



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Oregon, WI	<b>Accident Number:</b>	GAA18CA432
<b>Date &amp; Time:</b>	07/19/2018, 1400 CDT	<b>Registration:</b>	N9267H
<b>Aircraft:</b>	Piper PA28	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Runway excursion	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

According to the pilot receiving instruction, during instrument training, she and the flight instructor noted that the left brake was less effective than the right brake during landing. Following the training, the pilot receiving instruction returned to her home airport, and during landing on the wet, grass runway, she executed a go-around because there was insufficient runway to safely stop the airplane. During the second landing, the airplane touched down with about two-thirds of the 2,600-ft-long runway remaining. During the landing roll, the pilot receiving instruction ensured that the throttle was in the idle position, and she retracted the flaps and applied aft pressure to the yoke. She applied the foot brakes and then the hand brake and again noted that the left brake was less effective than the right brake, and the airplane continued to slide on the wet grass. The airplane overran the runway and impacted a drainage culvert. Subsequently, the right wing struck a barn, and the left wing struck a trailer.

The airplane sustained substantial damage to both wing's spars and ribs.

According to the Federal Aviation Administration aviation safety inspector who examined the airplane, there was a pool of hydraulic fluid on the ground that appeared to be consistent with an O-ring failure or displacement. He affirmed that, although degraded, the brake would still have been functional but would have required more input by the pilot to build pressure within the brake line.

## Probable Cause and Findings

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

The pilot's improper decision to take off with a known brake malfunction, which resulted in a collision with a barn during landing on a wet runway.

## Findings

<b>Aircraft</b>	Brake - Malfunction (Cause)
<b>Personnel issues</b>	Decision making/judgment - Pilot (Cause)
<b>Environmental issues</b>	Residence/building - Contributed to outcome

## Factual Information

### History of Flight

Landing-landing roll	Collision with terr/obj (non-CFIT) Runway excursion (Defining event)
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### Pilot Information

Certificate:	Private	Age:	22, Female
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	07/02/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	08/18/2017
Flight Time:	(Estimated) 191 hours (Total, all aircraft), 138 hours (Total, this make and model), 136 hours (Pilot In Command, all aircraft), 48.4 hours (Last 90 days, all aircraft), 10.7 hours (Last 30 days, all aircraft), 1.9 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9267H
Model/Series:	PA28 181	Aircraft Category:	Airplane
Year of Manufacture:	1996	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2843027
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	04/01/2018, Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3394.7 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	O-360-A1D
Registered Owner:	Peterson Aviation Llc	Rated Power:	180 hp
Operator:	Peterson Aviation Llc	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KMSN, 866 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	1853 UTC	Direction from Accident Site:	14°
Lowest Cloud Condition:		Visibility	10 Miles
Lowest Ceiling:	Broken / 11000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.91 inches Hg	Temperature/Dew Point:	24° C / 14° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Watertown, WI (RYV)	Type of Flight Plan Filed:	None
Destination:	Watertown, WI (RYV)	Type of Clearance:	None
Departure Time:	CDT	Type of Airspace:	Class G

## Airport Information

Airport:	Peterson Field (15WI)	Runway Surface Type:	Grass/turf
Airport Elevation:	978 ft	Runway Surface Condition:	Wet
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	2600 ft / 150 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:	42.927500, -89.418056 (est)

## Administrative Information

Investigator In Charge (IIC):	Michael A Hicks	Report Date:	09/26/2019
Additional Participating Persons:	Peter Hupfer; FAA; Milwaukee, WI		
Publish Date:	09/26/2019		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=97852">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=97852</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).