



Aviation Investigation Final Report

Location:	Lancaster, New York	Accident Number:	ERA22LA228
Date & Time:	May 14, 2022, 14:10 Local	Registration:	N20459
Aircraft:	Cessna 172M	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that after she demonstrated a soft-field takeoff, she directed the student to conduct one. During the takeoff roll, the student maintained excessive back pressure on the control yoke and was told by the instructor to reduce the back pressure. Once the airplane lifted off the runway it started to veer to the left; the instructor again informed the student to reduce back pressure to decrease the pitch, but the student maintained a grip on the controls and held excessive right rudder. The instructor stated, “I have the controls,” but the student “locked up and blocked” them and failed to relinquish the controls. The instructor was able to reduce the pitch, but directional control was lost, and the left wing contacted the runway surface, and the airplane departed the runway and flipped over, which resulted in substantial damage to the wings and airframe. The instructor stated that there were no mechanical malfunctions or failures 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 student pilot’s excessive pitch during takeoff resulted in a loss of control and impact with terrain. Contributing was the student’s failure to relinquish the controls when ordered by the instructor.

Findings

Aircraft	Pitch control - Incorrect use/operation
Personnel issues	Unnecessary action - Student/instructed pilot
Aircraft	Directional control - Not attained/maintained
Personnel issues	Anxiety/panic - Student/instructed pilot

Factual Information

History of Flight

Takeoff	Loss of control in flight (Defining event)
Initial climb	Dragged wing/rotor/float/other

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	26,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 2, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 13, 2021
Flight Time:	360.5 hours (Total, all aircraft), 300 hours (Total, this make and model), 309.4 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 16.2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	16,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	13.9 hours (Total, all aircraft), 13.9 hours (Total, this make and model), 0 hours (Pilot In Command, all aircraft), 3.8 hours (Last 90 days, all aircraft), 3.8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N20459
Model/Series:	172M	Aircraft Category:	Airplane
Year of Manufacture:	1973	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17261305
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 30, 2021 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	73 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2894 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A4M
Registered Owner:	LITTLE BIRD AIRWAYS LLC	Rated Power:	180 Horsepower
Operator:	LITTLE BIRD AIRWAYS LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BUF,705 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	281°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	27°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lancaster, NY	Type of Flight Plan Filed:	None
Destination:	Lancaster, NY	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Buffalo-Lancaster Regional Airport BQR	Runway Surface Type:	Asphalt
Airport Elevation:	751 ft msl	Runway Surface Condition:	Dry
Runway Used:	09/27	IFR Approach:	None
Runway Length/Width:	3199 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.922056,-78.611972

Administrative Information

Investigator In Charge (IIC):	Mccarter, Lawrence
Additional Participating Persons:	Paul Pryor; FAA FSDO; Rochester, NY
Original Publish Date:	July 13, 2022
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=105084

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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](#).