Aviation Investigation Final Report

Location:	Anchorage, Alaska	**Accident Number:**	ANC03LA055
Date & Time:	June 6, 2003, 17:05 Local	**Registration:**	N343WB
Aircraft:	de Havilland DHC-2	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The float-equipped airplane was in the traffic pattern to land at a seaplane base when the engine lost all power, and the pilot made an emergency landing in the backyard of a private residence. During the forced landing, the airplane struck trees and a railing on the deck of the residence, sustaining structural damage to the left wing. The pilot reported that he had the right wing fuel tank selected, and thought the tank was about 1/4 full. He indicated that when the engine lost power, he was too low and didn't have sufficient time or altitude to switch to the belly tank and restore power. Postaccident draining of the fuel tanks disclosed about 18 gallons of fuel in the belly tank, and about one quart in the right wing tank.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's incorrect positioning of the fuel tank selector to a nearly empty tank, which resulted in a loss of engine power due to fuel starvation, and subsequent emergency landing at an off-airport site.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
1. (C) FLUID,FUEL - STARVATION

2. (C) FUEL TANK SELECTOR POSITION - INCORRECT - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Findings
3. OBJECT - TREE(S)
4. OBJECT - RESIDENCE

Factual Information

On June 6, 2003, about 1705 Alaska daylight time, a float-equipped de Havilland DHC-2 airplane, N343WB, received substantial damage when it collided with trees and a private residence following a loss of engine power while on approach to land at the Lake Hood Seaplane Base, Anchorage, Alaska. The solo commercial pilot was not injured. The Title 14, CFR Part 91 personal flight operated in visual meteorological conditions without a flight plan. The flight departed a remote lake near Beluga, Alaska, about 1635, and the destination was the Lake Hood Seaplane Base.

The National Transportation Safety Board (NTSB) investigator-in-charge (IIC) spoke with the pilot of the accident airplane, and an Anchorage FAA Flight Standards District Office inspector, at 1725. The pilot spoke with the IIC from the accident site using the FAA inspector's cellular phone. The pilot related that he had departed a remote lake near Beluga, and was on final approach to land at Lake Hood, when the engine lost all power. The pilot said it was a "fuel starvation event." He said he had the fuel selector on the right fuel tank, and thought the right tank was about 1/4 full, but the engine stopped when he was about 300 yards from the lake, and about 150 feet above the ground. He reported that he had insufficient time or altitude to switch to the belly tank and restore power, and that he had to make an off-airport emergency landing. The airplane subsequently struck trees, and then a railing on the deck in the backyard of a private residence on Lakeshore Drive, and came to rest in the residence's garden, with the left wing resting on the deck railing.

An FAA inspector at the accident site, and an NTSB investigator who viewed the airplane the day after the accident, noted structural damage to the left wing.

In the NTSB Pilot/Operator Aircraft Accident/Incident Report submitted by the pilot, he reported that when he drained the fuel tanks prior to moving the airplane, he recovered about one quart of fuel from the right wing tank, and about 18 gallons from the belly tank.

Pilot Information

Certificate:	Commercial	**Age:**	65,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	June 20, 2002
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	May 15, 2002
Flight Time:	6860 hours (Total, all aircraft), 1771 hours (Total, this make and model), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	**Registration:**	N343WB
Model/Series:	DHC-2	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	1644
Landing Gear Type:	Float	**Seats:**	7
Date/Type of Last Inspection:	June 13, 2002 Annual	**Certified Max Gross Wt.:**	6000 lbs
Time Since Last Inspection:	41 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5698 Hrs as of last inspection	**Engine Manufacturer:**	Pratt & Whitney
ELT:	Installed, not activated	**Engine Model/Series:**	R-985
Registered Owner:	John F. Sumrall	**Rated Power:**	450 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PALH,71 ft msl	**Distance from Accident Site:**	
Observation Time:	16:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:		**Visibility**	9 miles
Lowest Ceiling:	Broken / 4800 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	13 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	180°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	12°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Beluga, AK	**Type of Flight Plan Filed:**	None
Destination:	Anchorage, AK (LHD)	**Type of Clearance:**	None
Departure Time:	16:45 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Lake Hood Seaplane LHD	**Runway Surface Type:**	Water
Airport Elevation:	71 ft msl	**Runway Surface Condition:**	Water-choppy
Runway Used:	180	**IFR Approach:**	None
Runway Length/Width:	1930 ft / 200 ft	**VFR Approach/Landing:**	Traffic pattern

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:**	61.18,-149.971939

Administrative Information

Investigator In Charge (IIC):	LaBelle, James
Additional Participating Persons:	Gary Anderson; FAA; Anchorage, AK
Original Publish Date:	November 25, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57173