



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Auburn, Indiana	<b>Accident Number:</b>	GAA17CA336
<b>Date &amp; Time:</b>	June 8, 2017, 13:00 Local	<b>Registration:</b>	N4543R
<b>Aircraft:</b>	Piper PA 28	<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		

## Analysis

The pilot reported that he attempted to take off in the airplane from his turf airstrip. He attempted to force the airplane into the air, and after a brief ascent, the airplane descended to the ground and touched down hard. The pilot continued the sequence of lifting off and then touching down again until he determined that he would not be able to clear the trees at the end of the runway. He made a left turn, and the airplane traveled through two fields, hit a ditch, and collided with a barn. The airplane sustained substantial damage to both wings.

Per the National Transportation Safety Board Pilot Aircraft Accident Report, the pilot reported that the accident could have been prevented if he had aborted the takeoff after the first bounce.

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 decision to continue to attempt to take off despite the airplane's inability to attain a positive climb rate, which resulted in little runway remaining, and his subsequent decision to turn off the runway, which resulted in a collision with a barn.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Aircraft</b>	Climb rate - Not attained/maintained
<b>Environmental issues</b>	Residence/building - Effect on operation

## Factual Information

### History of Flight

<b>Takeoff</b>	Aerodynamic stall/spin
<b>Takeoff</b>	Abnormal runway contact
<b>Takeoff</b>	Runway excursion (Defining event)
<b>Takeoff-rejected takeoff</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	74, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	July 29, 2016
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	January 21, 2017
<b>Flight Time:</b>	(Estimated) 271 hours (Total, all aircraft), 77 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N4543R
<b>Model/Series:</b>	PA 28 140	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1965	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28-21248
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	September 5, 2016 Annual	<b>Certified Max Gross Wt.:</b>	2150 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2871.8 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C91 installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-320-E2A
<b>Registered Owner:</b>		<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	GWB	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	16:55 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	70°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.02 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Auburn, IN (PVT )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Auburn, IN (22IN)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Mooney Field 22IN	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	865 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2000 ft / 50 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	41.207221,-85.003334(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Ken Hughes; FAA; Grand Rapids, IN
<b>Original Publish Date:</b>	November 14, 2017
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=95360">https://data.nts.gov/Docket?ProjectID=95360</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](#).