Aviation Investigation Final Report

Location:	Jefferson, Oregon	**Accident Number:**	WPR11LA276
Date & Time:	June 17, 2011, 16:40 Local	**Registration:**	N260HC
Aircraft:	DEHAVILLAND BEAVER DHC-2 MK.3	**Aircraft Damage:**	Substantial
Defining Event:	Abnormal runway contact	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The pilot reported that, while on short final for landing at an airstrip located atop a plateau, the airplane experienced a thermal lift then a downdraft, which caused the airplane to descend. The pilot added power; however, insufficient altitude existed to arrest the sink rate, and the airplane subsequently landed hard. One of the wings and the pontoon/landing gear sustained substantial damage. The pilot reported no preimpact malfunctions or failures with the airplane or engine 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 airplane control while on short final after experiencing a downdraft, which resulted in a subsequent hard landing.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Downdraft - Effect on operation

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing	Hard landing

On June 17, 2011, about 1640 Pacific daylight time, a DeHavilland Beaver DHC-2 MK 3, N260HC, landed hard on the runway at a private airstrip near Jefferson, Oregon. The pilot/owner operated the airplane under the provisions of 14 Code of Federal Regulations Part 91 as a business flight. The pilot, the sole occupant, was not injured. The airplane sustained substantial damage to one wing and the pontoon/landing gear. Visual meteorological conditions prevailed for the local area flight, and no flight plan had been filed.

The pilot reported to the National Transportation Safety Board investigator-in-charge (IIC), that the runway sits on a plateau. He stated that his approach was normal, but on short final, the airplane experienced a thermal lift then a downdraft, which dropped the airplane. He added power, however, there was not sufficient time to arrest the sink rate before the airplane landed hard.

The pilot reported no preimpact mechanical malfunctions or failures with the airplane or engine that would have precluded normal operation.

Pilot Information

Certificate:	Private	**Age:**	67
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Unknown
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	December 23, 2010
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	September 12, 2010
Flight Time:	2132 hours (Total, all aircraft), 1000 hours (Total, this make and model), 2032 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	**Registration:**	N260HC
Model/Series:	BEAVER DHC-2 MK.3	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	1665-TB37
Landing Gear Type:	Amphibian	**Seats:**	5
Date/Type of Last Inspection:	September 10, 2010 Annual	**Certified Max Gross Wt.:**	5370 lbs
Time Since Last Inspection:	25 Hrs	**Engines:**	1 Turbo prop
Airframe Total Time:	11657 Hrs as of last inspection	**Engine Manufacturer:**	P&W CANADA
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	PT6A-34
Registered Owner:	WILLIAM AMES CURTRIGHT	**Rated Power:**	750 Horsepower
Operator:	WILLIAM AMES CURTRIGHT	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SLE,214 ft msl	**Distance from Accident Site:**	12 Nautical Miles
Observation Time:	16:56 Local	**Direction from Accident Site:**	325°
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:	29.94 inches Hg	**Temperature/Dew Point:**	24°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Salem, OR (SLE)	**Type of Flight Plan Filed:**	None
Destination:	Jefferson, OR (21OG)	**Type of Clearance:**	None
Departure Time:	16:35 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Ames Airport 21OG	**Runway Surface Type:**	Asphalt
Airport Elevation:	720 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	14	**IFR Approach:**	None
Runway Length/Width:	1800 ft / 40 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	44.769721,-122.96833

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	Johnny Miller; Federal Aviation Administration; Portland, OR
Original Publish Date:	October 9, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=80845