



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Cypress, Texas	Accident Number:	GAA18CA551
Date & Time:	September 1, 2018, 10:45 Local	Registration:	N212NA
Aircraft:	Piper PA28	Aircraft Damage:	Substantial
Defining Event:	Landing area undershoot	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that, during approach, as the airplane crossed over a highway, it encountered turbulence and increased lift. He reduced power to correct, and the airplane lost altitude quickly. The student added power to compensate, but the airplane landed hard before reaching the runway, and the nose landing gear collapsed.

The airplane sustained substantial damage to the left wing.

The student reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The automated weather observation station located about 7 miles south of the airport reported that, about 10 minutes before the accident, the wind was from 090° at 5 knots. The student was landing the airplane on runway 9.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The student pilot's improper approach path after the airplane encountered turbulence, which resulted in the airplane landing hard short of the runway.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot
Environmental issues	(general) - Effect on operation

Factual Information

History of Flight

Landing	Other weather encounter
Landing	Attempted remediation/recovery
Landing	Landing area undershoot (Defining event)
Landing	Hard landing
Landing	Landing gear collapse

Student pilot Information

Certificate:	Student	Age:	54,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 31, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 39 hours (Total, all aircraft), 39 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N212NA
Model/Series:	PA28 161	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-7916150
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320 SERIES
Registered Owner:		Rated Power:	160 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:	KIWS, 111 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	15:35 Local	Direction from Accident Site:	194°
Lowest Cloud Condition:	Scattered / 2200 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 3100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	29°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cypress, TX (EYQ)	Type of Flight Plan Filed:	None
Destination:	Cypress, TX (EYQ)	Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	WEISER AIR PARK EYQ	Runway Surface Type:	Asphalt
Airport Elevation:	137 ft msl	Runway Surface Condition:	Dry
Runway Used:	09	IFR Approach:	None
Runway Length/Width:	3455 ft / 40 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	29.935277,-95.640274(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Jesse Sanchez; FAA; Houston, TX
Original Publish Date:	March 18, 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=98292

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).