



Aviation Investigation Final Report

Location: Scottsdale, Arizona Accident Number: GAA19CA225

Date & Time: April 20, 2019, 09:00 Local Registration: N6023V

Aircraft: Cessna 172 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that he landed the airplane right of the runway centerline and that it then continued to drift right. He added right rudder, and the airplane continued to the right. He said that he "over-corrected back." The airplane subsequently exited the runway to the right and impacted a runway sign. The pilot taxied to parking without further incident.

The airplane sustained substantial damage to the right elevator.

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

The airport's automated weather observation station reported that, about 7 minutes before the accident, the wind was from 150° at 6 knots. The pilot landed the airplane on runway 03.

Probable Cause and Findings

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

The pilot's improper rudder inputs and failure to maintain directional control during landing with a crosswind, which resulted in a runway excursion and impact with a runway sign.

Findings

Aircraft Directional control - Not attained/maintained

Aircraft Rudder control system - Incorrect use/operation

Personnel issues Aircraft control - Pilot

Personnel issuesUse of equip/system - PilotEnvironmental issuesTailwind - Effect on operation

Environmental issues Sign/marker - Effect on operation

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Factual Information

History of Flight

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

Pilot Information

Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	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:	October 1, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 7, 2017
Flight Time:	(Estimated) 210 hours (Total, all aircraft), 175 hours (Total, this make and model), 119 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N6023V
Model/Series:	172 S	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S10198
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 20, 2019 100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6665.5 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	Carefree Cessna Llc	Rated Power:	180 Horsepower
Operator:	Scottsdale Executive Flight Training LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSDL,1473 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	53°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	26°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Phoenix, AZ (IWA)	Type of Flight Plan Filed:	None
Destination:	Scottsdale, AZ (SDL)	Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	Class D

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Airport Information

Airport:	SCOTTSDALE SDL	Runway Surface Type:	Asphalt
Airport Elevation:	1510 ft msl	Runway Surface Condition:	Dry
Runway Used:	03	IFR Approach:	None
Runway Length/Width:	8249 ft / 100 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:	33.620277,-111.915275(est)

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Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Jack Major; FAA; Scottsdale, AZ
Original Publish Date:	November 6, 2019
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99321

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.

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