT	<b>Registration:</b>	N538ND
<b>Aircraft:</b>	CESSNA 172S	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Analysis

The accident occurred during the student pilot's third landing on his first solo flight. He reported that his first two landings were uneventful, but the airplane landed hard on the third landing for unknown reasons. An after-flight inspection revealed that one of the propeller blade tips was curled from contact with the runway and that the engine firewall was substantially deformed.

## Flight Events

Landing-flare/touchdown - Hard landing  
Landing-flare/touchdown - Abnormal runway contact

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
The student pilot's improper landing flare that resulted in a hard landing.

## Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Landing flare-Incorrect use/operation - C  
Personnel issues-Task performance-Use of equip/info-Aircraft control-Student pilot - C

## Student Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	23
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	23 hours (Total, all aircraft), 23 hours (Total, this make and model), 0 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	CESSNA	<b>Registration:</b>	N538ND
<b>Model/Series:</b>	172S	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	UND Aerospace Foundation	<b>Engine Manufacturer:</b>	Lycoming
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	IO-360-L2A
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	KGFK, 845 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	5 knots, 10°
<b>Temperature:</b>	19° C / 15° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Grand Forks, ND (KGFK)	<b>Destination:</b>	Grand Forks, ND (KGFK)

## Airport Information

<b>Airport:</b>	Grand Forks International (KGFK)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	35L	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	7349 ft / 150 ft		

## 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

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Andrew T Fox	<b>Adopted Date:</b>	11/09/2009
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=74182">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=74182</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.