



# **Aviation Investigation Final Report**

Location: Friendly, Maryland Accident Number: ERA21LA015

Date & Time: October 10, 2020, 11:00 Local Registration: N155TE

Aircraft: Piper PA24 Aircraft Damage: Substantial

**Defining Event:** Collision during takeoff/land **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

#### **Analysis**

During the instructional flight, the pilot performed maneuvers and procedures with the flight instructor to prepare the pilot for an instrument proficiency check. After completing the instructional portion of the flight, the pilot flew the airplane back to its home base. During the final approach to the runway, the airspeed decayed from the target speed of 85 mph to 80 mph, and the pilot lowered the nose to correct. During the landing flare, the descent rate increased, and the pilot added power to arrest the descent rate. The airplane bounced after touchdown, and the pilot attempted to abort the landing. The flight instructor "felt" the airplane settling towards the ground again and applied aft elevator to cushion what he thought would be a hard impact. The pilot said, "you are fighting me" and the flight instructor released the controls. The airplane then continued in a nose high pitch attitude off the left side of the runaway and impacted a parked airplane before eventually coming to a stop. The airplane sustained substantial damage to the outboard right wing, right aileron, and right wing spar. Both pilots 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 failure to maintain control of the airplane during an aborted landing and the flight instructor's inadequate remedial action.

# **Findings**

Personnel issues Incomplete action - Instructor/check pilot

Aircraft Directional control - Not attained/maintained

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# **Factual Information**

# **History of Flight**

Approach-VFR pattern final	Attempted remediation/recovery
Landing-flare/touchdown	Abnormal runway contact
Landing-aborted after touchdown	Collision during takeoff/land (Defining event)

### Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	72,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	BasicMed None	Last FAA Medical Exam:	August 18, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 27, 2019
Flight Time:	4500 hours (Total, all aircraft), 2 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### **Pilot Information**

Certificate:	Private	Age:	46,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Unknown	Last FAA Medical Exam:	August 6, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 353 hours (Total, all aircraft)		

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# **Aircraft and Owner/Operator Information**

Aircraft Make:	Piper	Registration:	N155TE
Model/Series:	PA24 250	Aircraft Category:	Airplane
Year of Manufacture:	1961	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-2930
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	August 7, 2020 Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:	3.4 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2839 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	O-540-A1D5
Registered Owner:	On file	Rated Power:	250 Horsepower
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:	ADW,282 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	10:56 Local	Direction from Accident Site:	45°
<b>Lowest Cloud Condition:</b>	Few / 13000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	19°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Indian Head, MD (2W5)	Type of Flight Plan Filed:	VFR
Destination:	Friendly, MD	Type of Clearance:	VFR
Departure Time:	10:50 Local	Type of Airspace:	Class G

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# **Airport Information**

Airport:	Potomac Airfield VKX	Runway Surface Type:	Asphalt
Airport Elevation:	118 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	2600 ft / 40 ft	VFR Approach/Landing:	Traffic pattern

# Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.748675,-76.955791(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Brazy, Douglass
Additional Participating Persons:	Jason Lyuke; FAA/FSDO; Washington, DC
Original Publish Date:	September 20, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=102126

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.

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