



# Aviation Investigation Final Report

<b>Location:</b>	Gambell, Alaska	<b>Accident Number:</b>	ANC19CA002
<b>Date &amp; Time:</b>	October 3, 2018, 15:00 Local	<b>Registration:</b>	N575Q
<b>Aircraft:</b>	Beech 1900	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Hard landing	<b>Injuries:</b>	9 None
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Scheduled		

## Analysis

According to the flight crew, the instrument approach was flown above the glideslope in anticipation of mechanical turbulence. As the airplane descended through 500 ft, the pilot monitoring notified the pilot flying that the airplane was high on the approach. The airplane continued the approach above the glideslope, and the landing flare was conducted too high, which resulted in an excessive sink rate. The pilot flying attempted to arrest the sink rate but was unable to do so, and the airplane landed harder than expected, which resulted in a tail strike and substantial damage to the lower aft fuselage.

## Probable Cause and Findings

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

The pilot's unstabilized approach and improper landing flare, which resulted in a hard landing.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Landing flare - Not attained/maintained
<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Miscellaneous/other
<b>Landing-flare/touchdown</b>	Hard landing (Defining event)
<b>Landing-flare/touchdown</b>	Attempted remediation/recovery

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	37,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	February 28, 2018
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	September 7, 2018
<b>Flight Time:</b>	4415 hours (Total, all aircraft), 220 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

### Co-pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	60,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	August 22, 2018
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	July 3, 2018
<b>Flight Time:</b>	11081 hours (Total, all aircraft), 686 hours (Total, this make and model), 11052 hours (Pilot In Command, all aircraft), 337 hours (Last 90 days, all aircraft), 105 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N575Q
<b>Model/Series:</b>	1900 C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1991	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	UC-160
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	11
<b>Date/Type of Last Inspection:</b>	September 11, 2018 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	16600 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo prop
<b>Airframe Total Time:</b>	47493.9 Hrs at time of accident	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	PT6A-65B
<b>Registered Owner:</b>		<b>Rated Power:</b>	1173 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Commuter air carrier (135)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PAGM	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	23:33 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 900 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	21 knots / 28 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	80°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.2 inches Hg	<b>Temperature/Dew Point:</b>	9°C / 8°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Nome, AK (OME )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Gambell, AK (GAM )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	Gambell GAM	<b>Runway Surface Type:</b>	Asphalt;Concrete
<b>Airport Elevation:</b>	29 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	16	<b>IFR Approach:</b>	RNAV
<b>Runway Length/Width:</b>	4499 ft / 96 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	7 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	9 None	<b>Latitude, Longitude:</b>	63.772777,-171.734725(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Banning, David
<b>Additional Participating Persons:</b>	James Howery; Federal Aviation Administration; Anchorage, AK
<b>Original Publish Date:</b>	March 18, 2019
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=98451">https://data.nts.gov/Docket?ProjectID=98451</a>

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