



# Aviation Investigation Final Report

<b>Location:</b>	Chandler, Arizona	<b>Accident Number:</b>	GAA18CA256
<b>Date &amp; Time:</b>	May 5, 2018, 11:05 Local	<b>Registration:</b>	N76SC
<b>Aircraft:</b>	Cessna A185	<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 - Personal		

## Analysis

The pilot of the tailwheel-equipped airplane reported that, during final approach, the airplane required about 10° of crab to the right to maintain alignment with the runway. During the landing flare, he reduced power to idle, slowly applied rudder to align the fuselage with the runway centerline, and added right aileron to counter the crosswind. He added that, during the three-point landing, the airplane bounced. During the landing roll, he had full right aileron countering the wind when a "perceived" gust lifted the right wing. He held full right aileron, full aft yoke, and used the rudder to maintain alignment. Subsequently, about 40 knots groundspeed, the left main landing gear collapsed, and the left wing impacted the runway.

The airplane sustained substantial damage to the left wing and aileron.

The pilot reported that the left main landing gear detached from the airplane.

The automated weather observation system located at the accident airport reported that, about 20 minutes before the accident, the wind was from 110° at 8 knots, gusting to 19 knots. The same observation system reported that, about 10 minutes after the accident, the wind was from 150° at 13 knots, gusting to 21 knots. The pilot landed on runway 4R.

## 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 during landing in gusting tailwind conditions.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Gusts - Effect on operation
<b>Environmental issues</b>	Tailwind - Effect on operation

## Factual Information

### History of Flight

<b>Approach</b>	Other weather encounter
<b>Landing</b>	Abnormal runway contact
<b>Landing</b>	Loss of control on ground (Defining event)
<b>Landing</b>	Landing gear collapse
<b>Landing</b>	Part(s) separation from AC

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	76,Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Waiver time limited special	<b>Last FAA Medical Exam:</b>	June 16, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	June 15, 2017
<b>Flight Time:</b>	(Estimated) 6250 hours (Total, all aircraft), 26 hours (Total, this make and model), 6150 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N76SC
<b>Model/Series:</b>	A185 F	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1981	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18504206
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	January 18, 2018 Annual	<b>Certified Max Gross Wt.:</b>	3500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5188.1 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-D
<b>Registered Owner:</b>		<b>Rated Power:</b>	300 Horsepower
<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>	KCHD, 1243 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	18:15 Local	<b>Direction from Accident Site:</b>	174°
<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>	13 knots / 21 knots	<b>Turbulence Type Forecast/Actual:</b>	Convective / None
<b>Wind Direction:</b>	150°	<b>Turbulence Severity Forecast/Actual:</b>	Moderate / N/A
<b>Altimeter Setting:</b>	29.97 inches Hg	<b>Temperature/Dew Point:</b>	34°C / -4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	PALM SPRINGS, CA (PSP )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Chandler, AZ (CHD )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	09:00 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	CHANDLER MUNI CHD	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1243 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	04R	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4870 ft / 75 ft	<b>VFR Approach/Landing:</b>	Full stop;Straight-in;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<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>	33.271667,-111.813331(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Swenson, Eric
<b>Additional Participating Persons:</b>	Scott Hutson; FAA; Scottsdale, AZ
<b>Original Publish Date:</b>	October 24, 2018
<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=97185">https://data.nts.gov/Docket?ProjectID=97185</a>

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