



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

Page 2 of 6 GAA18CA565

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)		

Page 3 of 6 GAA18CA565

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:	On file	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°
Lowest Cloud Condition:		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

Page 4 of 6 GAA18CA565

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)

Page 5 of 6 GAA18CA565

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Bruce Cummings; FAA; Anchorage , AK
Original Publish Date:	April 8, 2019
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	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) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

Page 6 of 6 GAA18CA565