



Aviation Investigation Final Report

Location:	Limon, Colorado	Accident Number:	CEN23LA102
Date & Time:	February 1, 2023, 16:00 Local	Registration:	N5163H
Aircraft:	Cessna 172S	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The student pilot reported that he was performing touch-and-go landings. When he added power to take off, he lost control of the airplane as it veered left. He was unable to regain control before the airplane impacted a snowbank. The airplane flipped over and came to rest inverted on the side of the runway, which resulted in substantial damage to the wings, fuselage, and vertical stabilizer. The pilot reported there were no mechanical malfunctions or failures that would have precluded normal operations. At the time of the accident, the pilot was landing on Runway 34 with wind from 350° at 4 knots.

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 directional control during the takeoff roll.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event)
Takeoff	Runway excursion
Takeoff	Nose over/nose down

Pilot Information

Certificate:	Student	Age:	23,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	June 1, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	99 hours (Total, all aircraft), 99 hours (Total, this make and model), 14.1 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5163H
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S8933
Landing Gear Type:		Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	EDB Air Inc	Rated Power:	
Operator:	EDB Air Inc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLIC, 5358 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:55 Local	Direction from Accident Site:	331°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	-3°C / -9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Limon, CO	Type of Flight Plan Filed:	None
Destination:	Limon, CO	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Limon Municipal KLIC	Runway Surface Type:	Asphalt
Airport Elevation:	5374 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	Unknown
Runway Length/Width:	4700 ft / 60 ft	VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.269236,-103.66428

Administrative Information

Investigator In Charge (IIC):	Abraham, Laura
Additional Participating Persons:	Nelson Wolfmeier; FAA; Denver, CO
Original Publish Date:	June 6, 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=106688

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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](#).