



Aviation Investigation Final Report

Location:	Fort Thomas, Arizona	Accident Number:	WPR11CA024
Date & Time:	October 22, 2010, 13:50 Local	Registration:	N5011X
Aircraft:	Cessna 185	Aircraft Damage:	Substantial
Defining Event:	Runway excursion	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that after flying for about 10 minutes he made a normal traffic pattern approach and touched down on the runway. The initial rollout was without incident; however, seconds after lowering the tailwheel onto the runway surface, the airplane encountered a sudden gust of wind from the right, which was akin to a dust devil, or strong whirlwind. At this point in time, the pilot had minimal rudder authority. Despite his efforts to maintain directional control, the airplane's left wingtip contacted the runway and the airplane rolled off the runway and into a berm. During the accident sequence the outboard portion of the left wing was bent and the right wing strut was bent. The pilot indicated that he had no warning of the presence of the dust devil swirl of air. No weather reporting services are available at the airport from which the pilot took off and landed. The pilot reported that the windssock had indicated that the wind speed was between 5 and 7 knots. The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The airplane's encounter with a dust devil during landing rollout, which resulted in the pilot not being able to maintain directional control.

Findings

Environmental issues	Dust devil/whirlwind - Effect on operation
Aircraft	Directional control - Attain/maintain not possible

Factual Information

History of Flight

Landing-landing roll	Other weather encounter
Landing-landing roll	Runway excursion (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	49, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	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:	December 2, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 30, 2010
Flight Time:	1107 hours (Total, all aircraft), 28 hours (Total, this make and model), 954 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5011X
Model/Series:	185	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	185-0033
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	July 1, 2010 Annual	Certified Max Gross Wt.:	3525 lbs
Time Since Last Inspection:	14 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2675 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520-D
Registered Owner:	On file	Rated Power:	300 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Few / 8000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ 10 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Thomas, AZ (5AZ9)	Type of Flight Plan Filed:	None
Destination:	Fort Thomas, AZ (5AZ9)	Type of Clearance:	None
Departure Time:	13:40 Local	Type of Airspace:	

Airport Information

Airport:	Regeneration 5AZ9	Runway Surface Type:	Dirt
Airport Elevation:	2750 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	3000 ft / 50 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	33.032775,-109.987503(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	Lori J Schwark; Federal Aviation Administration; Scottsdale, AZ
Original Publish Date:	March 16, 2011
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=77659

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