



# Aviation Investigation Final Report

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<b>Location:</b>	Springfield, Ohio	<b>Accident Number:</b>	GAA17CA047
<b>Date &amp; Time:</b>	October 15, 2016, 11:00 Local	<b>Registration:</b>	N55378
<b>Aircraft:</b>	Piper PA 34	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Hard landing	<b>Injuries:</b>	5 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot reported that he landed with extra power to compensate for gusting wind. He added that, after the main landing gear touched down, the airplane encountered a wind gust and ballooned up about 50 to 100 ft. The pilot initiated a go-around but was unsuccessful. The airplane impacted the runway in a flat attitude, and the nose landing gear was pushed/driven through the top of the cowling.

The airplane sustained substantial damage to the fuselage.

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 inadequate compensation for gusting wind during the landing flare, which resulted in a hard landing.

## Findings

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<b>Aircraft</b>	Landing flare - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Gusts - Response/compensation

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Other weather encounter
<b>Landing</b>	Attempted remediation/recovery
<b>Landing</b>	Hard landing (Defining event)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	52, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	May 3, 2012
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 30, 2015
<b>Flight Time:</b>	(Estimated) 1000 hours (Total, all aircraft), 500 hours (Total, this make and model), 998 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Female
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N55378
<b>Model/Series:</b>	PA 34 200	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1973	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-7350207
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	August 1, 2016 Annual	<b>Certified Max Gross Wt.:</b>	4200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	4168.1 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	LIO-360-C1E6
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	200 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>	KSGH,1051 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	14:56 Local	<b>Direction from Accident Site:</b>	74°
<b>Lowest Cloud Condition:</b>	Few / 6000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.21 inches Hg	<b>Temperature/Dew Point:</b>	18°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	MUNCIE, IN (MIE )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Springfield, OH (SGH )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	SPRINGFIELD-BECKLEY MUNI SGH	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1051 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	24	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	9009 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	4 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	5 None	<b>Latitude, Longitude:</b>	39.83889,-83.845001(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Vanover, Jackie
<b>Additional Participating Persons:</b>	Benjamin J Roller; FAA; Cincinnati, OH
<b>Original Publish Date:</b>	April 10, 2017
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<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=94284">https://data.nts.gov/Docket?ProjectID=94284</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).