



# Aviation Investigation Final Report

<b>Location:</b>	Terrell, Texas	<b>Accident Number:</b>	CEN23LA154
<b>Date &amp; Time:</b>	April 11, 2023, 16:12 Local	<b>Registration:</b>	N1221U
<b>Aircraft:</b>	Cessna 172M	<b>Aircraft Damage:</b>	Unknown
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The flight instructor reported that the student pilot was landing the airplane with a left crosswind. On touchdown, the airplane bounced, pitched up, and drifted toward the right side of the runway. The flight instructor told the student pilot to go around and then attempted to take control of the airplane. The airplane touched down in the grass, nosed over and came to rest inverted. The airplane sustained substantial damage to the forward fuselage, vertical stabilizer and rudder, and right wing strut. At the time of the accident, the airplane was landing on runway 18 with wind 100° at 7 knots.

## 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 landing and the flight instructor's delayed remedial response

## Findings

<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Delayed action - Instructor/check pilot
<b>Personnel issues</b>	Monitoring other person - Instructor/check pilot

## Factual Information

### History of Flight

Landing	Loss of control on ground (Defining event)
Landing	Runway excursion
Landing	Nose over/nose down

### Student pilot Information

Certificate:	Student	Age:	34
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Unknown	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	26.9 hours (Total, all aircraft), 17.4 hours (Total, this make and model)		

### Flight instructor Information

Certificate:	Flight instructor	Age:	29,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	719 hours (Total, all aircraft), 523.3 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N1221U
<b>Model/Series:</b>	172M	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1976	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17266918
<b>Landing Gear Type:</b>		<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	
<b>ELT:</b>		<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KTRL, 474 ft msl	<b>Distance from Accident Site:</b>	0.5 Nautical Miles
<b>Observation Time:</b>	15:53 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Few / 6500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots / 0 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	100°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.21 inches Hg	<b>Temperature/Dew Point:</b>	23°C / 0°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Terrell, TX	<b>Type of Flight Plan Filed:</b>	
<b>Destination:</b>	Terrell, TX	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	Terrell municipal Airport TRL	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	474 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5006 ft / 75 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Unknown
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	32.709628,-96.267109

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Bowling, David
<b>Additional Participating Persons:</b>	Arnold Turner; Federal Aviation Administration ; Irvine, TX
<b>Original Publish Date:</b>	June 29, 2023
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=107050">https://data.nts.gov/Docket?ProjectID=107050</a>

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