

Aviation Investigation Final Report

Location:	Taylor, Texas	Accident Number:	CEN19CA336
Date & Time:	September 2, 2019, 10:30 Local	Registration:	N6400A
Aircraft:	Piper PA38	Aircraft Damage:	Substantial
Defining Event:	Loss of lift	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

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

Personnel issues	Monitoring other person - Instructor/check pilot	
Aircraft	Pitch control - Not attained/maintained	
Environmental issues	Sloped/uneven terrain - Effect on operation	

Factual Information

History of Flight

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

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	23,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
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:	October 24, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 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:	3-point
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:	July 3, 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:	
Airworthiness Certificate:	Normal	Serial Number:	38-78A0415
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	August 27, 2019 100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6223 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-235-L2C
Registered Owner:	Pilots Choice Aviation Equipment Leasing	Rated Power:	110 Horsepower
Operator:	Pilots Choice Aviation Equipment Leasing	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KEDC,617 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	10:35 Local	Direction from Accident Site:	211°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	32°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Georgetown, TX (GTU)	Type of Flight Plan Filed:	None
Destination:	Taylor, TX (T74)	Type of Clearance:	VFR;Traffic advisory
Departure Time:	09:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	Taylor Muni T74	Runway Surface Type:	Asphalt
Airport Elevation:	600 ft msl	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

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	30.572778,-97.443054(est)

Administrative Information

Investigator In Charge (IIC):	Folkerts, Michael
Additional Participating Persons:	Brian Carroll; Flight Standard District Office; San Antonio, TX
Original Publish Date:	March 17, 2020
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=100386

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