



Aviation Investigation Final Report

Location:	King Salmon, Alaska	Accident Number:	GAA18CA187
Date & Time:	March 29, 2018, 13:20 Local	Registration:	N31TN
Aircraft:	Beech 99	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	8 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot reported that, after exiting instrument meteorological conditions during a circling approach, he was "a little above" the normal glidepath; as the airplane crossed the approach end of the runway, the airplane began to sink rapidly and drift to the left. He added power to initiate a go-around, but the airplane continued to sink and landed with the left main landing gear off the left side of the runway. As the airplane became airborne again, he attempted to retract the landing gear, "but the handle was locked in place." He noticed that the left and right main landing gear extension lights were illuminated, but the nose landing gear light was not. The pilot noticed a positive rate of climb and decided to fly to an alternate airport.

The pilot reported that, while en route to the alternate airport, a passenger reported that they smelled smoke, so he turned off electrical equipment. A pilot-rated passenger assisted with circuit breaker troubleshooting before turning on the battery again for communications. He instructed the pilot-rated passenger to visually examine the landing gear; the passenger reported that the left main landing gear was extended without damage and the right main landing gear was "bent back," with damage to the right flap with fuel leaking from the wing.

After contacting the alternate airport's tower, the pilot reported that he declared an emergency and provided a safety brief to the passengers. He added that, at the alternate airport, he performed an instrument landing system approach, and over the approach end of the runway, he reduced power, feathered the propellers, and moved both fuel levers to fuel cutoff. During landing, the right main landing gear collapsed, the right wing settled onto the runway, and the airplane began to pull to the right. The pilot added left rudder to maintain the runway centerline and the airplane came to rest on the runway.

The airplane sustained substantial damage to the right wing.

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 failure to maintain an adequate approach path and runway centerline during the initial landing, which resulted in a hard landing to the left of the runway and damage to the landing gear and wing.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
Aircraft	Heading/course - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Aircraft	Main landing gear - Damaged/degraded

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Landing gear collapse

Pilot Information

Certificate:	Commercial	Age:	31, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 24, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 29, 2017
Flight Time:	(Estimated) 4056 hours (Total, all aircraft), 103 hours (Total, this make and model), 3918 hours (Pilot In Command, all aircraft), 230 hours (Last 90 days, all aircraft), 69 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N31TN
Model/Series:	99 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1969	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	U49
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	March 21, 2018 Continuous airworthiness	Certified Max Gross Wt.:	10400 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:	39673.3 Hrs at time of accident	Engine Manufacturer:	P&W
ELT:	C126 installed, not activated	Engine Model/Series:	PT6A-20
Registered Owner:	LAKE CLARK AIR INC	Rated Power:	550 Horsepower
Operator:	LAKE CLARK AIR INC	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	HXXC

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAII,92 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	21:30 Local	Direction from Accident Site:	218°
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Overcast / 200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.52 inches Hg	Temperature/Dew Point:	0°C / -1°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	DILLINGHAM, AK (DLG)	Type of Flight Plan Filed:	IFR
Destination:	PILOT POINT, AK (PNP)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	KING SALMON AKN	Runway Surface Type:	Asphalt
Airport Elevation:	73 ft msl	Runway Surface Condition:	Snow;Wet
Runway Used:	12	IFR Approach:	ILS
Runway Length/Width:	8901 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	7 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	8 None	Latitude, Longitude:	58.679721,-156.656112(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Spencer Leonard; FAA; Anchorage, AK
Original Publish Date:	July 5, 2018
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=96959

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).