



Aviation Investigation Final Report

Location:	Rapid City, South Dakota	Accident Number:	GAA18CA173
Date & Time:	March 20, 2018, 10:20 Local	Registration:	N3024Y
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, while departing from a short snow-covered airstrip, the airplane's nose wheel lifted off upon arriving at the "go/no go" decision point. He added that, about 30 ft. further the airplane encountered deeper snow and the nose landing gear lowered to the ground. Subsequently, he reduced the throttle and aborted the takeoff. The airplane exited the airstrip to the left, the right wing encountered terrain, and the airplane spun 180° and came to rest in a ditch.

The airplane sustained substantial damage to the elevator and both wings.

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 selection of unsuitable terrain for takeoff, which resulted in a loss of control and runway excursion.

Findings

Personnel issues	Decision making/judgment - Pilot
Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Snow/slush/ice covered surface - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event)
Takeoff	Runway excursion

Pilot Information

Certificate:	Commercial	Age:	69,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	March 1, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 3920 hours (Total, all aircraft), 306 hours (Total, this make and model), 26 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3024Y
Model/Series:	182 E	Aircraft Category:	Airplane
Year of Manufacture:	1962	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18254024
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 17, 2017 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	C91 installed, not activated	Engine Model/Series:	O-470 SERIES
Registered Owner:		Rated Power:	230 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:	KRAP,3168 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	15:52 Local	Direction from Accident Site:	303°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	-3°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rapid City, SD	Type of Flight Plan Filed:	None
Destination:	RAPID CITY, SD (RAP)	Type of Clearance:	None
Departure Time:	10:20 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.973888,-102.90361(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Greg Pire; FAA; Rapid City, SD
Original Publish Date:	July 5, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96904

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).