



# Aviation Investigation Final Report

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<b>Location:</b>	Allentown, Pennsylvania	<b>Accident Number:</b>	ERA24LA132
<b>Date &amp; Time:</b>	March 8, 2024, 09:46 Local	<b>Registration:</b>	N3023K
<b>Aircraft:</b>	Piper PA-28RT-201	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Hard landing	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot reported that he was on short final approach for landing when he encountered a windshear. The airplane started to sink toward the runway. He added power; however, it was too late due to his altitude. Upon touchdown, the airplane landed hard, breaking two runway threshold lights from their mounts. An examination of the wreckage by a Federal Aviation Administration inspector revealed substantial damage to the right wing. The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation. A review of the airport surface weather observations revealed no reports of wind gusts or variable wind before or after the accident.

## Probable Cause and Findings

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

The pilot's failure to maintain a proper descent rate during the final approach, resulting in a hard landing and collision with a runway edge light.

## Findings

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**Personnel issues**

Aircraft control - Pilot

**Aircraft**

Descent rate - Not attained/maintained

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Hard landing (Defining event)
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### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	43, 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>	Airplane single-engine	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	October 13, 2020
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 11, 2023
<b>Flight Time:</b>	915 hours (Total, all aircraft), 96 hours (Total, this make and model), 736 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N3023K
<b>Model/Series:</b>	PA-28RT-201	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1978	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28R-7918022
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	January 26, 2024 Annual	<b>Certified Max Gross Wt.:</b>	2750 lbs
<b>Time Since Last Inspection:</b>	3 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5815 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-C1C6
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	200
<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>	KABE,385 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	09:51 Local	<b>Direction from Accident Site:</b>	248°
<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>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	80°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.3 inches Hg	<b>Temperature/Dew Point:</b>	7°C / -1°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Caldwell, NJ (CDW)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Allentown, PA	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	09:00 Local	<b>Type of Airspace:</b>	Class C

## Airport Information

<b>Airport:</b>	Lehigh Valley International ABE	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	393 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	6	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	7599 ft / 150 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	40.652363,-75.440406

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Ralph
<b>Additional Participating Persons:</b>	Michael Conte; FAA/FSDO; Allentown, PA
<b>Original Publish Date:</b>	April 12, 2024
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=193899">https://data.ntsb.gov/Docket?ProjectID=193899</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](#).