



# Aviation Investigation Final Report

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<b>Location:</b>	Cantwell, Alaska	<b>Accident Number:</b>	CEN22LA373
<b>Date &amp; Time:</b>	August 3, 2022, 20:00 Local	<b>Registration:</b>	N9211T
<b>Aircraft:</b>	Cessna 180C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot reported that during a local personal flight, he decided to make an off-airport landing onto a gravel runway. Although the touchdown in the tailwheel-equipped airplane was uneventful, the pilot applied hard braking in order to minimize the landing roll on the rough terrain. As the airplane began to slow it nosed over coming to rest on its back. Both of the airplane's wings, the fuselage and the vertical stabilizer and rudder sustained substantial damage. 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 pilot's excessive brake application during the landing roll that resulted in a nose over.

## Findings

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<b>Personnel issues</b>	Knowledge of geographic area - Pilot
<b>Aircraft</b>	Braking capability - Capability exceeded
<b>Environmental issues</b>	Rough terrain - Effect on equipment

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Abnormal runway contact
<b>Landing-landing roll</b>	Nose over/nose down (Defining event)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	34, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	April 25, 2022
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	April 27, 2022
<b>Flight Time:</b>	650 hours (Total, all aircraft), 153 hours (Total, this make and model), 578 hours (Pilot In Command, all aircraft), 99 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N9211T
<b>Model/Series:</b>	180C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1960	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	50711
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	August 2, 2021 Annual	<b>Certified Max Gross Wt.:</b>	2650 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5067.3 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	0-470L
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	230 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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	6 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	AK06 , AK (AK06)	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	19:20 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	No ID N/A	<b>Runway Surface Type:</b>	Gravel
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough
<b>Runway Used:</b>	N/A	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Valley/terrain following

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	63.14675,-149.13356(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Otterstrom, Kevin
<b>Additional Participating Persons:</b>	Brad Sipperley ; FAA Inspector ; Fairbanks , AK
<b>Original Publish Date:</b>	October 6, 2022
<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.ntsb.gov/Docket?ProjectID=105696">https://data.ntsb.gov/Docket?ProjectID=105696</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](#).