

Aviation Investigation Final Report

Location: Talkeetna, Alaska Accident Number: ANC05TA058

Date & Time: April 15, 2005, 13:00 Local Registration: N8190Y

Aircraft: de Havilland DHC-2 Aircraft Damage: Substantial

Defining Event: 2 Minor, 1 None

Flight Conducted Under: Part 91: General aviation - Public aircraft - federal

Analysis

The airline transport pilot was conducting a federal public use flight under Title 14, CFR Part 91, when he landed a ski-equipped airplane on a glacier. In a written statement to the NTSB, the pilot reported exiting the landing area in a wide right-hand turn attempting to keep high on the slope, and avoid a depression on the steeply sloping terrain. He wrote that when the tailwheel started to slide downhill, he added power to increase rudder authority, and shallowed the right turn, hoping to avoid a depression. He reported that the airplane crossed over the depression, and upon "touching down on the far side" the right main landing gear collapsed, and the right wing struck the snow. The pilot reported that the right wing and forward fuselage sustained structural damage. According to the pilot, there were no known preaccident mechanical anomalies with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's selection of unsuitable terrain for taxi after landing, which resulted in the collapse of the main landing gear and structural damage to the right wing and forward fuselage. A factor associated with the accident was the rough and uneven terrain.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAXI - FROM LANDING

Findings

- 1. (F) TERRAIN CONDITION ROUGH/UNEVEN
- 2. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA SELECTED PILOT IN COMMAND

Occurrence #2: MAIN GEAR COLLAPSED Phase of Operation: TAXI - FROM LANDING

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Factual Information

On April 15, 2005, about 1300 Alaska daylight time, a ski-equipped de Havilland DHC-2 airplane, N8190Y, sustained substantial damage during an on-ground encounter with terrain while taxiing from landing on a glacier, about 50 miles northwest of Talkeetna, Alaska. The airplane and pilot were provided by Talkeetna Air Taxi, inc., and the flight was being operated by the National Park Service, Talkeetna, as a visual flight rules (VFR) federal public use flight when the accident occurred. The airline transport pilot was not injured, and the two passengers received minor injuries. Visual meteorological conditions prevailed, and company flight following procedures were in effect. The flight departed Talkeetna about 1245.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on April 18, the pilot said that after landing, while taxiing to an area of the glacier to unload cargo and the two passengers, both National Park employees, he noticed a crevasse in his taxi path. He said he was unable to avoid the crevasse, and applied power to "leap-frog" over the crevasse. He said when the airplane landed on the opposite side of the crevasse, the right main landing gear collapsed, and the right wing struck the snow. The right wing and forward fuselage sustained structural damage. The pilot said there were no known preaccident mechanical anomalies with the airplane.

In a subsequent written statement to the NTSB dated April 17, the pilot reported that he exited the landing area in a wide right-hand turn attempting to keep high on the slope, and avoid a depression on the steeply sloping terrain. He wrote that when the tailwheel started to slide downhill, he added power to increase rudder authority, and shallowed the right turn, hoping to avoid the depression that was hidden by the crown of the hill. He wrote that the airplane crossed over the depression, and upon "touching down on the far side" the right main landing gear collapsed.

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Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	61,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi- engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider; Gyroplane; Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Glider; Gyroplane; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 1, 2004
Flight Time:	15000 hours (Total, all aircraft), 1000 hours (Total, this make and model), 14000 hours (Pilot In Command, all aircraft), 55 hours (Last 90 days, all aircraft), 44 hours (Last 30 days, all aircraft), 21 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aireneft Maker	de Hevilland	Domintuntions	NO100V
Aircraft Make:	de Havilland	Registration:	N8190Y
Model/Series:	DHC-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	824
Landing Gear Type:	Tailwheel; Ski/wheel	Seats:	10
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	5600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Pratt & Whitney Canada
ELT:	Installed, not activated	Engine Model/Series:	R 985SB3
Registered Owner:	Talkeetna Air Taxi Inc.	Rated Power:	450
Operator:	National Park Service	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PATK	Distance from Accident Site:	50 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	322°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	6°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Talkeetna, AK (PATK)	Type of Flight Plan Filed:	Company VFR
Destination:	Ruth Glacier, AK	Type of Clearance:	None
Departure Time:	12:35 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	62.968612,-150.754714

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Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Stephen Stewart; Anchorage, FSDO-03; Anchorage, AK
Original Publish Date:	June 28, 2006
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61333

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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.

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