



# Aviation Investigation Final Report

<b>Location:</b>	DUXBURY, Minnesota	<b>Accident Number:</b>	CHI96LA307
<b>Date &amp; Time:</b>	August 19, 1996, 15:15 Local	<b>Registration:</b>	N2814A
<b>Aircraft:</b>	CESSNA 180	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot said the airplane lifted off the lake near it's midpoint after extending 20 degrees of flaps. He said the airplane's stall horn was sounding as it flew about 20 feet above the water. The pilot said it was clear to him that the airplane would not clear the trees near the lake's shoreline. The pilot said he turned the airplane to the left and reduced the power for landing while in a turn. He said the airplane's left wing stalled, and the airplane pitched down as it rolled to the left. The left wingtip, followed by the corresponding float, and fuselage collided with the water. The airplane sank shortly after coming to rest. The pilot was asked how many degrees of take off flaps are recommended by the manufacturer. He responded by saying one notch, 10 degrees.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the pilot to maintain airspeed.

### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

- Findings
1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
  2. STALL/SPIN - INADVERTENT - PILOT IN COMMAND

-----

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - WATER

## Factual Information

On August 19, 1996, at 1515 central daylight time (cdt), a Cessna 180, N2814A, piloted by a private pilot, was substantially damaged when it collided with the water while maneuvering to avoid trees along the water's edge. The 14 CFR Part 91 personal flight was not operating on a flight plan. Visual meteorological conditions prevailed at the time of the accident. The pilot and passenger reported no injuries. The flight was departing Big Tamarack Lake, near Duxbury, Minnesota, at 1513 cdt.

The pilot said the airplane lifted off the lake near its midpoint after extending 20 degrees of flaps. He said the airplane's stall horn was sounding as it flew about 20 feet above the water. The pilot said it was clear to him that the airplane would not clear the trees near the shoreline. The pilot said he turned the airplane to the left and reduced the power for landing. He said the airplane's left wing stalled and the airplane pitched down as it rolled left. The left wingtip, followed by the corresponding float, and fuselage collided with the water. The airplane sank shortly after coming to rest.

The pilot was asked how many degrees of flaps for takeoff are recommended by the manufacturer. He said one notch, 10 degrees.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	38, 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 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	November 14, 1994
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	500 hours (Total, all aircraft), 100 hours (Total, this make and model), 500 hours (Pilot In Command, all aircraft), 40 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>	N2814A
<b>Model/Series:</b>	180 180	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	30014
<b>Landing Gear Type:</b>	Float	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	March 20, 1996 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>	60 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6300 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-470R
<b>Registered Owner:</b>	DAVID L. AFRICANO	<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>	JMR ,1012 ft msl	<b>Distance from Accident Site:</b>	45 Nautical Miles
<b>Observation Time:</b>	15:35 Local	<b>Direction from Accident Site:</b>	250°
<b>Lowest Cloud Condition:</b>	Scattered / 1000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 2500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	21°C / 21°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>	15:13 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	Water
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Water-calm
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	46.010372,-92.930686(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gattolin, Frank
<b>Additional Participating Persons:</b>	WILLIAM JOHNSON; MINNEAPOLIS , MN
<b>Original Publish Date:</b>	February 18, 1997
<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=10371">https://data.nts.gov/Docket?ProjectID=10371</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](#).