Aviation Investigation Final Report

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

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

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

Factual Information

History of Flight

Initial climb	Loss of engine power (partial) (Defining event)
Emergency descent	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

Certificate:	Private	**Age:**	70,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	November 21, 2007
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	October 27, 2007
Flight Time:	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

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

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Few	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.04 inches Hg	**Temperature/Dew Point:**	13°C
Precipitation and Obscuration:			
Departure Point:	Girdwood, AK (AQY)	**Type of Flight Plan Filed:**	VFR
Destination:	Valdez, AK (PAVD)	**Type of Clearance:**	VFR
Departure Time:	13:35 Local	**Type of Airspace:**	

Airport Information

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

Wreckage and Impact Information

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

Administrative Information

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