



# Aviation Investigation Final Report

<b>Location:</b>	JUNEAU, Alaska	<b>Accident Number:</b>	ANC97LA105
<b>Date &amp; Time:</b>	June 22, 1997, 14:45 Local	<b>Registration:</b>	N470DB
<b>Aircraft:</b>	de Havilland DHC-2 MK-I	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The float-equipped airplane was observed striking its right wing on water 3 miles west of Juneau, Alaska, while landing, then taking off again. One hour later, witnesses at a lake 30 miles south of Juneau, observed the airplane land, drag a wing and strike the propeller on the water, then take off. The private pilot reported that while in cruise, after the second takeoff, the engine stopped, and he made a power-off landing to the water. Postaccident inspection revealed substantial damage to the right wing.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudged touchdown which resulted in dragging the right wingtip and rupturing the fuel tank. A factor associated with the accident is the rough water conditions.

### Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### Findings

1. (C) TOUCHDOWN - MISJUDGED - PILOT IN COMMAND
2. (F) TERRAIN CONDITION - WATER,ROUGH

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Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

On June 22, 1997, about 1445 Alaska daylight time, a float equipped DeHavilland DHC-2 MK-I airplane, N470DB, sustained substantial damage during a hard landing on the water near Lena Point, two miles west of the Juneau, Alaska, airport, and during a subsequent hard landing at Hasselborg Lake, 30 miles south of Juneau. The solo, private certificated pilot was uninjured. The airplane was owned and operated by Thomas L. Hall of Juneau, Alaska. The flight was conducted under 14 CFR Part 91 as a personal flight. No flight plan was filed, and visual meteorological conditions prevailed at the time of the accident.

Witnesses described the airplane's right wing contacting the water while landing at Lena Point, and then observing the airplane depart.

Additional witnesses provided the following description of the airplane landing at Hasselborg Lake at 1430: "The right float began to drag and dip...the right wing tip hit the water...the plane tipped forward and the propeller hit the water...the nose and right wing was in the water and I could see the full bottom of each float. Somehow the plane didn't go over and slammed back down on the floats...It appeared the right wing tip was damaged and that a piece of the wing tip was folded up and visible on the upper side of the end of the wing...a very short time after landing, the pilot applied power and took off."

The pilot stated in the NTSB Pilot/Operator Report that after departing Hasselborg Lake, water poured over the right passenger window while in a left bank, and that the airplane developed, "an abrupt right yaw...shortly thereafter the engine sputtered and died at about 1500 feet." The pilot said he made an engine out landing and paddled the airplane onto a beach.

On June 23, 1997, FAA aviation safety inspectors observed the airplane secured at the Juneau Airport float pond. Their inspection revealed damage to the right wing's outboard butt rib, cracked upper and lower right wing skins, and a ruptured right wing tip fuel tank.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	44, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Invalid Medical for flight	<b>Last FAA Medical Exam:</b>	September 17, 1997
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	352 hours (Total, all aircraft), 51 hours (Total, this make and model), 224 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	de Havilland	<b>Registration:</b>	N470DB
<b>Model/Series:</b>	DHC-2 MK-I DHC-2 MK-I	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	917
<b>Landing Gear Type:</b>	Float	<b>Seats:</b>	8
<b>Date/Type of Last Inspection:</b>	April 5, 1997 Annual	<b>Certified Max Gross Wt.:</b>	5100 lbs
<b>Time Since Last Inspection:</b>	51 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	9030 Hrs	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	R-985
<b>Registered Owner:</b>	THOMAS L. HALL	<b>Rated Power:</b>	450 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	30 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	, AK (JNU )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(JNU )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Stop and go;Valley/terrain following

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	58.57941,-134.77066(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Thomas, Matthew
<b>Additional Participating Persons:</b>	BRIAN J IORG; JUNEAU , AK GARRISON R RUSSELL; JUNEAU , AK FREDDIE J KAISER; JUNEAU , AK
<b>Original Publish Date:</b>	November 10, 1998
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=3028">https://data.nts.gov/Docket?ProjectID=3028</a>

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