



Aviation Investigation Final Report

Location:	McCarthy, Alaska	Accident Number:	ANC23LA052
Date & Time:	July 11, 2023, 18:30 Local	Registration:	N814DW
Aircraft:	DEHAVILLAND DHC-2	Aircraft Damage:	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	Injuries:	2 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot reported that during the landing roll on a gravel-covered airstrip, the airplane veered left, went through an embankment, and came to rest upright. A postaccident examination of the airplane revealed the right brake caliper bolts failed in overload. The lower bolt was broken in half, the upper bolt was not located, and the brake caliper was located in brush. Given that the airplane is routinely operated from rough, uneven, gravel-covered, off airport sites, it is likely that the brake caliper and bolts sustained impact damage, resulting in the failure of the attachment hardware.

Probable Cause and Findings

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

A failure of the right brake caliper bolts during landing, which resulted in a runway excursion and subsequent impact with terrain.

Findings

Aircraft	Landing gear brakes system - Failure
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Factual Information

History of Flight

Landing	Loss of control on ground
Landing	Runway excursion
Landing	Sys/Comp malf/fail (non-power) (Defining event)

Pilot Information

Certificate:	Commercial	Age:	73,Male
Airplane Rating(s):	Single-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:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 4, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	9379 hours (Total, all aircraft), 1009 hours (Total, this make and model), 9361 hours (Pilot In Command, all aircraft), 91 hours (Last 90 days, all aircraft), 86 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied: Right
Other Aircraft Rating(s):	Restraint Used: 4-point
Instrument Rating(s):	Second Pilot Present: No
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N814DW
Model/Series:	DHC-2	Aircraft Category:	Airplane
Year of Manufacture:	1949	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34
Landing Gear Type:	Tailwheel	Seats:	9
Date/Type of Last Inspection:	May 30, 2023 Annual	Certified Max Gross Wt.:	5370 lbs
Time Since Last Inspection:	75 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	18186 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	C126 installed, not activated	Engine Model/Series:	R-985-AN-14B
Registered Owner:	WRANGELL MOUNTAIN AIR INC	Rated Power:	450 Horsepower
Operator:	WRANGELL MOUNTAIN AIR INC	Operating Certificate(s) Held:	Commuter air carrier (135), On-demand air taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAGK, 1578 ft msl	Distance from Accident Site:	85 Nautical Miles
Observation Time:	09:53 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:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	13°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	McCarthy, AK (PAMX)	Type of Flight Plan Filed:	Company VFR
Destination:	McCarthy, AK	Type of Clearance:	None
Departure Time:	18:20 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:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	61.442003,-142.89609(est)

Administrative Information

Investigator In Charge (IIC):	Hill, Millicent
Additional Participating Persons:	Patrick Teagarden; FAA/FSDO; Anchorage, AK
Original Publish Date:	May 15, 2024
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192644

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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](#).