



Aviation Investigation Final Report

Location:	Silver City, New Mexico	Accident Number:	GAA18CA493
Date & Time:	August 15, 2018, 11:50 Local	Registration:	N1543Y
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The student pilot reported that, during a solo cross-country flight, while landing in a gusting crosswind, the airplane drifted off the runway to the left and spun 180°. The nose landing gear collapsed, and the right wing struck the ground.

The airplane sustained substantial damage to the right wing.

The automated weather observation station located on the airport reported that, about 5 minutes after the accident, the wind was from 140° at 10 knots. The airplane landed on runway 26.

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 while landing with a quartering tailwind.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot
Environmental issues	Tailwind - Effect on operation
Environmental issues	Crosswind - Effect on operation

Factual Information

History of Flight

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

Student pilot Information

Certificate:	Student	Age:	47,Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
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:	January 4, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1543Y
Model/Series:	172 C	Aircraft Category:	Airplane
Year of Manufacture:	1962	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17249243
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	O-300 SER
Registered Owner:		Rated Power:	145 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:	KSVC, 5446 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	17:55 Local	Direction from Accident Site:	273°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	31°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	Unknown
Destination:	Silver City, NM (SVC)	Type of Clearance:	Unknown
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	GRANT COUNTY SVC	Runway Surface Type:	Asphalt
Airport Elevation:	5445 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	6802 ft / 100 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	32.632499,-108.154167(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Gary Medina; FAA; Albuquerque, NM
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.nts.gov/Docket?ProjectID=98083

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](#).