



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Green Valley, Arizona	Accident Number:	GAA18CA161
Date & Time:	March 12, 2018, 14:00 Local	Registration:	N418DD
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 during the landing roll he felt as though the airplane was being pushed to the left side of the runway so he applied full right rudder and left aileron. The airplane exited the left side of the runway, and he added power to prevent the airplane's nose from colliding with a drainage culvert, but the airplane accelerated and impacted a tree.

The airplane sustained substantial damage to the leading edge of the left wing.

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

The pilot reported that the wind at the destination airport was from 90° at 10 knots, gusting to 15 knots. The airplane landed on runway 24.

The pilot landed to runway 24 because of the 2.9-percent uphill gradient.

Probable Cause and Findings

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

The pilot's failure to maintain directional control of the airplane during landing with a tailwind.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Environmental issues	Tailwind - Effect on operation
Environmental issues	Tree(s) - Contributed to outcome

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Attempted remediation/recovery

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	84,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 1, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 19, 2017
Flight Time:	(Estimated) 2993 hours (Total, all aircraft), 2624 hours (Total, this make and model), 2720 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N418DD
Model/Series:	172 L	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17260474
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 17, 2017 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1690 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-D2J
Registered Owner:		Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KRYN, 2418 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	20:45 Local	Direction from Accident Site:	351°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	25°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Tucson, AZ (RYN)	Type of Flight Plan Filed:	None
Destination:	Green Valley, AZ (14AZ)	Type of Clearance:	None
Departure Time:	13:40 Local	Type of Airspace:	Class G

Airport Information

Airport:	RUBY STAR AIRPARK 14AZ	Runway Surface Type:	Asphalt
Airport Elevation:	4011 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	4300 ft / 50 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:	31.909166,-111.120834(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Scott Hutson; FAA; Scottsdale, AZ
Original Publish Date:	August 27, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96860

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](#).