



# Aviation Investigation Final Report

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<b>Location:</b>	WHITE BEAR LAKE, Minnesota	<b>Accident Number:</b>	CHI99LA209
<b>Date &amp; Time:</b>	July 5, 1999, 12:40 Local	<b>Registration:</b>	N9780B
<b>Aircraft:</b>	Cessna 180A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

Shortly after takeoff, the pilot noted that the airplane was not climbing normally. He said that he could not maintain a comfortable airspeed to raise the wheels on the floats. He became distracted with trying to maintain a flying airspeed of 85 miles per hour and an altitude of 300 feet agl. 'The plane was indicating normal temperatures and pressures. The only noticeable differences were vibrations until the propeller was dialed back to 2,500 rpm and [the] manifold pressure was pulled to 25 inches [of Mercury (HG)].' The pilot cleared the landing lane on the lake and made the landing area. He said that he did not perform a before landing check and that the landing gear (wheels) were still extended out of the floats. On contact with the water, the airplane nosed over. Examination of the airplane revealed that the wheels were fully extended on the floats. Examination of the engine and other airplane systems revealed no anomalies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inability to get the airplane to climb for undetermined reason, and the pilot landing the floatplane on the lake with the wheels extended. Factors contributing to this accident were the pilot's failure to perform a before landing checklist, pressure induced by the event, and the precautionary landing.

## Findings

Occurrence #1: MISCELLANEOUS/OTHER

Phase of Operation: CLIMB

### Findings

1. (C) CLIMB - NOT POSSIBLE - PILOT IN COMMAND
2. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: WHEELS DOWN LANDING IN WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

3. (C) LANDING GEAR - EXTENDED
4. (F) CHECKLIST - NOT PERFORMED - PILOT IN COMMAND
5. (F) PRESSURE INDUCED BY CONDITIONS/EVENTS - PILOT IN COMMAND
6. (F) PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND

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Occurrence #3: NOSE OVER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

On July 5, 1999, at 1240 central daylight time (cdt), a Cessna 180A floatplane, N9780B, operated by a private pilot, sustained substantial damage when during a precautionary landing to a lake, following partial power loss, the airplane nosed over. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR Part 91. No flight plan was on file. The pilot and three passengers on board reported no injuries. The local flight originated at 1230 cdt, at Forest Lake, Minnesota.

In his written statement, the pilot said that after takeoff from the grass strip at Forest Lake, he became concerned that his airplane was not climbing normally. He said that he could not maintain a comfortable airspeed to raise the wheels on the floats. The pilot said he became distracted with trying to maintain a flying airspeed of 85 miles per hour and an altitude of 300 feet above ground level (agl). "The plane was indicating normal temperatures and pressures. The only noticeable differences were vibrations until the propeller was dialed back to 2,500 rpm and [the] manifold pressure was pulled to 25 inches [of Mercury (HG)]." The pilot cleared his landing lane on the lake and said that he was relieved that he made his landing area.

The pilot said that he did not perform a before landing check and that the landing gear (wheels) were still extended out of the floats. On contact with the water, the airplane nosed over. The pilot and passengers got out of the airplane and swam to safety as the airplane sank inverted.

A Federal Aviation Administration (FAA) inspector examined the airplane after it was removed from Bald Eagle Lake. The airplane's lower engine cowling was crushed inward. The upper cowling was bent and buckled aft. The upper firewall was bent forward and down. The airplane's right side fuselage skin, just forward of the wind screen showed heavy wrinkles. The leading edge of the left wing, just inboard of the tip and running inboard to the vicinity of the left wing strut, was crushed inward. The left horizontal stabilizer was bent downward approximately 3 degrees at mid-span. The skin along the leading edge of the left horizontal stabilizer was bent and torn, upward and aft. The leading edge of the right horizontal stabilizer was bent downward and broken. The front tips of both floats were crushed aft. The wheels were fully extended on the floats. Flight control continuity was confirmed. The airplane's engine was started and run. Examination of the airplane's engine revealed no anomalies which would have resulted in the airplane's inability to gain altitude in a normal manner. Examination of the other airplane systems showed no anomalies.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	41, 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>	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>	November 9, 1998
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1810 hours (Total, all aircraft), 270 hours (Total, this make and model), 1760 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 57 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N9780B
<b>Model/Series:</b>	180A 180A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	50078
<b>Landing Gear Type:</b>	Amphibian	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 4, 1999 Annual	<b>Certified Max Gross Wt.:</b>	2850 lbs
<b>Time Since Last Inspection:</b>	25 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2279 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-470
<b>Registered Owner:</b>	MARK R. BAKER	<b>Rated Power:</b>	230 Horsepower
<b>Operator:</b>		<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>	Day
<b>Observation Facility, Elevation:</b>	STP ,705 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	12:53 Local	<b>Direction from Accident Site:</b>	185°
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 3400 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 23°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	FOREST LAKE , MN (25D )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	Class B

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Water-choppy
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Precautionary landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	45.089202,-93.009307(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Bowling, David
<b>Additional Participating Persons:</b>	CHRISTINE M FIERO; MINNEAPOLIS , MN
<b>Original Publish Date:</b>	May 12, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=46695">https://data.nts.gov/Docket?ProjectID=46695</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](#).