



# Aviation Investigation Final Report

<b>Location:</b>	Denison, Texas	<b>Accident Number:</b>	GAA18CA350
<b>Date &amp; Time:</b>	June 14, 2018, 09:15 Local	<b>Registration:</b>	N67404
<b>Aircraft:</b>	Cessna 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The chief flight instructor reported that, according to the student pilot, during landing, the right crosswind increased. He added that the airplane turned left, touched down hard, and bounced. Following the bounce, the student tried to hold attitude, but the airplane descended, bounced a second time, and the nose landing gear collapsed. During the third touchdown, the propeller struck the runway, and the airplane skidded to a stop on the runway.

The airplane sustained substantial damage to the engine mounts.

The chief flight instructor reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The automated weather observation station located on the airport reported that, about the time of the accident, the wind was from 210° at 10 knots. The airplane landed on runway 17L.

## 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 in crosswind conditions, which resulted in a hard, bounced landing.

## Findings

<b>Aircraft</b>	Landing flare - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Environmental issues</b>	Crosswind - Effect on operation

## Factual Information

### History of Flight

<b>Landing</b>	Other weather encounter
<b>Landing</b>	Abnormal runway contact (Defining event)
<b>Landing</b>	Hard landing
<b>Landing</b>	Landing gear collapse

### Student pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	20,Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	March 6, 2018
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 32.5 hours (Total, all aircraft), 32.5 hours (Total, this make and model), 18.2 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N67404
<b>Model/Series:</b>	152 NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1981	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	15285297
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	May 21, 2018 100 hour	<b>Certified Max Gross Wt.:</b>	1670 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	16438.6 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	O-235 SERIES
<b>Registered Owner:</b>		<b>Rated Power:</b>	110 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Pilot school (141)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KGYI, 749 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	14:55 Local	<b>Direction from Accident Site:</b>	188°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.04 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Denison, TX (GYI)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Denison, TX (GYI)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	09:18 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	NORTH TEXAS RGNL/PERRIN FIELD GYI	<b>Runway Surface Type:</b>	Asphalt;Concrete
<b>Airport Elevation:</b>	749 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	17L	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	9000 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	33.720832,-96.672775(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Benhoff, Kathryn
<b>Additional Participating Persons:</b>	Brent Furlow; FAA; North Texas, TX
<b>Original Publish Date:</b>	November 5, 2018
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97487">https://data.nts.gov/Docket?ProjectID=97487</a>

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