



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	West Lafayette, Indiana	Accident Number:	CEN23LA384
Date & Time:	August 26, 2023, 13:42 Local	Registration:	N767PA
Aircraft:	Piper PA-44-180	Aircraft Damage:	Substantial
Defining Event:	Birdstrike	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that during the initial climb, about 600 ft above ground level, his student observed a bird under the nose of the airplane. The flight instructor took control of the airplane and maneuvered the airplane in an attempt to avoid the bird. The bird went over the top of the airplane and struck the vertical stabilizer, which resulted in substantial damage. The flight instructor landed the airplane without further incident.

Probable Cause and Findings

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

An in-flight collision with a bird during initial climb.

Findings

Environmental issues	Animal(s)/bird(s) - Ability to respond/compensate
Environmental issues	Animal(s)/bird(s) - Effect on equipment

Factual Information

History of Flight

Initial climb	Birdstrike (Defining event)
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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	23, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	February 8, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	818 hours (Total, all aircraft), 62 hours (Total, this make and model), 767 hours (Pilot In Command, all aircraft), 242 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Commercial	Age:	26, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 9, 2021
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	283 hours (Total, all aircraft), 12 hours (Total, this make and model), 271 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N767PA
Model/Series:	PA-44-180	Aircraft Category:	Airplane
Year of Manufacture:	2002	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4496114
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 22, 2023 100 hour	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	7442.1 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360 SERIES
Registered Owner:	PURDUE AVIATION LLC	Rated Power:	180 Horsepower
Operator:	PURDUE AVIATION LLC	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLAF, 606 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 1800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	27°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lafayette, IN (LAF)	Type of Flight Plan Filed:	IFR
Destination:	Lafayette, IN (LAF)	Type of Clearance:	IFR
Departure Time:	13:42 Local	Type of Airspace:	Class D

Airport Information

Airport:	PURDUE UNIVERSITY LAF	Runway Surface Type:	
Airport Elevation:	605 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	Visual
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	40.412257,-86.936189(est)

Administrative Information

Investigator In Charge (IIC):	Brown, Zane
Additional Participating Persons:	Gary Brown ; FAA FSDO; Indianapolis , IN
Original Publish Date:	February 20, 2024
Last Revision Date:	February 22, 2024
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192952

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](#).