



# Aviation Investigation Final Report

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<b>Location:</b>	Girdwood, Alaska	<b>Accident Number:</b>	ANC08LA074
<b>Date &amp; Time:</b>	June 9, 2008, 13:35 Local	<b>Registration:</b>	N13RZ
<b>Aircraft:</b>	Lake L-4	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (partial)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

During the initial climb after takeoff in an amphibious airplane on a personal flight, the pilot reported that as the airplane reached about 300 feet above ground level, the engine began to lose power. He said that the airplane was unable to climb, and that he selected an emergency landing spot in a creek about 3/4 mile south of the departure airport. The airplane received structural damage to the left wing, the hull, and the fuselage. After recovery, the airplane's engine and airframe were examined by two Federal Aviation Administration airworthiness inspectors. The engine was started and it ran at idle, but when full power was applied the engine rpm decreased from 2,600 to 2,200 after about 12 seconds. The engine fuel pressure remained within normal limits, and the magneto check was normal. No other mechanical malfunction was observed. The propeller governor and the engine-driven fuel pump were sent to their respective manufacturers for examination. No mechanical malfunction of either component was observed.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power for an undetermined reason, which resulted in a forced landing. Contributing to the accident was rough and uneven terrain.

## Findings

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<b>Not determined</b>	(general) - Unknown/Not determined
<b>Environmental issues</b>	Rough terrain - Contributed to outcome
<b>Aircraft</b>	(general) - Not specified

## Factual Information

### History of Flight

<b>Initial climb</b>	Loss of engine power (partial) (Defining event)
<b>Emergency descent</b>	Off-field or emergency landing

On June 9, 2008, about 1335 Alaska daylight time, an amphibious Lake L-4 airplane, N13RZ, sustained substantial damage following a loss of engine power after takeoff from the Girdwood Airport, Girdwood, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country personal flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot. The private certificated pilot, and the sole passenger, were not injured. Visual meteorological conditions prevailed. The flight was en route to Valdez, Alaska, and a VFR flight plan was filed.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on June 9, the pilot reported that he was departing to the south, and as the airplane reached about 300 feet agl, the engine began to lose power. The airplane was unable to climb, and the pilot selected an emergency landing spot in Glacier Creek, about 3/4 mile south of the Girdwood Airport. The airplane received structural damage to the left wing, the hull, and fuselage.

On June 11, two Federal Aviation Administration (FAA) airworthiness inspectors examined the airplane after it was recovered to the airport. The inspectors observed while the pilot, who holds an FAA mechanic certificate with airframe and powerplant ratings, started the engine. It ran at idle, but when full power was applied, the engine rpm decreased from 2,600 to 2,200 after about 12 seconds. The engine fuel pressure remained within normal limits, and the magneto check was normal. No other mechanical malfunction was observed.

The propeller governor was sent to the manufacturer for examination, which was accomplished on August 26, 2008. No malfunction of the governor was observed. The engine driven fuel pump was sent to the manufacturer for examination, which was accomplished on December 10, 2008. No malfunction of the fuel pump was observed.

The governor and fuel pump were released to the owner on December 16, 2008.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	70, 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 With waivers/limitations	<b>Last FAA Medical Exam:</b>	November 21, 2007
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	October 27, 2007
<b>Flight Time:</b>	1107 hours (Total, all aircraft), 502 hours (Total, this make and model), 1060 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Lake	<b>Registration:</b>	N13RZ
<b>Model/Series:</b>	L-4	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	57
<b>Landing Gear Type:</b>	Tricycle; Amphibian	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	May 31, 2008 100 hour	<b>Certified Max Gross Wt.:</b>	2690 lbs
<b>Time Since Last Inspection:</b>	1 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2454 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360 A1B
<b>Registered Owner:</b>	Eugene N. Bjornstad	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	Eugene N. Bjornstad	<b>Operating Certificate(s) Held:</b>	None

## 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>	Few	<b>Visibility</b>	10 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>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.04 inches Hg	<b>Temperature/Dew Point:</b>	13°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Girdwood, AK (AQY)	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Valdez, AK (PAVD)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	13:35 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Girdwood AQY	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	150 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	60.955001,-149.121673

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Erickson, Scott
<b>Additional Participating Persons:</b>	Phillip Kathman; FAA-AL-ANC FSDO 03; Anchorage, AK
<b>Original Publish Date:</b>	April 15, 2009
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=68206">https://data.ntsb.gov/Docket?ProjectID=68206</a>

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](#).