



National Transportation Safety Board Aviation Accident Final Report

Location:	Shaw Island, WA	Accident Number:	WPR14CA086
Date & Time:	01/03/2014, 1600 PST	Registration:	N5484U
Aircraft:	DEHAVILLAND BEAVER DHC 2 MK.1	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot was departing on a personal local flight from a narrow, tree-lined, private airstrip, located on a small island, in a single-engine, amphibious float-equipped airplane. After lifting off, as he approached the departure end of the runway, the airplane suddenly rolled left into the trees. The airplane came to rest at the base of the trees, standing on its nose and float tips. The pilot said there were no known preaccident mechanical anomalies with the airplane, and that he thought either the flap system or aileron system had malfunctioned causing the abrupt left roll. The airplane sustained substantial damage to both wings and the fuselage.

The pilot reported that when he took off the wind was calm. A resident of the island, who was working outside, heard and responded to the accident. He said the wind at his residence was gusty and varying in direction. The departure end of the runway is over a bay, and he said there were whitecaps on the bay when he arrived at the accident site.

Two islands, one to the north and one to the west of the accident island, have automated weather reporting stations. The island to the north was reporting wind at 12 knots gusting to 20 knots. The island to the west was reporting calm wind.

On site documentation revealed there was a break in the tree-line along the right side of the runway, about the same area where the loss of control occurred. A commercial airplane operator reported that he suspended flight operations to neighboring islands the afternoon of the accident, due to wind/wind shear.

A postaccident examination of the airframe did not reveal any mechanical malfunctions or failures 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 directional control during takeoff in variable wind conditions, resulting in a collision with trees lining the left side of the runway.

Findings

Aircraft	Directional control - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)
Environmental issues	Variable wind - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of control in flight (Defining event)
Initial climb	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial; Private	Age:	82
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	08/31/2013
Occupational Pilot:	No	Last Flight Review or Equivalent:	10/30/2013
Flight Time:	16169 hours (Total, all aircraft), 4400 hours (Total, this make and model), 15870 hours (Pilot In Command, all aircraft), 52 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	DEHAVILLAND	Registration:	N5484U
Model/Series:	BEAVER DHC 2 MK.1 MARKI	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	1600
Landing Gear Type:	Amphibian; Tailwheel	Seats:	
Date/Type of Last Inspection:	03/06/2013, Annual	Certified Max Gross Wt.:	5370 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	7795 Hours	Engine Manufacturer:	P&W
ELT:	C91A installed, not activated	Engine Model/Series:	R-985 SERIES
Registered Owner:	NIMBUS CORPORATION	Rated Power:	450 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KFHR, 20 ft msl	Observation Time:	1600 PST
Distance from Accident Site:	3 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	230°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few	Temperature/Dew Point:	7° C
Lowest Ceiling:	None	Visibility	3 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Shaw Island, WA	Type of Flight Plan Filed:	None
Destination:	Shaw Island, WA	Type of Clearance:	None
Departure Time:	1600 PST	Type of Airspace:	Class G

Airport Information

Airport:	Private Shaw Island (none)	Runway Surface Type:	Dirt; Grass/turf
Airport Elevation:	60 ft	Runway Surface Condition:	Dry; Rough
Runway Used:	none	IFR Approach:	None
Runway Length/Width:	1500 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor		

Administrative Information

Investigator In Charge (IIC):	Lawrence Lewis	Adopted Date:	05/05/2014
Additional Participating Persons:	Curtis R Johnson; FAA-FSDO; Renton, WA		
Publish Date:	07/08/2015		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=88625		

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