



# **Aviation Investigation Final Report**

Location: Grand Prairie, Texas Accident Number: GAA18CA460

Date & Time: July 29, 2018, 11:05 Local Registration: N24144

Aircraft: Cessna 172 Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

The student pilot reported that, while practicing soft-field takeoffs, the airplane lifted off about midfield and drifted left. He and the flight instructor tried to correct, but the airplane struck a runway sign and spun left.

The flight instructor reported that, during the soft-field takeoff, as soon as the airplane lifted off the ground, the student pilot lost his composure. He added that, while calling for the flight controls, he began to fight the student for the flight controls and yelled "let go." The airplane struck a taxiway sign, and the airplane spun to the left.

The airplane sustained substantial damage to the left wing.

The flight instructor 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 on the airport reported that, about 15 minutes before the accident, the wind was from 210° at 11 knots. The student reported that the wind was from between 220° and 240° at 11 knots, gusting to 18 knots. The airplane departed from runway 17.

### **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 the runway centerline during takeoff with a crosswind.

### **Findings**

Aircraft Heading/course - Not attained/maintained

Personnel issues Aircraft control - Student/instructed pilot

**Environmental issues** Crosswind - Effect on operation

**Environmental issues** Sign/marker - Contributed to outcome

Page 2 of 5 GAA18CA460

# **Factual Information**

# **History of Flight**

Takeoff	Loss of control in flight (Defining event)
Takeoff	Attempted remediation/recovery
Takeoff	Collision with terr/obj (non-CFIT)

### **Flight instructor Information**

Certificate:	Commercial; Flight instructor	Age:	36,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Waiver time limited special	Last FAA Medical Exam:	November 8, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 480 hours (Total, all aircraft), 410 hours (Total, this make and model), 426 hours (Pilot In Command, all aircraft), 199 hours (Last 90 days, all aircraft), 105 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

# **Student pilot Information**

Certificate:	Student	Age:	58,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	July 27, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 58 hours (Total, all aircraft), 58 hours (Total, this make and model), 9 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Page 3 of 5 GAA18CA460

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N24144
Model/Series:	172 S	Aircraft Category:	Airplane
Year of Manufacture:	2007	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S10558
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	IO-360-L2A
Registered Owner:		Rated Power:	180 Horsepower
Operator:		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:	KGPM,589 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	337°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	34°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Grand Prairie, TX (GPM )	Type of Flight Plan Filed:	None
Destination:	Grand Prairie, TX (GPM )	Type of Clearance:	VFR
Departure Time:	11:05 Local	Type of Airspace:	Class D

Page 4 of 5 GAA18CA460

#### **Airport Information**

Airport:	GRAND PRAIRIE MUNI GPM	Runway Surface Type:	Concrete
Airport Elevation:	588 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	4001 ft / 75 ft	VFR Approach/Landing:	None

#### **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:	32.69889,-97.046943(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Adam Henderson; FAA; North Texas, 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.ntsb.gov/Docket?ProjectID=97963

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.

Page 5 of 5 GAA18CA460