



Aviation Investigation Final Report

Location:	Fairbank's, Alaska	Accident Number:	WPR22LA289
Date & Time:	July 28, 2022, 18:17 Local	Registration:	N4493B
Aircraft:	Cessna 170B	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The student pilot in the tailwheel equipped airplane reported that, during the takeoff ground roll he did not apply enough right rudder input to compensate for the propellers asymmetric blade effect. The airplane veered off the left side of the runway and ground looped. The right wing and horizontal stabilizer were substantially damaged. The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane 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 failure to maintain directional control during the takeoff roll.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event)
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Pilot Information

Certificate:	Student	Age:	48, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 5, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	153 hours (Total, all aircraft), 47 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4493B
Model/Series:	170B	Aircraft Category:	Airplane
Year of Manufacture:	1955	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	26837
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	December 1, 2021 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Installed	Engine Model/Series:	0-300 SER
Registered Owner:	On file	Rated Power:	145 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:	PAFA,430 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	214°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 5500 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:	30.07 inches Hg	Temperature/Dew Point:	18°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fairbank's , AK	Type of Flight Plan Filed:	None
Destination:	Fairbank's , AK	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	Fairbanks International Airport PAFA	Runway Surface Type:	Gravel
Airport Elevation:	439 ft msl	Runway Surface Condition:	Dry
Runway Used:	Ski 20	IFR Approach:	None
Runway Length/Width:	2900 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	64.815354,-147.85665

Administrative Information

Investigator In Charge (IIC):	Johnson, Scott
Additional Participating Persons:	Dustin Cook; Federal Aviation Administration; Fairbanks, AK
Original Publish Date:	December 8, 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=105657

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](#).