



Aviation Investigation Final Report

Location:	Dayton, Ohio	Accident Number:	GAA18CA426
Date & Time:	July 14, 2018, 14:15 Local	Registration:	N7492K
Aircraft:	Piper PA 20	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the tailwheel-equipped airplane reported that, during the landing flare, he felt a wind shift push the airplane left of centerline. He applied opposite rudder, but the airplane touched down "skewed" to the right. The airplane then exited the runway to the right and ground looped on an adjacent field.

The airplane sustained substantial damage to the left wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported that the wind was variable at 6 knots at the accident site. He added that, during the short final leg of the approach, the wind was from about 210° and that, during the landing flare, the wind shifted to from about 280°. The airport's automated weather observation station reported that, about 20 minutes before the accident, the wind was from 310° at 9 knots and that, about 30 minutes after the accident, the wind was from 180° at 8 knots. The pilot landed the airplane on runway 20.

Probable Cause and Findings

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

The pilot's inadequate compensation for variable crosswind conditions during landing, which resulted in a runway excursion.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Crosswind - Response/compensation
Environmental issues	Variable wind - Response/compensation
Aircraft	Directional control - Not attained/maintained

Factual Information

History of Flight

Landing-flare/touchdown	Other weather encounter
Landing-flare/touchdown	Loss of control on ground (Defining event)
Landing-flare/touchdown	Attempted remediation/recovery
Landing-flare/touchdown	Runway excursion

Pilot Information

Certificate:	Private	Age:	31, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
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:	March 16, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 19, 2018
Flight Time:	(Estimated) 82 hours (Total, all aircraft), 109 hours (Total, this make and model), 55 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7492K
Model/Series:	PA 20 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	1950	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-407
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	July 13, 2017 Annual	Certified Max Gross Wt.:	1799 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-C1
Registered Owner:	Gateway Tailwheel Club LLC	Rated Power:	108 Horsepower
Operator:	Gateway Tailwheel Club LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMGY,962 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	349°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	32°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Dayton, OH (MGY)	Type of Flight Plan Filed:	None
Destination:	Dayton, OH (MGY)	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Dayton-Wright Brothers MGY	Runway Surface Type:	Asphalt
Airport Elevation:	956 ft msl	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Full stop;Straight-in;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.58889,-84.224723(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Mike Puehler; FAA; Cincinnati, OH
Original Publish Date:	September 26, 2019
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=97805

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