



# Aviation Investigation Final Report

<b>Location:</b>	Colorado Springs, Colorado	<b>Accident Number:</b>	GAA18CA433
<b>Date &amp; Time:</b>	July 22, 2018, 11:30 Local	<b>Registration:</b>	N99243
<b>Aircraft:</b>	Cessna 172	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The student pilot reported that, during a check ride and a short-field landing in gusting crosswind conditions, the touchdown was normal, but the airplane quickly veered right. He added that he and the designated pilot examiner applied left rudder to no avail. The airplane exited the runway to the right, the right main landing gear struck a taxiway sign, and the airplane came to rest in the grass adjacent to the taxiway.

The airplane sustained substantial damage to the right horizontal stabilizer.

The Federal Aviation Administration inspector conducted a postaccident examination. He reported that the rudder system appeared normal and functioned properly. He added that there were no pre-existing mechanical conditions that could have caused the accident.

The automated weather observation station located on the airport reported that, about the time of the accident, the wind was from 50° at 11 knots, gusting to 21 knots. The airplane landed on runway 33.

## 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 landing in gusting crosswind conditions.

## Findings

<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Environmental issues</b>	Gusts - Effect on operation
<b>Environmental issues</b>	Crosswind - Effect on operation
<b>Environmental issues</b>	Sign/marker - Contributed to outcome

## Factual Information

### History of Flight

Landing	Other weather encounter
Landing	Loss of control on ground (Defining event)
Landing	Attempted remediation/recovery
Landing	Runway excursion
Landing	Collision with terr/obj (non-CFIT)

### Student pilot Information

Certificate:	Student	Age:	65,Male
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 3 With waivers/limitations	Last FAA Medical Exam:	March 16, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 130 hours (Total, all aircraft), 108 hours (Total, this make and model), 36 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Check pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	74,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	March 7, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N99243
<b>Model/Series:</b>	172 P	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1985	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17276418
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 8, 2018 100 hour	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-D2J
<b>Registered Owner:</b>		<b>Rated Power:</b>	160
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KFLY, 6874 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	17:35 Local	<b>Direction from Accident Site:</b>	349°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility:</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots / 21 knots	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	50°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.3 inches Hg	<b>Temperature/Dew Point:</b>	32°C / 4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Colorado Springs, CO (FLY )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Colorado Springs, CO (FLY )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	09:58 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	MEADOW LAKE FLY	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	6873 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	33	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6000 ft / 60 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	38.940555,-104.568611(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Benhoff, Kathryn
<b>Additional Participating Persons:</b>	Michael Anderson; FAA; Denver, CO
<b>Original Publish Date:</b>	March 18, 2019
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97853">https://data.nts.gov/Docket?ProjectID=97853</a>

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