



Aviation Investigation Final Report

Location:	Clemson, South Carolina	Accident Number:	GAA16CA478
Date & Time:	September 5, 2016, 12:30 Local	Registration:	N451SW
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	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

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	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

Aircraft Make:	Cessna	Registration:	N451SW
Model/Series:	180 C	Aircraft Category:	Airplane
Year of Manufacture:	1960	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	50885
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	July 14, 2016 Continuous airworthiness	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3888.4 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	O-470
Registered Owner:	On file	Rated Power:	230 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:	KCEU, 891 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:54 Local	Direction from Accident Site:	212°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.29 inches Hg	Temperature/Dew Point:	28°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Clemson, SC (CEU)	Type of Flight Plan Filed:	None
Destination:	South Boston, VA (3VG9)	Type of Clearance:	None
Departure Time:	12:30 Local	Type of Airspace:	Class G

Airport Information

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

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:	34.672222,-82.885833(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	David W Martin; FAA; Columbia , SC
Original Publish Date:	January 18, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93997

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).