



National Transportation Safety Board Aviation Accident Final Report

Location:	Colorado Springs, CO	Accident Number:	CEN16LA348
Date & Time:	08/25/2016, 1300 MDT	Registration:	N66898
Aircraft:	PIPER PA 18-180	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Glider Tow		

Analysis

The pilot had completed a local glider tow operation and was landing at an airfield at the base of the mountains. He indicated that, after touchdown and the landing roll, a "large gust of wind" came from the right side of the airplane and lifted the right wing. The pilot stated that, to regain directional control, he applied rudder, lowered the tailwheel, and applied pressure to both wheel brakes. He indicated that the left brake grabbed "more efficiently" than the right brake, which caused the airplane to exit the runway and ground loop. The right wing contacted the ground. A postaccident examination of the tailwheel revealed no mechanical malfunctions or failures that would have precluded normal operation. Although the weather information for the airfield shortly before the accident did not note wind gusts, given the pilot's statement and the surrounding mountainous terrain, it is likely that the pilot lost directional control after encountering a wind gust during the landing roll.

Probable Cause and Findings

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

The pilot's failure to maintain directional control after encountering a wind gust during the landing roll, which resulted in a ground loop.

Findings

Aircraft	Directional control - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)
Environmental issues	Gusts - Effect on operation (Cause)

Factual Information

On August 25, 2016, about 1300 mountain daylight time (MDT), a Piper PA-18-180 airplane, N66898, departed the left side of the runway on landing at United States Air Force Academy Airfield (AFF), Colorado Springs, Colorado. The airplane sustained substantial damage to the right wing. The airline transport rated pilot, the sole occupant, was not injured. The airplane was registered to Big Q Aviation Corporation and operated under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a glider towing operation. Visual meteorological conditions prevailed for the flight, and no flight plan was filed.

The pilot reported that he just completed a local glider towing operation and was landing on runway 16L. After a routine touchdown and roll out, there was a "large gust of wind" from the right side that lifted the right wing of the airplane. To "regain directional control," the pilot applied rudder, slowly lowered the tailwheel to the ground, and applied pressure to both wheel brakes. He stated that when he applied both wheel brakes, the left brake grabbed "more efficiently" than the right brake and the airplane turned to left and exited the runway. The airplane rotated counterclockwise and the right wheel dug into the soft dirt, and subsequently, the right wing contacted the ground.

The pilot stated that when he began his shift that day, he was advised there "were issues with the steering of the tailwheel." An inspection of the tailwheel by the responding Federal Aviation Administration inspector noted the tailwheel functioned properly.

History of Flight

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

Certificate:	Commercial	Age:	65, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	09/10/2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	04/16/2016
Flight Time:	(Estimated) 29000 hours (Total, all aircraft), 65 hours (Total, this make and model), 23000 hours (Pilot In Command, all aircraft), 65 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N66898
Model/Series:	PA 18-180	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	18-7509091
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360 SERIES
Registered Owner:	Big Q Aviation	Rated Power:	180 hp
Operator:	Big Q Aviation	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AFF	Distance from Accident Site:	
Observation Time:	1858 UTC	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.29 inches Hg	Temperature/Dew Point:	19° C / 8° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Colorado Springs, CO (AFF)	Type of Flight Plan Filed:	None
Destination:	Colorado Springs, CO (AFF)	Type of Clearance:	VFR
Departure Time:	1230 MDT	Type of Airspace:	

Airport Information

Airport:	USAF ACADEMY AFLD (AFF)	Runway Surface Type:	Asphalt
Airport Elevation:	6572 ft	Runway Surface Condition:	Dry
Runway Used:	16L	IFR Approach:	None
Runway Length/Width:	3534 ft / 75 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.973333, -104.820000 (est)

Administrative Information

Investigator In Charge (IIC):	Courtney Liedler	Report Date:	08/03/2020
Additional Participating Persons:	David C Longan; FAA; Denver, CO		
Publish Date:	08/03/2020		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93944		

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