



# Aviation Investigation Final Report

<b>Location:</b>	Denton, Texas	<b>Accident Number:</b>	CEN23LA100
<b>Date &amp; Time:</b>	February 5, 2023, 12:00 Local	<b>Registration:</b>	N5442B
<b>Aircraft:</b>	Cessna 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The student pilot was performing landings during her second solo flight. On her third touch-and-go landing, while looking down to ensure that the flaps were retracted and carburetor heat was off, she advanced the throttle to full, and the airplane began to veer to the left. The student pilot attempted to correct but was unable to regain control of the airplane before it departed the runway. The airplane entered muddy terrain, nosed over, and came to rest inverted. The airplane sustained substantial damage to the vertical stabilizer and wings. The student pilot reported there were no preaccident mechanical malfunctions or failures 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 failure to maintain directional control during a touch-and-go landing.

## Findings

<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Wet/muddy terrain - Contributed to outcome
<b>Personnel issues</b>	Aircraft control - Student/instructed pilot

## Factual Information

### History of Flight

<b>Takeoff</b>	Loss of control on ground (Defining event)
<b>Takeoff</b>	Attempted remediation/recovery
<b>Takeoff-rejected takeoff</b>	Runway excursion
<b>Takeoff-rejected takeoff</b>	Nose over/nose down

### Student pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	42,Female
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	August 10, 2022
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 41.1 hours (Total, all aircraft), 41.1 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 39.5 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N5442B
<b>Model/Series:</b>	152	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1979	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	15283870
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	December 13, 2022 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>	18347 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C91 installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	0-235-L2C
<b>Registered Owner:</b>	WINGS OVER TEXAS HOLDINGS LLC	<b>Rated Power:</b>	110 Horsepower
<b>Operator:</b>	US Aviation Group LLC	<b>Operating Certificate(s) Held:</b>	Pilot school (141)
<b>Operator Does Business As:</b>	US Aviation Academy	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KDTO,642 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	11:53 Local	<b>Direction from Accident Site:</b>	
<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>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.17 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 8°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Denton, TX	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Denton, TX	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	DENTON ENTERPRISE DTO	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	643 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18R	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5003 ft / 75 ft	<b>VFR Approach/Landing:</b>	Touch and go

## 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>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	33.20513,-97.200315(est)

## Administrative Information

Investigator In Charge (IIC):	Rutt, Brian
Additional Participating Persons:	Rachel Cameron; FAA FSDO - North Texas; TX
Original Publish Date:	March 2, 2023
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.ntsb.gov/Docket?ProjectID=106683">https://data.ntsb.gov/Docket?ProjectID=106683</a>

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