



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Elbert, Colorado	<b>Accident Number:</b>	CEN23LA277
<b>Date &amp; Time:</b>	June 26, 2023, 11:00 Local	<b>Registration:</b>	N23161
<b>Aircraft:</b>	Piper J3C-50	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, as the tail lifted during takeoff, the airplane veered left. He attempted to correct with full right rudder and full brakes. However, the airplane subsequently nosed over resulting in substantial damage to the fuselage, lift struts, rudder, and vertical stabilizer.

The pilot reported that there were no preaccident mechanical malfunctions or anomalies with the airplane that would have precluded normal operation.

At about the time of the accident, wind was from 180° at 5 knots. The pilot decided to depart on runway 35 due to the prevailing airport traffic. He stated that departing with “more favorable wind conditions” may have prevented the accident.

## Probable Cause and Findings

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

The pilot's loss of directional control during takeoff and subsequent excessive use of brakes which resulted in a nose-over. Contributing to the accident was his decision to takeoff downwind.

## Findings

<b>Aircraft</b>	Braking capability - Incorrect use/operation
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Tailwind - Contributed to outcome

## Factual Information

### History of Flight

<b>Takeoff</b>	Loss of control on ground
<b>Takeoff-rejected takeoff</b>	Nose over/nose down (Defining event)

### Pilot Information

<b>Certificate:</b>	Sport Pilot	<b>Age:</b>	65, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Sport pilot None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	September 27, 2022
<b>Flight Time:</b>	409.4 hours (Total, all aircraft), 409.4 hours (Total, this make and model), 409.4 hours (Pilot In Command, all aircraft), 9.3 hours (Last 90 days, all aircraft), 1.5 hours (Last 30 days, all aircraft), 0.5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N23161
<b>Model/Series:</b>	J3C-50	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1939	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	2943
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 26, 2023 Annual	<b>Certified Max Gross Wt.:</b>	1170 lbs
<b>Time Since Last Inspection:</b>	0.2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1234.2 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	C126 installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	C85-8F
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	85 Horsepower
<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>	KMNH,7060 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	10:55 Local	<b>Direction from Accident Site:</b>	143°
<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>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.19 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 5°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Parker, CO (IC08)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Elbert, CO	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	09:00 Local	<b>Type of Airspace:</b>	Class G;Unknown

## Airport Information

<b>Airport:</b>	Kelly Air Park CO15	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	7040 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	35	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3500 ft / 36 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	39.224185,-104.64007

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Brown, Zane
<b>Additional Participating Persons:</b>	Felix Mendoza III; FAA Flight Standards; Denver, CO
<b>Original Publish Date:</b>	November 9, 2023
<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.nts.gov/Docket?ProjectID=192541">https://data.nts.gov/Docket?ProjectID=192541</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](#).