



Aviation Investigation Final Report

Location:	Stillwater, Oklahoma	Accident Number:	CEN11LA579
Date & Time:	August 16, 2011, 18:45 Local	Registration:	N3316D
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During landing, the airplane touched down on the main wheels, and, while the tail was still in the air, the airplane started to weathervane and swerved hard to the right. The left wing struck the runway, and the airplane nosed over. A postaccident examination revealed no anomalies. According to the airport's weather reporting station, at the time of the landing, the wind shifted from 180 degrees at 3 knots to 330 degrees at 14 knots with gusts to 25 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's on-ground loss of control during the landing roll upon encountering a sudden wind shift and gust.

Findings

Personnel issues	Incorrect action performance - Pilot
Environmental issues	Sudden wind shift - Contributed to outcome
Environmental issues	Gusts - Contributed to outcome

Factual Information

History of Flight

Landing-landing roll	Other weather encounter
Landing-landing roll	Loss of control on ground
Landing-flare/touchdown	Nose over/nose down (Defining event)

On August 16, 2011, approximately 1845 central daylight time, a Cessna 180, N3316D, nosed over on landing at Stillwater Regional Airport (KSWO), Stillwater, Oklahoma. The private pilot was not injured. The airplane sustained substantial damage to both wings and the vertical stabilizer and rudder. The airplane was being operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, and no flight plan had been filed. The local flight originated from KSWO approximately 1730.

According to the pilot, he had made 2 full stall and 3 wheel landings. The control tower cleared him for the option to runway 17. He configured the airplane for a wheel landing. The airplane touched down and during the rollout, with the tail still in the air, the airplane started to weathervane with the wind and swerved hard to the right. The left wing struck the runway and the airplane nosed over. A postaccident examination revealed no anomalies.

According to the airport's weather reporting station, the wind had been from 180 degrees at 3 knots, then it shifted to 330 degrees at 14 knots, with gusts to 25 knots.

Pilot Information

Certificate:	Private	Age:	23, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
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:	January 16, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 16, 2011
Flight Time:	171 hours (Total, all aircraft), 17 hours (Total, this make and model), 109 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3316D
Model/Series:	180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32114
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-470-K
Registered Owner:	Russell M. Davis	Rated Power:	230 Horsepower
Operator:	David A. Roberts	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSWO,989 ft msl	Distance from Accident Site:	
Observation Time:	19:18 Local	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 25 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	31°C / 16°C
Precipitation and Obscuration:			
Departure Point:	Stillwater, OK (KSWO)	Type of Flight Plan Filed:	None
Destination:	Stillwater, OK (KSWO)	Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	Stillwater Regional KSWO	Runway Surface Type:	Asphalt
Airport Elevation:	989 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	6002 ft / 100 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:	36.157028,-97.083765(est)

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	William Witten; FAA Flight Standards District Office; Oklahoma City, OK
Original Publish Date:	February 16, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=81522

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