



# Aviation Investigation Final Report

<b>Location:</b>	Hooper Bay, Alaska	<b>Accident Number:</b>	ANC20LA020
<b>Date &amp; Time:</b>	February 4, 2020, 15:50 Local	<b>Registration:</b>	N454SF
<b>Aircraft:</b>	Cessna 208	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Miscellaneous/other	<b>Injuries:</b>	7 None
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Scheduled		

## Analysis

While taking off from a snow-covered runway in instrument meteorological conditions, the pilot stated that the airplane was not gaining speed as expected, but that there was inadequate runway remaining on which to abort the takeoff. The airplane became airborne, and the stall warning horn activated; the airplane subsequently settled back onto the ground, the nose landing gear impacted terrain, and the airplane came to rest upright off the departure end of the runway, resulting in substantial damage.

## Probable Cause and Findings

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

The pilot's decision to depart from a contaminated runway, and his failure to make a timely decision to abort the takeoff when the airplane was not accelerating as expected. Contributing to the accident was the pilot's decision to depart in limited visibility conditions, which likely affected his ability to determine the available runway distance remaining during the takeoff.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Environmental issues</b>	Low visibility - Effect on personnel
<b>Environmental issues</b>	Snow/slush/ice covered surface - Effect on operation
<b>Environmental issues</b>	Snow - Effect on operation
<b>Environmental issues</b>	Flat light - Effect on personnel

# Factual Information

## History of Flight

Takeoff	Miscellaneous/other (Defining event)
Takeoff	Runway excursion

On February 4, 2020, about 1550 Alaska standard time, a Cessna 208B airplane, N454SF, sustained substantial damage when it was involved in an accident near Hooper Bay, Alaska. The pilot and seven passengers were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 135 scheduled passenger flight.

According to the pilot, the departure was delayed about 3 hours due to the weather conditions on the day of the accident, which included snow, low visibility, and flat light. Before departing, the pilot received runway reports from the company dispatch that all destination airport runways were suitable. After performing a risk analysis and gathering more weather information, the pilot departed on the flight.

While en route to the first airport, he chose to cancel the second leg of the flight due to deteriorating weather conditions, and he informed company dispatch that he would return with all of the passengers to the departure airport. After landing and loading the passengers and baggage, the pilot taxied the airplane for departure. He stated that flat light conditions prevailed and that it was difficult to see down the runway or have any depth perception. He initiated the takeoff with 20° of flaps selected and noticed no issues during the initial takeoff roll. He then noticed that the airspeed was not increasing fast enough but decided that there was inadequate runway remaining on which to abort the takeoff.

The airplane became airborne, and the stall warning horn activated as the airplane cleared the departure end of the runway. The pilot attempted to maneuver the airplane in ground effect, but the airplane settled, and the main landing gear impacted the snow-covered terrain. The nose wheel impacted the snow, and the airplane came to rest upright about 150 ft from the end of the runway. The engine mount sustained substantial damage.

The pilot reported no preimpact mechanical malfunctions or failures that would have precluded normal operation.

The pilot added that there was about 3 to 5 inches of wet, heavy snow on the runway at the time of departure.

The Chart Supplement Alaska discussed the airport information for HPB effective January 30, 2020, and stated under airport remarks:

- *Unattended. Runway condition not monitored; recommend visual inspection prior to using.*

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	28,Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	December 30, 2019
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	December 9, 2019
<b>Flight Time:</b>	(Estimated) 3455 hours (Total, all aircraft), 1452 hours (Total, this make and model), 3060 hours (Pilot In Command, all aircraft), 240 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N454SF
<b>Model/Series:</b>	208 B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1999	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	208B-0797
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	11
<b>Date/Type of Last Inspection:</b>	January 24, 2020 AAIP	<b>Certified Max Gross Wt.:</b>	8750 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Turbo prop
<b>Airframe Total Time:</b>	20344 Hrs at time of accident	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	PT6A-114A
<b>Registered Owner:</b>	Aviation Capital Corporation	<b>Rated Power:</b>	675 Horsepower
<b>Operator:</b>	Grant Aviation	<b>Operating Certificate(s) Held:</b>	Commuter air carrier (135), On-demand air taxi (135)
<b>Operator Does Business As:</b>	Grant Aviation	<b>Operator Designator Code:</b>	ENHA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PAHP, 18 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	15:56 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Few / 1500 ft AGL	<b>Visibility</b>	1.25 miles
<b>Lowest Ceiling:</b>	Overcast / 1500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	60°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.07 inches Hg	<b>Temperature/Dew Point:</b>	0°C / -1°C
<b>Precipitation and Obscuration:</b>	Moderate - None - Mist		
<b>Departure Point:</b>	Hooper Bay, AK (HPB )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Bethel, AK (BET )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Hooper Bay HPB	<b>Runway Surface Type:</b>	Dirt;Gravel;Ice;Snow
<b>Airport Elevation:</b>	19 ft msl	<b>Runway Surface Condition:</b>	Ice;Snow;Wet
<b>Runway Used:</b>	13	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3300 ft / 75 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	6 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	7 None	<b>Latitude, Longitude:</b>	61.523887,-166.14472(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Swenson, Eric
<b>Additional Participating Persons:</b>	Charlie Gillespie; FAA; Anchorage, AK Dan Knesek; Grant Aviation; Anchorage, AK
<b>Original Publish Date:</b>	March 11, 2022
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 3</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=100929">https://data.nts.gov/Docket?ProjectID=100929</a>

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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](#).