



Aviation Investigation Final Report

Location:	Elbert, Colorado	Accident Number:	CEN23LA277
Date & Time:	June 26, 2023, 11:00 Local	Registration:	N23161
Aircraft:	Piper J3C-50	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	1 Minor
Flight Conducted Under:	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

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

Factual Information

History of Flight

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

Pilot Information

Certificate:	Sport Pilot	Age:	65, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Sport pilot None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 27, 2022
Flight Time:	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

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

Airport Information

Airport:	Kelly Air Park C015	Runway Surface Type:	Asphalt
Airport Elevation:	7040 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	3500 ft / 36 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Brown, Zane
Additional Participating Persons:	Felix Mendoza III; FAA Flight Standards; Denver, CO
Original Publish Date:	November 9, 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=192541

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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](#).