



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

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 issues	Use of equip/system - Pilot
Environmental issues	Tailwind - Effect on operation
Environmental issues	Sign/marker - Effect on operation

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)		

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:		Rated Power:	180 Horsepower
Operator:		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 /	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

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)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Jack Major; FAA; Scottsdale, AZ
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=99321

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](#).