



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Martinsville, Indiana	Accident Number:	CEN23LA119
Date & Time:	February 23, 2023, 11:48 Local	Registration:	N1700T
Aircraft:	Piper PA-28-140	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot attempted a short field takeoff from a grass airstrip at the time of the accident. During the airplane's takeoff roll, the passenger, who was seated in the left pilot seat, said that the windsock was "inconsistent." At an airplane speed of 45-50 mph, the pilot applied control back pressure to ease the airplane into ground effect. The airplane became airborne but quickly settled back onto the runway and became airborne again. The airplane airspeed did not increase and remained at 40 mph. The pilot asked the passenger to continue to read the airspeed indications as the pilot realized that they were running out of remaining runway. The pilot reduced some of the control back pressure and pushed the airplane nose down out of fear of an aerodynamic stall and in hopes of increasing airspeed. The airplane descended and impacted the ground about 100 yds south of the departure runway and nosed over. The airplane sustained substantial damage that included damage to the right wing, aileron, and empennage. The pilot stated there was no mechanical malfunction or failure of the airplane that would have precluded normal operations. Recorded weather observations, north and northeast and 15-16 nm from the airport, indicated a quartering tailwind relative to the runway direction prevailed at the time of the accident.

Probable Cause and Findings

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

The pilot's inadequate weather evaluation and failure to abort the takeoff that resulted in an impact with terrain.

Findings

Personnel issues	Decision making/judgment - Pilot
Personnel issues	Lack of action - Pilot

Factual Information

History of Flight

Takeoff	Other weather encounter
Initial climb	Collision with terr/obj (non-CFIT) (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	37,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 10, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 28, 2022
Flight Time:	756 hours (Total, all aircraft), 365 hours (Total, this make and model), 658 hours (Pilot In Command, all aircraft), 63 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:	Age:	Male
Airplane Rating(s):	Seat Occupied:	Left
Other Aircraft Rating(s):	Restraint Used:	4-point
Instrument Rating(s):	Second Pilot Present:	No
Instructor Rating(s):	Toxicology Performed:	
Medical Certification:	Last FAA Medical Exam:	
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N1700T
Model/Series:	PA-28-140	Aircraft Category:	Airplane
Year of Manufacture:	1970	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-7125017
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 12, 2022 Annual	Certified Max Gross Wt.:	2440 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3179 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-D2A
Registered Owner:	On file	Rated Power:	160
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:	IND,796 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	10:54 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 1800 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	19 knots / 27 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	17°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Martinsville, IN	Type of Flight Plan Filed:	None
Destination:	Danville, IN (2R2)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Twelve Oaks Airport II87	Runway Surface Type:	Grass/turf
Airport Elevation:	715 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2140 ft / 35 ft	VFR Approach/Landing:	None

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:	39.451437,-86.328325(est)

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Joshua Wade; Federal Aviation Administration, Indianapolis FSDO; Indianapolis, IN
Original Publish Date:	April 20, 2023
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=106770

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](#).