



Aviation Investigation Final Report

Location:	Llano, Texas	Accident Number:	GAA18CA583
Date & Time:	June 21, 2018, 10:00 Local	Registration:	N9496D
Aircraft:	Piper PA18	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot receiving instruction in the tailwheel-equipped airplane reported that, during landing, the airplane touched down abruptly. He added that he taxied to the edge of the runway and saw that the airplane was leaning left.

The flight instructor reported that the pilot leveled off about 3 ft above the ground and allowed the airspeed to decrease. He added that he instructed the pilot to add power to "cushion the landing" and that the pilot attempted to do so, but the airplane continued to decelerate until it aerodynamically stalled and landed hard on the left main landing gear.

The airplane sustained substantial damage to the fuselage.

The instructor 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 pilot's receiving instruction's improper landing flare and his failure to maintain adequate airspeed and his exceedance of the airplane's critical angle of attack during landing, which resulted in an aerodynamic stall.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Angle of attack - Capability exceeded
Aircraft	Landing flare - Not attained/maintained
Aircraft	Airspeed - Not attained/maintained

Factual Information

History of Flight

Landing	Aerodynamic stall/spin (Defining event)
Landing	Hard landing

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	68,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Waiver time limited special	Last FAA Medical Exam:	April 4, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 11456 hours (Total, all aircraft), 1252 hours (Total, this make and model), 11359 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	41,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	November 13, 2018
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 1826 hours (Total, all aircraft), 1.2 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9496D
Model/Series:	PA18	Aircraft Category:	Airplane
Year of Manufacture:	1958	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	18-6748
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 29, 2017 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5346.9 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	O-320-A2B
Registered Owner:		Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KAQO, 1102 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:15 Local	Direction from Accident Site:	252°
Lowest Cloud Condition:	Few / 1000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	26°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Llano, TX (AQO)	Type of Flight Plan Filed:	None
Destination:	Llano, TX (AQO)	Type of Clearance:	None
Departure Time:	09:50 Local	Type of Airspace:	Class G

Airport Information

Airport:	LLANO MUNI AQO	Runway Surface Type:	Grass/turf
Airport Elevation:	1101 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	3209 ft / 150 ft	VFR Approach/Landing:	Full stop

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:	30.784166,-98.661392(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Frank Fortmann; FAA; San Antonio, TX
Original Publish Date:	June 5, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98611

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