



Aviation Investigation Final Report

Location:	Sugar Land, Texas	Accident Number:	GAA19CA119
Date & Time:	December 27, 2018, 13:00 Local	Registration:	N17SJ
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that, while taking off for a stop-and-go landing, he applied full power, and the airplane drifted left. He corrected with right rudder, but the airplane continued left. He reduced power to idle to abort the takeoff, but the airplane "continued out of control to the left." He applied brakes and opposite rudder, but the airplane exited the runway to the left and struck an airport sign, the left main landing gear separated, and the airplane came to rest about 200 ft past the sign.

The airplane sustained substantial damage to the left wing lift strut.

The student 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 student pilot's failure to maintain directional control during takeoff, which resulted in a runway excursion and impact with a sign.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot
Environmental issues	Sign/marker - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event)
Takeoff	Attempted remediation/recovery
Takeoff-rejected takeoff	Runway excursion
Takeoff-rejected takeoff	Part(s) separation from AC
Takeoff-rejected takeoff	Collision with terr/obj (non-CFIT)

Student pilot Information

Certificate:	Student	Age:	40,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	May 22, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 98 hours (Total, all aircraft), 98 hours (Total, this make and model), 17.2 hours (Pilot In Command, all aircraft), 13.3 hours (Last 90 days, all aircraft), 9.1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N17SJ
Model/Series:	172 S	Aircraft Category:	Airplane
Year of Manufacture:	1999	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	172S8344
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-360SER
Registered Owner:		Rated Power:	
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSGR, 84 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	200°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.75 inches Hg	Temperature/Dew Point:	21°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sugar Land, TX (SGR)	Type of Flight Plan Filed:	None
Destination:	Sugar Land, TX (SGR)	Type of Clearance:	None
Departure Time:	12:15 Local	Type of Airspace:	Class D

Airport Information

Airport:	SUGAR LAND RGNL SGR	Runway Surface Type:	Concrete
Airport Elevation:	82 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	8000 ft / 100 ft	VFR Approach/Landing:	Stop and go

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:	29.622777,-95.656669(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Jay Wilkins; FAA; Houston, TX
Original Publish Date:	November 6, 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=98924

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.

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