



Aviation Investigation Final Report

Location: Northway, Alaska Accident Number: ANC11TA079

Date & Time: August 3, 2011, 09:50 Local Registration: N723DR

Aircraft: DEHAVILLAND DHC-2 MK. I(L20A) Aircraft Damage: Substantial

Defining Event: Landing gear collapse **Injuries:** 5 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

Analysis

The pilot stated that during the landing roll he noticed a problem with the tailwheel. After he unloaded the passengers, he realized that the tailwheel casting had broken and the tailwheel spindle and fork had separated from the airframe. He inspected the landing area and noticed that he had hit a 4-inch bank of dirt that he had not seen in the grass. The airplane sustained substantial damage to the aft fuselage bulkhead.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to identify unsuitable terrain for landing and subsequent contact with a dirt mound, resulting in the separation of the tailwheel from the airframe.

Findings

Aircraft Nose/tail landing gear - Damaged/degraded

Environmental issues Hidden/submerged object - Effect on equipment

Personnel issues Identification/recognition - Pilot

Factual Information

History of Flight

Landing-landing roll	Abnormal runway contact
Landing-landing roll	Landing gear collapse (Defining event)

On August 3, 2011, about 0950 Alaska daylight time, a deHavilland DHC-2 airplane, N723DR, sustained substantial damage during an off-airport landing approximately 40 miles south of Northway, Alaska. The airplane was registered to and operated by Copper Valley Air Service, LLC, Glennallen, Alaska, under the provisions of 14 Code of Federal Regulations (CFR) Part 135 as an on-demand air taxi flight, under contract to the U.S. National Parks Service (NPS). The pilot and four passengers were not injured. Visual meteorological conditions prevailed, and company flight following procedures were in effect. The public use flight originated at the Gulkana Airport, Glennallen, Alaska about 0830. The purpose of the flight was to transport NPS employees to a remote site to take water samples and do a site survey.

In a written statement to the National Transportation Safety Board (NTSB), the pilot stated that during the landing, as the airplane was coming to a stop, he noticed a problem with the tailwheel. After he unloaded the passengers, he realized that the tailwheel casting had broken, and the tailwheel spindle and fork had separated from the airframe. He inspected the landing area, and noticed that he had hit a small, 4-inch, bank of dirt in the grass that he had not seen.

A postaccident examination of the airplane by a Federal Aviation Administration (FAA) airworthiness inspector discovered substantial damage the aft fuselage bulkhead.

Pilot Information

Certificate:	Commercial	Age:	49,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	April 29, 2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 3, 2011
Flight Time:	8800 hours (Total, all aircraft), 1800 hours (Total, this make and model), 8100 hours (Pilot In Command, all aircraft), 165 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N723DR
Model/Series:	DHC-2 MK. I(L20A)	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1546
Landing Gear Type:	Tailwheel	Seats:	8
Date/Type of Last Inspection:	January 4, 2011 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	15651 Hrs as of last inspection	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	R-985 SERIES
Registered Owner:	COPPER VALLEY AIR SERVICE LLC	Rated Power:	450 Horsepower
Operator:	COPPER VALLEY AIR SERVICE LLC	Operating Certificate(s) Held:	On-demand air taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	Glennallen, AK (PAGK)	Type of Flight Plan Filed:	Company VFR
Destination:	Northway, AK	Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	

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Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	64.900886,-157.689743(est)

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Administrative Information

Investigator In Charge (IIC):	Shaver, Christopher
Additional Participating Persons:	Roy Redifer; FAA - Anchorage FSDO; Anchorage, AK
Original Publish Date:	November 3, 2011
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=81537

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.

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