



# Aviation Investigation Final Report

<b>Location:</b>	FORT LEWIS, Washington	<b>Accident Number:</b>	SEA94LA082
<b>Date &amp; Time:</b>	March 13, 1994, 15:20 Local	<b>Registration:</b>	N4732E
<b>Aircraft:</b>	CESSNA 185	<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

SHORTLY AFTER TAKEOFF, THE PILOT OF THE CESSNA AMPHIBIAN EXPERIENCED A LOSS OF AVAILABLE POWER AND ATTEMPTED TO RETURN FOR A LANDING ON THE LAKE FROM WHICH HE HAD DEPARTED. POST CRASH INSPECTION REVEALED THAT THE FUEL SHUTOFF VALVE WAS SEIZED IN A PARTIALLY RESTRICTED POSITION, RESTRICTING FUEL FLOW.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FUEL SHUTOFF VALVE SEIZED IN A PARTIALLY OPEN POSITION.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) FUEL SYSTEM,FUEL SHUTOFF - MOVEMENT RESTRICTED  
-----

Occurrence #2: FORCED LANDING  
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)  
-----

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

## Factual Information

On March 13, 1994, at approximately 1520 Pacific standard time (PST), an amphibious Cessna 185, N4732E, impacted the water during a precautionary landing on American Lake, Tacoma, Washington. The commercial pilot, who was the sole occupant of the aircraft, was not injured, but the aircraft sustained substantial damage. The local personal pleasure flight was on its initial takeoff when the accident occurred. No flight plan had been filed, and the ELT, which was activated by the impact with the water, was turned off at the scene.

The pilot said that after takeoff, the aircraft seemed to be producing substantially less power than he expected. He moved the throttle to full forward, and adjusted the propeller to maximum rpm, but felt that he would not be able to clear the trees at the end of the lake. He then made a steep turn back toward the center of the lake, and while he was rolling out of the turn, the aircraft impacted the water and flipped over.

The fuel shutoff valve, Cessna part number 9851070-2, was found to be seized in a partially closed position, restricting fuel flow.

### Pilot Information

<b>Certificate:</b>	None	<b>Age:</b>	30, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	May 15, 1993
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2105 hours (Total, all aircraft), 20 hours (Total, this make and model), 1950 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N4732E
<b>Model/Series:</b>	185 185	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18503849
<b>Landing Gear Type:</b>	Amphibian; Float	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 30, 1993 Annual	<b>Certified Max Gross Wt.:</b>	3350 lbs
<b>Time Since Last Inspection:</b>	24 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1251 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-520
<b>Registered Owner:</b>	MCPMAHON, ROBERT D.	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>	MCPMAHON, BOB D.	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Not reported
<b>Observation Facility, Elevation:</b>	TCM	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	14:05 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 11000 ft AGL	<b>Visibility</b>	30 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>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	17°C / 7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:20 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<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>		<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>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Stockhill, Michael
<b>Additional Participating Persons:</b>	DON SCHOOLCRAFT; RENTON , WA
<b>Original Publish Date:</b>	January 26, 1995
<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=41895">https://data.ntsb.gov/Docket?ProjectID=41895</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](#).