



# Aviation Investigation Final Report

<b>Location:</b>	Clemson, South Carolina	<b>Accident Number:</b>	GAA16CA478
<b>Date &amp; Time:</b>	September 5, 2016, 12:30 Local	<b>Registration:</b>	N451SW
<b>Aircraft:</b>	Cessna 180	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

According to the pilot of the tailwheel-equipped airplane, prior to the takeoff roll he applied one notch of flaps and added power. He reported that just before rotation the airplane veered to the left and he could not keep the airplane on the runway. He reported that he aborted the takeoff, applied the brakes and the airplane exited the runway to the left and impacted a drainage culvert. The airplane sustained substantial damage to the left wing spar and ribs.

The pilot reported that there were no mechanical malfunctions or anomalies with any portion of the airplane during the preflight that would have prevented the normal flight operations.

The meteorological aerodrome report at the accident airport reported that the wind was out of 100 degrees true at 04 knots at the time of the accident. The pilot departed runway 25.

## Probable Cause and Findings

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

The pilot's loss of directional control during the takeoff roll, which resulted in a runway excursion.

## Findings

<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Tailwind - Awareness of condition

## Factual Information

### History of Flight

Takeoff	Abrupt maneuver
Takeoff	Loss of control on ground (Defining event)
Takeoff	Attempted remediation/recovery
Takeoff	Collision with terr/obj (non-CFIT)

### Pilot Information

Certificate:	Private	Age:	57,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:	December 3, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 1, 2014
Flight Time:	(Estimated) 286 hours (Total, all aircraft), 4 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 10 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>	N451SW
<b>Model/Series:</b>	180 C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1960	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	50885
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 14, 2016 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	2650 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3888.4 Hrs as of last inspection	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-470
<b>Registered Owner:</b>		<b>Rated Power:</b>	230 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>	KCEU, 891 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	15:54 Local	<b>Direction from Accident Site:</b>	212°
<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>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	100°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.29 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Clemson, SC (CEU)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	South Boston, VA (3VG9)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	OCONEE COUNTY RGNL CEU	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	890 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	25	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5000 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	34.672222,-82.885833(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	David W Martin; FAA; Columbia , SC
<b>Original Publish Date:</b>	January 18, 2017
<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=93997">https://data.nts.gov/Docket?ProjectID=93997</a>

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