



National Transportation Safety Board Aviation Accident Final Report

Location:	Denton, TX	Accident Number:	GAA19CA566
Date & Time:	09/18/2019, 1118 CDT	Registration:	N93069
Aircraft:	Cessna 152	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The student pilot reported that, during landing, he flared the airplane too high. The airplane then sank, landed hard, and bounced multiple times, and the nose landing gear collapsed. The airplane sustained substantial damage to the engine mount. The safety manager for the flight school reported that there were no preaccident mechanical failures or malfunctions with the airplane 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 hard, bounced landing and a nose landing gear collapse.

Findings

Aircraft	Landing flare - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Student pilot (Cause)
Environmental issues	Crosswind - Effect on operation

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing	Landing gear collapse

Pilot Information

Certificate:	Student	Age:	23, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	01/11/2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 65.7 hours (Total, all aircraft), 65.7 hours (Total, this make and model), 2.8 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 17.4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N93069
Model/Series:	152 No Series	Aircraft Category:	Airplane
Year of Manufacture:	1981	Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	15285389
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	09/05/2019, 100 Hour	Certified Max Gross Wt.:	1470 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	14378 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-235 SERIES
Registered Owner:	Us Aviation Group LLC	Rated Power:	110 hp
Operator:	Us Aviation Group LLC	Operating Certificate(s) Held:	Pilot School (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KDTON, 642 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1618 UTC	Direction from Accident Site:	214°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	29° C / 21° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Denton, TX (DTO)	Type of Flight Plan Filed:	None
Destination:	Denton, TX (DTO)	Type of Clearance:	VFR
Departure Time:	0800 CDT	Type of Airspace:	Class D

Airport Information

Airport:	DENTON ENTERPRISE (DTO)	Runway Surface Type:	Asphalt
Airport Elevation:	642 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	7002 ft / 150 ft	VFR Approach/Landing:	Full Stop; Straight-in

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:	33.207500, -97.197778 (est)

Administrative Information

Investigator In Charge (IIC):	Kathryn R Benhoff	Report Date:	03/17/2020
Additional Participating Persons:	Jim Staggs; FAA; Irving, TX		
Publish Date:	03/17/2020		
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=100328		

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).