



Aviation Investigation Final Report

Location:	Anaktuvuk Pass, Alaska	Accident Number:	ANC06LA109
Date & Time:	August 1, 2006, 17:30 Local	Registration:	N4040W
Aircraft:	de Havilland DHC-2 MK.1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	6 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The airline transport certificated pilot was transporting passengers from a remote lake in a float-equipped airplane under Title 14, CFR Part 135. He said that during takeoff he passed his predetermined point to abort the takeoff without becoming airborne, and felt that he had to proceed with the takeoff or hit the shoreline. The pilot said that he was able to become airborne, but struck the shore of the lake with the airplane's floats just after liftoff. He stated that he was concerned about damage to the floats from the impact with the shore, and elected to land on a hard surface runway at the destination airport. The float structure collapsed during landing, resulting in substantial damage to the fuselage. There were no known mechanical anomalies with the airplane prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to abort the takeoff at his predetermined reference point, which resulted in a collision with the shore during takeoff-initial climb, and structural damage to the airplane.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

2. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: GEAR COLLAPSED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On August 1, 2006, about 1730 Alaska daylight time, a float-equipped, de Havilland DHC-2 Mk.1 airplane, N4040W, sustained substantial damage when it struck the shore during takeoff from a remote lake, about 50 miles south of Anaktuvuk Pass, Alaska. The airplane was being operated by Brooks Range Aviation, Bettles, Alaska, as a visual flight rules (VFR) passenger flight under Title 14, CFR Part 135, when the accident occurred. The airline transport certificated pilot and the five passengers were not injured. Visual meteorological conditions prevailed, and company flight following procedures were in effect.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on August 1, the Bettles Airport manager said the float-equipped accident airplane landed on the hard-surfaced runway at Bettles. The manager said the pilot told her that he had struck the shore during takeoff from a lake, and feared the floats would not support the airplane during a water landing, and elected to land on the hard-surface runway. The manager reported that during landing the float's supporting structure collapsed, and the airplane sat on its tail.

On August 3, the director of operations for the company told the IIC he believed that damage to the airplane was limited to the floats and support structure, however the airplane had been put back on wheels, and the airplane was being ferried to a repair facility to have the fuselage examined and repaired, if necessary.

On August 10, an FAA maintenance inspector who examined the repairs made to the airplane, told the IIC that an aft fuselage bulkhead had to be cut and spliced at the bottom, and that several additional fuselage stringers had to be cut and repaired, or replaced.

In a written statement to the NTSB dated August 27, the pilot wrote that he "hesitated" at the takeoff abort point long enough that he felt he had no choice but to continue the takeoff, and that the floats hit the bank just as the airplane became airborne.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	62, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 1, 2006
Flight Time:	16631 hours (Total, all aircraft), 422 hours (Total, this make and model), 8610 hours (Pilot In Command, all aircraft), 99 hours (Last 90 days, all aircraft), 97 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N4040W
Model/Series:	DHC-2 MK.1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1147
Landing Gear Type:	Float	Seats:	7
Date/Type of Last Inspection:	July 1, 2006 100 hour	Certified Max Gross Wt.:	5090 lbs
Time Since Last Inspection:	56 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	127000 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney Canada
ELT:	Installed, not activated	Engine Model/Series:	R-985-14G
Registered Owner:	Jespersion Aircraft Services Inc.	Rated Power:	450 Horsepower
Operator:	BROOKS RANGE AVIATION INC	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Brooks Range Aviation	Operator Designator Code:	FWOA

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:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anaktuvuk Pass, AK	Type of Flight Plan Filed:	Company VFR
Destination:	Bettles, AK (PABT)	Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	6 None	Latitude, Longitude:	68.150054,-151.710693(est)

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Gary Hunt; Fairbanks FSDO-01; Fairbanks, AK
Original Publish Date:	February 26, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=64306

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](#).