



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	Shawnee, OK	<b>Accident Number:</b>	DFW05CA097
<b>Date &amp; Time:</b>	04/02/2005, 1130 CST	<b>Registration:</b>	N5086Q
<b>Aircraft:</b>	Cessna 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None

**Flight Conducted Under:** Part 91: General Aviation - Instructional

---

## Analysis

The 99-hour student pilot, who had logged 2.4 hours of solo time, reported that on final approach to runway 17, his airspeed was 61 knots. He planned on making a normal landing, and when he reached the runway, he "pulled the throttle to idle and flared," but the airplane "hit the ground heavily and jumped back up." The pilot then "lowered the airplane nose and flared again." When the airplane touched down, the student pilot noticed that he was left of the centerline, so he applied right rudder. "Suddenly, the nose gear broke, and the airplane nose fell on the ground." The propeller then hit the ground and stopped, and the airplane came to a stop. The student pilot performed the proper shutdown procedures and exited the airplane, uninjured. Reported winds at the time of the landing on runway 17 were from 200 degrees at 8 knots.

## 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 his inadequate recovery from a bounced landing. A factor was the prevailing crosswind.

## Findings

---

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - CROSSWIND
2. (C) FLARE - IMPROPER - PILOT IN COMMAND
3. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND

-----

Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

### Student Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	24, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last Medical Exam:</b>	07/13/2004
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	99 hours (Total, all aircraft), 99 hours (Total, this make and model), 2 hours (Pilot In Command, all aircraft), 38 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	Cessna	<b>Registration:</b>	N5086Q
<b>Model/Series:</b>	152	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	15285069
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	02/25/2005, 100 Hour	<b>Certified Max Gross Wt.:</b>	1670 lbs
<b>Time Since Last Inspection:</b>	74.2 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	15012.1 Hours	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-235-L2C
<b>Registered Owner:</b>	Spartan Aviation Industries	<b>Rated Power:</b>	110 hp
<b>Operator:</b>	Spartan Aviation Industries	<b>Air Carrier Operating Certificate:</b>	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	SNL, 1073 ft msl	Observation Time:	1753 CDT
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	19°C / 2°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	8 knots, 200°	Visibility (RVR):	
Altimeter Setting:	30.17 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Tulsa, OK (RVS)	Type of Flight Plan Filed:	VFR
Destination:	Shawnee, OK (SNL)	Type of Clearance:	VFR
Departure Time:	0800 CST	Type of Airspace:	Class E

## Airport Information

Airport:	Shawnee Regional Airport (SNL)	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	5600 ft / 100 ft	VFR Approach/Landing:	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):	Alexander Lemishko	Adopted Date:	07/07/2005
Additional Participating Persons:	Michael Bowler; Federal Aviation Administration; Oklahoma City, OK		
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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.

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.