



Aviation Investigation Final Report

Location:	Tyonek, Alaska	Accident Number:	GAA17CA134
Date & Time:	January 29, 2017, 15:00 Local	Registration:	N5222E
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the tundra tire- and tailwheel-equipped airplane reported that, while on the flight back to his home airport, he decided to land on a snow-covered airstrip. He flew over the landing area three times before deciding on the fourth pass to attempt a full-stop landing. During the touchdown of the three-point landing, he realized the snow was deeper than he had expected, and the airplane decelerated rapidly. The pilot increased power, but the airplane continued to sink in the snow. Subsequently, the airplane nosed over and slid to a stop inverted.

The airplane sustained substantial damage to its empennage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airframe or engine 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 improper decision to land on a snow-covered airstrip with a tundra tire-equipped airplane, which resulted in a nose-over.

Findings

Aircraft	Wheel/ski/float - Capability exceeded
Personnel issues	Decision making/judgment - Pilot
Personnel issues	Aircraft control - Pilot
Environmental issues	Snow/slush/ice covered surface - Effect on operation
Environmental issues	Snow/slush/ice covered surface - Decision related to condition
Environmental issues	Snow/slush/ice covered surface - Ability to respond/compensate

Factual Information

History of Flight

Landing	Miscellaneous/other
Landing	Loss of control on ground (Defining event)
Landing	Nose over/nose down

Pilot Information

Certificate:	Private	Age:	42, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	October 9, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 6, 2016
Flight Time:	(Estimated) 350 hours (Total, all aircraft), 100 hours (Total, this make and model), 250 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5222E
Model/Series:	180 B	Aircraft Category:	Airplane
Year of Manufacture:	1959	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	50522
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	May 5, 2016 Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	7327 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	C91A installed, activated, aided in locating accident	Engine Model/Series:	O-470-R-13
Registered Owner:	On file	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:	PAEN,92 ft msl	Distance from Accident Site:	47 Nautical Miles
Observation Time:	23:53 Local	Direction from Accident Site:	145°
Lowest Cloud Condition:	Scattered / 4300 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.17 inches Hg	Temperature/Dew Point:	-8°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ANCHORAGE, AK (LHD)	Type of Flight Plan Filed:	None
Destination:	KENAI, AK (ENA)	Type of Clearance:	Traffic advisory
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	61.220001,-152.160003(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Christian Monson; FAA; Juneau, AK
Original Publish Date:	April 4, 2017
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=94700

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