



Aviation Investigation Final Report

Location:	Queen Creek, Arizona	Accident Number:	WPR23LA171
Date & Time:	April 29, 2023, 09:30 Local	Registration:	N2207D
Aircraft:	Cessna 170B	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported encountering a dust devil (also called a whirlwind) during rollout following a full stall landing maneuver. The airplane did not have any aileron authority due to the low airspeed at the time of the encounter. The left wing subsequently impacted the ground and the airplane departed the runway. It continued to roll down a hill before flipping and coming to rest inverted, resulting in substantial damage to the empennage and both wings. The pilot reported there were no preimpact mechanical malfunctions or failures with the airframe or the engine 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 after landing, which resulted in a loss of directional control.

Findings

Aircraft	Directional control - Attain/maintain not possible
Environmental issues	Dust devil/whirlwind - Ability to respond/compensate

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
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Pilot Information

Certificate:	Private	Age:	50
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Unknown	Last FAA Medical Exam:	April 20, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 26, 2022
Flight Time:	1000 hours (Total, all aircraft), 200 hours (Total, this make and model), 950 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2207D
Model/Series:	170B	Aircraft Category:	Airplane
Year of Manufacture:	1952	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20359
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	April 16, 2022 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6099 Hrs	Engine Manufacturer:	Continental
ELT:	C91 installed, not activated	Engine Model/Series:	C-145-2
Registered Owner:	On file	Rated Power:	145 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:	KIWA,1382 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	09:53 Local	Direction from Accident Site:	336°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	30°C / -6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Queen Creek, AZ (5AZ3)	Type of Flight Plan Filed:	None
Destination:	Queen Creek, AZ	Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Pegasus Airpark 5AZ3	Runway Surface Type:	Asphalt
Airport Elevation:	1452 ft msl	Runway Surface Condition:	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	5124 ft / 80 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.208725,-111.61724(est)

Administrative Information

Investigator In Charge (IIC):	Basti, Paymaun
Additional Participating Persons:	Dale Seitz; FAA; Scottsdale, AZ
Original Publish Date:	October 20, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=107166

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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](#).