



Aviation Investigation Final Report

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

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

Personnel issues	Aircraft control - Pilot
Aircraft	Descent rate - Not attained/maintained

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	43,Male
Airplane Rating(s):	Single-engine land; Multi-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):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	October 13, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 11, 2023
Flight Time:	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

Aircraft Make:	Piper	Registration:	N3023K
Model/Series:	PA-28RT-201	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28R-7918022
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	January 26, 2024 Annual	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5815 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-C1C6
Registered Owner:	On file	Rated Power:	200
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KABE,385 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:51 Local	Direction from Accident Site:	248°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.3 inches Hg	Temperature/Dew Point:	7°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Caldwell, NJ (CDW)	Type of Flight Plan Filed:	None
Destination:	Allentown, PA	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class C

Airport Information

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

Wreckage and Impact Information

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

Administrative Information

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

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](#).