



Aviation Investigation Final Report

Location:	Anchorage, Alaska	Accident Number:	ANC10LA044
Date & Time:	May 23, 2010, 20:00 Local	Registration:	N4793C
Aircraft:	DEHAVILLAND BEAVER DHC-2 MK.1	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The certificated flight instructor/check pilot was providing an annual corporate flight proficiency check ride to the commercial pilot in a float-equipped airplane. The commercial pilot receiving the proficiency review was appropriately rated and current by Federal Aviation Administration standards to operate float-equipped airplanes. After the commercial pilot completed a series of practice touch-and-go takeoffs and landings to the south, the check pilot asked him to land to the west, which would require a correction for a left crosswind. The check pilot reported that, just after touchdown, the airplane veered immediately to the left, the right float submerged, and the airplane abruptly nosed over. The airplane sustained substantial damage to the wings and fuselage during the accident. Examination of the airplane revealed no preaccident mechanical anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The commercial pilot's loss of airplane control while landing in a crosswind, resulting in a nose-over. Contributing to the accident was the check pilot's inadequate supervision of the commercial pilot while landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Crosswind correction - Incorrect use/operation
Environmental issues	Crosswind - Contributed to outcome
Personnel issues	Monitoring other person - Instructor/check pilot

Factual Information

History of Flight

Landing-flare/touchdown	Loss of control on ground (Defining event)
Landing-landing roll	Nose over/nose down

On May 23, 2010, about 2000 Alaska daylight time, a float-equipped de Havilland DHC-2 (Beaver) airplane, N4793C, sustained substantial damage while landing on Figure Eight Lake, about 18 miles northwest of Anchorage, Alaska. The airplane was being operated as a visual flight rules (VFR) local area proficiency check flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the Civil Air Patrol Inc. (CAP), Anchorage, Alaska. The three people aboard, a commercial pilot in the left seat, the certificated flight instructor/check pilot in the right seat, and a pilot-rated passenger, were not injured. Visual meteorological conditions prevailed, and CAP flight following procedures were in effect. The flight originated at the Lake Hood Seaplane Base, Anchorage, about 1920.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on May 24, the chief of flight safety for the CAP reported that the purpose of the flight was to accomplish a "Form 5" proficiency check of the commercial pilot, in a float-equipped de Havilland DHC-2 airplane. He said that the CAP has an annual check ride, in addition to the Federal Aviation Administration's requirements, for CAP pilots who wish to fly CAP aircraft. He noted that the commercial pilot's most recent biennial flight review was on May 31, 2009.

During a telephone conversation with the NTSB IIC on May 26, the check pilot reported that after the commercial pilot completed a series of touch-and-go landings to the south, he asked him to land to the west, which would require a correction for a 6 knot left crosswind. The check pilot reported that just after touchdown, the airplane veered immediately to the left, the right float submerged, and the right wing struck the water. The airplane nosed over abruptly, and the cabin rapidly filled with water. He said that all three occupants struggled to free themselves from their seat belts while upside-down and submerged in cold lake water. He said that just before the airplane's cabin sank, all three were able to exit the airplane just as a float-equipped Cessna 185 arrived on-scene, which took the three occupants to shore.

The airplane sustained substantial damage to the wings and fuselage during the accident.

According to the CAP's chief of flight safety, all three occupants had attended underwater egress training, which benefited them during their escape from the submerged cabin.

On June 11, 2010, following recovery of the airplane's wreckage to Anchorage, a wreckage examination was done under the direction of the NTSB IIC, and an additional senior NTSB air

safety investigator. Also present were two members of the CAP's safety assessment team. During the wreckage examination, a CAP safety assessment team member reported finding a 2-inch elliptical-shaped dent on the toe of the accident airplane's left float, but the source of the dent is unknown and inconclusive. No preaccident mechanical anomalies were discovered during the wreckage exam.

Pilot Information

Certificate:	Commercial	Age:	70, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	December 23, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1455 hours (Total, all aircraft), 400 hours (Total, this make and model), 1350 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Flight instructor Information

Certificate:	Commercial	Age:	74, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 18, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 17, 2010
Flight Time:	6800 hours (Total, all aircraft), 800 hours (Total, this make and model), 5400 hours (Pilot In Command, all aircraft), 48 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N4793C
Model/Series:	BEAVER DHC-2 MK.1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	296
Landing Gear Type:	Float	Seats:	8
Date/Type of Last Inspection:	May 14, 2010 100 hour	Certified Max Gross Wt.:	5090 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	95109 Hrs as of last inspection	Engine Manufacturer:	P&W
ELT:	C126 installed, not activated	Engine Model/Series:	R-985 SERIES
Registered Owner:	CIVIL AIR PATROL INC	Rated Power:	450 Horsepower
Operator:	CIVIL AIR PATROL INC	Operating Certificate(s) Held:	None

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:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.7 inches Hg	Temperature/Dew Point:	9°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anchoarge, AK (LHD)	Type of Flight Plan Filed:	Company VFR
Destination:	Anchorage, AK	Type of Clearance:	None
Departure Time:	19:20 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	61.300277,-150.60028(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	Steve S Fortenberry; Federal Aviation Administration (Operations); Anchorage, AK Aaron Sauer ; National Transportation Safety Board; Chicago, IL
Original Publish Date:	April 12, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=76124

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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](#).