



# Aviation Investigation Final Report

<b>Location:</b>	Nenana, Alaska	<b>Accident Number:</b>	ANC04LA120
<b>Date &amp; Time:</b>	September 25, 2004, 14:00 Local	<b>Registration:</b>	N4409M
<b>Aircraft:</b>	Piper PA-12	<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 commercial pilot was taking off from a lake in the float-equipped airplane when the engine lost power for an undetermined reason. The airplane descended rapidly and landed hard on the water, sustaining structural damage to the fuselage. Postaccident inspection of the engine disclosed no evidence of a mechanical malfunction.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power during takeoff-initial climb for an undetermined reason, which resulted in an emergency descent and hard landing.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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Occurrence #3: HARD LANDING  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

2. TERRAIN CONDITION - WATER

## Factual Information

On September 25, 2004, about 1400 Alaska daylight time, a float-equipped Piper PA-12 airplane, N4409M, sustained substantial damage during a hard water landing, following a loss of engine power during initial climb after takeoff from a lake, about 10 miles north of Nenana, Alaska. The airplane was being operated by the pilot as a visual flight rules (VFR) personal cross-country flight under Title 14, CFR Part 91, when the accident occurred. The solo commercial pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on October 24, the pilot said he had just lifted off the lake and started to climb, when the engine lost power and the airplane descended rapidly, landing hard on the water. The pilot said he did not know why the airplane lost engine power, and that there were no known mechanical anomalies with the airplane prior to the accident.

The airplane was recovered to Fairbanks, Alaska, via helicopter.

During a telephone conversation with the NTSB IIC on October 5, the FAA aviation safety inspector who inspected the airplane at Fairbanks, said the lower fuselage longerons were bent, and major airframe tubing repairs were needed.

During a telephone conversation with the NTSB IIC on January 25, 2005, the mechanic who was repairing the airplane said the engine was running fine, and he was unable to find any mechanical cause for the loss of power.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	70, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	April 7, 2004
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1506 hours (Total, all aircraft), 800 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N4409M
<b>Model/Series:</b>	PA-12	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	12-3361
<b>Landing Gear Type:</b>	Float	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	June 1, 2004 Annual	<b>Certified Max Gross Wt.:</b>	1500 lbs
<b>Time Since Last Inspection:</b>	30 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2698 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-B3B
<b>Registered Owner:</b>	Don Button	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>		<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>	Clear	<b>Visibility</b>	50 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Nenana, AK	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Fairbanks, AK (FAI)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	14:00 Local	<b>Type of Airspace:</b>	Class G

## 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>	64.650001,-149.166671

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lewis, Lawrence
<b>Additional Participating Persons:</b>	John Gamble; FAA Fairbanks, FSDO-01; Fairbanks, AK
<b>Original Publish Date:</b>	July 7, 2005
<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=60274">https://data.ntsb.gov/Docket?ProjectID=60274</a>

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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](#).