



Aviation Investigation Final Report

Location:	Big Lake, Alaska	Accident Number:	ANC20CA032
Date & Time:	March 9, 2020, 20:30 Local	Registration:	N52168
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot reported that he was attempting to take off from a snow-covered runway and that, during the first attempt, the airplane failed to generate enough airspeed, so he aborted the takeoff and exited the runway. On his second attempt, he chose to begin the takeoff roll with a high-speed taxi on a taxiway before turning 90° to enter the runway. Just before entering the runway, the airplane hit a dip in the taxiway, and the airplane veered left and impacted a snow berm, which resulted in substantial damage to the right wing. The pilot reported several ways that the accident could have been prevented, including parking the airplane and waiting for a snowplow to clear the runway. In addition, he indicated that he was fatigued and that his judgment and decision-making abilities were compromised.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper decision to initiate the takeoff roll from a snow-covered taxiway, which resulted in a loss of directional control, runway excursion, and impact with a snow berm.

Findings

Personnel issues	Decision making/judgment - Pilot
Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Environmental issues	Snow/slush/ice covered surface - Decision related to condition
Environmental issues	Snow/ice - Effect on operation
Personnel issues	(general) - Pilot

Factual Information

History of Flight

Takeoff	Miscellaneous/other
Takeoff	Loss of control on ground (Defining event)
Takeoff	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	43,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-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 multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	January 13, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 8, 2019
Flight Time:	2796 hours (Total, all aircraft), 1500 hours (Total, this make and model), 2689 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N52168
Model/Series:	172 N	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17273457
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-D2J
Registered Owner:	Flight Safety Alaska Inc	Rated Power:	160 Horsepower
Operator:	Flight Safety Alaska Inc	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	PAYS	Distance from Accident Site:	8 Nautical Miles
Observation Time:	04:56 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-5°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Big Lake, AK (BGQ)	Type of Flight Plan Filed:	None
Destination:	Anchorage, AK (MRI)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Big Lake BGQ	Runway Surface Type:	Gravel
Airport Elevation:	157 ft msl	Runway Surface Condition:	Snow
Runway Used:	07	IFR Approach:	None
Runway Length/Width:	2450 ft / 70 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	61.534721,-149.8125

Administrative Information

Investigator In Charge (IIC): Banning, David

Additional Participating Persons:

Original Publish Date: June 29, 2020

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=101070>

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