



# **Aviation Investigation Final Report**

Location: Igiugig, Alaska Accident Number: GAA18CA565

Date & Time: September 20, 2018, 15:30 Local Registration: N121AK

Aircraft: De Havilland DHC 2 Aircraft Damage: Substantial

**Defining Event:** Fuel starvation **Injuries:** 1 Minor, 6 None

Flight Conducted Under: Part 91: General aviation

#### **Analysis**

The pilot of the float-equipped airplane reported that, during the initial climb after a water takeoff, about 200 ft, he turned right, and the engine lost power. He immediately switched fuel tanks and attempted to restart the engine to no avail. The airplane descended and struck trees, and the right wing impacted terrain.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported to the Federal Aviation Administration inspector that, during the initial climb and after the engine lost power, he noticed that the center tank, which was selected for takeoff, was empty. He added that passengers stated that the engine did regain power after switching tanks, but the airplane had already struck trees.

The pilot reported as a recommendation to more closely follow checklists.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's selection of an empty fuel tank for takeoff, which resulted in fuel starvation and the subsequent total loss of engine power.

### **Findings**

Aircraft Fuel selector/shutoff valve - Incorrect use/operation

Aircraft Fuel - Fluid level

Personnel issues Incorrect action selection - Pilot
Personnel issues Use of equip/system - Pilot

**Environmental issues** Tree(s) - Contributed to outcome

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# **Factual Information**

# **History of Flight**

Takeoff	Fuel starvation (Defining event)
Takeoff	Loss of engine power (total)
Takeoff	Attempted remediation/recovery
Takeoff	Collision with terr/obj (non-CFIT)

### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	59,Male
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):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 10, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 1, 2018
Flight Time:	(Estimated) 12496 hours (Total, all aircraft), 5000 hours (Total, this make and model), 10632 hours (Pilot In Command, all aircraft), 198 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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### Aircraft and Owner/Operator Information

Aircraft Make:	De Havilland	Registration:	N121AK
Model/Series:	DHC 2 I	Aircraft Category:	Airplane
Year of Manufacture:	1951	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	121
Landing Gear Type:	Float	Seats:	8
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed	Engine Model/Series:	R-985
Registered Owner:		Rated Power:	450 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAIG,90 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	23:28 Local	Direction from Accident Site:	211°
<b>Lowest Cloud Condition:</b>		Visibility	5 miles
Lowest Ceiling:	Broken / 800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.15 inches Hg	Temperature/Dew Point:	12°C / 11°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Igiugig, AK	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

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#### **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 6 None	Latitude, Longitude:	59.325,-155.900833(est)

#### **Administrative Information**

Investigator In Charge (IIC):Benhoff, KathrynAdditional Participating Persons:Bruce Cummings; FAA; Anchorage, AKOriginal Publish Date:April 8, 2019Note:This accident report documents the factual circumstances of this accident as described to the NTSB.Investigation Docket:https://data.ntsb.gov/Docket?ProjectID=98343

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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