



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Taylor, TX	<b>Accident Number:</b>	CEN19CA336
<b>Date &amp; Time:</b>	09/02/2019, 1030 CDT	<b>Registration:</b>	N6400A
<b>Aircraft:</b>	Piper PA38	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of lift	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

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## Analysis

The flight instructor and student pilot were conducting a training flight, which included touch-and-go landings. During the landing rollout and with about 2,000 ft of runway remaining, the instructor directed the student to transition to a soft-field takeoff. The student conducted the takeoff and attempted to climb with a high pitch attitude, but the airplane settled back to the ground off the end of the runway. The airplane subsequently impacted a ditch, which resulted in substantial damage to the fuselage. The instructor reported that the pitch attitude during the climbout was too high and that he should not have directed the student to attempt a soft-field takeoff given the runway distance remaining. The instructor reported that there were no mechanical malfunctions or failures 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 flight instructor's inadequate supervision of the student's soft-field takeoff, which resulted in an excessive pitch attitude, settling effect, and impact with a ditch off the end of the runway.

## Findings

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<b>Aircraft</b>	Pitch control - Not attained/maintained (Cause)
<b>Personnel issues</b>	Monitoring other person - Instructor/check pilot (Cause)
<b>Environmental issues</b>	Sloped/uneven terrain - Effect on operation (Cause)

## Factual Information

### History of Flight

Takeoff	Loss of lift (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

### Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	23, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	10/24/2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	07/14/2019
Flight Time:	628 hours (Total, all aircraft), 292 hours (Total, this make and model), 532 hours (Pilot In Command, all aircraft), 140 hours (Last 90 days, all aircraft), 72 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### Student Pilot Information

Certificate:	Student	Age:	19, Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last FAA Medical Exam:	07/03/2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	114 hours (Total, all aircraft), 100 hours (Total, this make and model), 5 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N6400A
Model/Series:	PA38 112	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	38-78A0415
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/27/2019, 100 Hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6223 Hours as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	Pilots Choice Aviation Equipment Leasing	Rated Power:	110 hp
Operator:	Pilots Choice Aviation Equipment Leasing	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:	KEDC, 617 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	1035 CDT	Direction from Accident Site:	211°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.08 inches Hg	Temperature/Dew Point:	32°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Georgetown, TX (GTU)	Type of Flight Plan Filed:	None
Destination:	Taylor, TX (T74)	Type of Clearance:	Traffic Advisory; VFR
Departure Time:	0915 CDT	Type of Airspace:	Class G

## Airport Information

Airport:	Taylor Muni (T74)	Runway Surface Type:	Asphalt
Airport Elevation:	600 ft	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	Touch and Go

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	30.572778, -97.443056 (est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Michael J Folkerts	<b>Report Date:</b>	03/17/2020
<b>Additional Participating Persons:</b>	Brian Carroll; Flight Standard District Office; San Antonio, TX		
<b>Publish Date:</b>	03/17/2020		
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100386">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100386</a>		

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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](#).