



# Aviation Investigation Final Report

|                                |                                      |                         |                 |
|--------------------------------|--------------------------------------|-------------------------|-----------------|
| <b>Location:</b>               | Brainerd, Minnesota                  | <b>Accident Number:</b> | CHI02LA235      |
| <b>Date &amp; Time:</b>        | August 4, 2002, 14:00 Local          | <b>Registration:</b>    | N11LP           |
| <b>Aircraft:</b>               | Cessna 185B                          | <b>Aircraft Damage:</b> | Substantial     |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 1 Minor, 2 None |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |                 |

## Analysis

The float equipped airplane was substantially damaged when it impacted the water just after liftoff from a lake. Witnesses in a boat reported that the airplane lifted off 30 feet behind a skier that was being pulled behind the boat. They reported that the airplane then climbed to 30 feet above the boat, banked sharply to the left, and crashed into the lake. Postaccident examinations of the airframe and engine revealed no preexisting defects. The pilot reported no mechanical malfunctions in his report of the accident. The pilot did not submit a narrative description of the accident events.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's evasive maneuver to avoid obstacle clearance, resulting in a premature lift off with inadequate airspeed followed by a stall. The presence of the boat was a factor.

## Findings

Occurrence #1: ABRUPT MANEUVER  
Phase of Operation: TAKEOFF

### Findings

1. (F) OBJECT - VEHICLE
2. (C) MANEUVER TO AVOID OBSTRUCTIONS - INITIATED - PILOT IN COMMAND

-----

Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

- 3. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
- 4. STALL - INADVERTENT - PILOT IN COMMAND

-----

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

- 5. TERRAIN CONDITION - WATER

## Factual Information

On August 4, 2002, at 1400 central daylight time, a float equipped Cessna 185B, N11LP, piloted by a private pilot, sustained substantial damage when it impacted the water and nosed over during takeoff from Gull Lake, near Brainerd, Minnesota. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions without a flight plan. The pilot received minor injuries and the two passengers were not injured. The flight was originating at the time of the accident with Minong, Wisconsin, as the intended destination.

The pilot furnished no narrative description of the accident in the report submitted to the National Transportation Safety Board. The section of the report for describing mechanical malfunctions was checked "No."

The initial reports indicated that the airplane engine lost power during takeoff from the lake and the pilot attempted to land back on the lake. During the attempted landing the left wingtip struck the water first. The airplane subsequently flipped over coming to rest upside down.

A witness to the accident reported seeing and hearing the airplane during the accident sequence. The witness reported being in a boat that was pulling a water skier at the time of the accident. She said that the airplane lifted off of the water when it was about 30 feet behind the skier, climbed to 30 feet above the boat, turned sharply to the left and fell into the water. The witness stated that the airplane engine was running and was "really loud." She said that she saw no smoke or fire coming from the airplane prior to impact.

A second witness who was also in the boat said the airplane came over the boat and then "it just came down." She said that she heard engine noises from the airplane until it hit the water. She said that there was no smoke coming from the airplane prior to impact.

A postaccident examination of the airplane by Federal Aviation Administration officials revealed no pre-impact mechanical defects with respect to the airframe. The airplane's engine was retained and examined at the manufacturer's facility in Mobile, Alabama. The examination of the engine was performed under the direct supervision of a National Transportation Safety Board Investigator. No pre-impact defects that would have precluded engine operation were found during the examination of the engine.

## Pilot Information

|                                  |  |  |                 |
|----------------------------------|--|--|-----------------|
| <b>Certificate:</b>              | Private  | <b>Age:</b>                              | 30, 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 2 Valid Medical--no waivers/lim.   | <b>Last FAA Medical Exam:</b>            | August 21, 2001 |
| <b>Occupational Pilot:</b>       | No   | <b>Last Flight Review or Equivalent:</b> | August 21, 2001 |
| <b>Flight Time:</b>              | 730 hours (Total, all aircraft), 600 hours (Total, this make and model), 720 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft) |  |                 |

## Aircraft and Owner/Operator Information

|                                      |                                |                                       |                 |
|--------------------------------------|--------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Cessna                         | <b>Registration:</b>                  | N11LP           |
| <b>Model/Series:</b>                 | 185B                           | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                                | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                         | <b>Serial Number:</b>                 | 1850574         |
| <b>Landing Gear Type:</b>            | Float                          | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> | June 15, 2002 Annual           | <b>Certified Max Gross Wt.:</b>       | 3200 lbs        |
| <b>Time Since Last Inspection:</b>   | 10 Hrs                         | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 5950 Hrs as of last inspection | <b>Engine Manufacturer:</b>           | Continental     |
| <b>ELT:</b>                          | Installed, not activated       | <b>Engine Model/Series:</b>           | IO-520-D9B      |
| <b>Registered Owner:</b>             | Northern Air Service, Inc.     | <b>Rated Power:</b>                   | 300 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> | BRD,1226 ft msl                  | <b>Distance from Accident Site:</b>         | 10 Nautical Miles |
| <b>Observation Time:</b>                | 14:02 Local                      | <b>Direction from Accident Site:</b>        | 85°               |
| <b>Lowest Cloud Condition:</b>          | Scattered / 2700 ft AGL          | <b>Visibility</b>                           | 10 miles          |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |                   |
| <b>Wind Speed/Gusts:</b>                | 7 knots /                        | <b>Turbulence Type Forecast/Actual:</b>     | /                 |
| <b>Wind Direction:</b>                  | 360°                             | <b>Turbulence Severity Forecast/Actual:</b> | /                 |
| <b>Altimeter Setting:</b>               | 30.17 inches Hg                  | <b>Temperature/Dew Point:</b>               | 24°C / 17°C       |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                   |
| <b>Departure Point:</b>                 | Brainerd, MI                     | <b>Type of Flight Plan Filed:</b>           | None              |
| <b>Destination:</b>                     | Minong, WI                       | <b>Type of Clearance:</b>                   | None              |
| <b>Departure Time:</b>                  | 14:00 Local                      | <b>Type of Airspace:</b>                    | Class G           |

## Wreckage and Impact Information

|                            |                 |                             |                      |
|----------------------------|-----------------|-----------------------------|----------------------|
| <b>Crew Injuries:</b>      | 1 Minor         | <b>Aircraft Damage:</b>     | Substantial          |
| <b>Passenger Injuries:</b> | 2 None          | <b>Aircraft Fire:</b>       | None                 |
| <b>Ground Injuries:</b>    | N/A             | <b>Aircraft Explosion:</b>  | None                 |
| <b>Total Injuries:</b>     | 1 Minor, 2 None | <b>Latitude, Longitude:</b> | 46.383335,-94.361946 |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Brannen, John   |
| <b>Additional Participating Persons:</b> | Tom Groshans; FAA-Minneapolis, FSDO; Minneapolis, MN  |
| <b>Original Publish Date:</b>            | November 25, 2003   |
| <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=55462">https://data.ntsb.gov/Docket?ProjectID=55462</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](#).