National Transportation Safety Board
Aviation Accident Final Report

Location:	Nashville, Tennessee	**Accident Number:**	GAA17CA105
Date & Time:	December 29, 2016, 13:45 Local	**Registration:**	N301BK
Aircraft:	Piper PA 46	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control on ground	**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, during the landing roll, the airplane "began to drift sharply to the left." The pilot reported that, although there were no wind gusts reported, he felt as though a wind gust was pushing the airplane to the left. He attempted to maintain directional control with rudder pedal application, and he applied full right aileron. The airplane continued to drift to the left, and the pilot attempted to abort the landing by applying full throttle and 25° of flaps. He reported that the airplane continued to drift to the left and that he was not able to achieve sufficient airspeed to rotate. The airplane exited the runway, the pilot pulled the throttle to idle, and he applied the brakes to avoid obstacles. However, the airplane impacted the runway and taxiway signage and came to rest in a drainage culvert. The airplane sustained substantial damage to both wings.

The published METAR for the accident airport reported that the wind was from 290° at 15 knots, and wind gusts exceeded 22 knots 1 hour before and 1 hour after the accident. The pilot landed the airplane on runway 20. The maximum demonstrated crosswind component for the airplane was 17 knots.

The pilot reported that there were no preaccident 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 pilot's loss of directional control during the aborted landing in gusting crosswind conditions, which resulted in a runway excursion.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Aircraft	Maximum crosswind component - Capability exceeded
Environmental issues	Gusts - Effect on operation
Environmental issues	Crosswind - Effect on operation
Environmental issues	Sign/marker - Contributed to outcome

Factual Information

History of Flight

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

Pilot Information

Certificate:	Private	**Age:**	55,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	April 1, 2016
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 9, 2016
Flight Time:	(Estimated) 1550.5 hours (Total, all aircraft), 1092.9 hours (Total, this make and model), 1395.1 hours (Pilot In Command, all aircraft), 86 hours (Last 90 days, all aircraft), 27.2 hours (Last 30 days, all aircraft), 3.9 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N301BK
Model/Series:	PA 46 350P	**Aircraft Category:**	Airplane
Year of Manufacture:	2007	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	4636407
Landing Gear Type:	Tricycle	**Seats:**	6
Date/Type of Last Inspection:	December 9, 2016 Annual	**Certified Max Gross Wt.:**	4299 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	1332.4 Hrs as of last inspection	**Engine Manufacturer:**	LYCOMING
ELT:	C91A installed, not activated	**Engine Model/Series:**	TIO-540-AE2A
Registered Owner:		**Rated Power:**	350 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KBNA,605 ft msl	**Distance from Accident Site:**	10 Nautical Miles
Observation Time:	19:53 Local	**Direction from Accident Site:**	112°
Lowest Cloud Condition:	Few / 6000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	15 knots / 22 knots	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.12 inches Hg	**Temperature/Dew Point:**	11°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MEMPHIS, TN (M01)	**Type of Flight Plan Filed:**	IFR
Destination:	NASHVILLE, TN (JWN)	**Type of Clearance:**	None
Departure Time:	12:20 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	JOHN C TUNE JWN	**Runway Surface Type:**	Asphalt
Airport Elevation:	501 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	20	**IFR Approach:**	None
Runway Length/Width:	6001 ft / 100 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:**	36.183055,-86.88639(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Kenneth Owens; FAA; Nasheville, TN
Original Publish Date:	July 20, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=94557

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