



# Aviation Investigation Final Report

<b>Location:</b>	St. Helen, Michigan	<b>Accident Number:</b>	CHI01LA304
<b>Date &amp; Time:</b>	September 3, 2001, 13:10 Local	<b>Registration:</b>	N9310S
<b>Aircraft:</b>	Beech C23	<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 attempted a short and soft field takeoff on runway 18 (2,600 feet by 110 feet, dry/turf). The pilot reported that during the takeoff roll he set full engine power, held the yoke aft, and the airplane lifted off into ground effect. The pilot stated that after the liftoff the airplane settled back to the runway, and at which time he aborted the takeoff. The pilot reported that he reduced the engine power, set the mixture control to idle cutoff, and applied full brake pressure. The pilot stated that he was unable to stop prior to impacting the airport perimeter fence. The aircraft was approximately 75 pounds below the certified maximum gross weight at the time of the accident. The pilot reported no airframe or engine malfunctions or anomalies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to attain the proper airspeed which resulted in a premature lift-off and subsequent stall/mush. A factor to the accident was the fence.

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: TAKEOFF - ABORTED

### Findings

1. (C) LIFT-OFF - PREMATURE - PILOT IN COMMAND

2. (C) AIRSPEED - NOT ATTAINED - PILOT IN COMMAND
3. STALL/MUSH
4. (F) OBJECT - FENCE

## Factual Information

On September 3, 2001, at 1310 eastern daylight time, a Beech C23, N9310S, piloted by a private pilot, sustained substantial damage during an on-ground collision with a fence while executing an aborted takeoff on runway 18 (2,600 feet by 110 feet, dry/turf) at the St. Helen Airport, St. Helen, Michigan. Visual meteorological conditions prevailed at the time of the accident. The flight was operating under the provisions of 14 CFR Part 91 on an instrument flight plan. The pilot and his passenger reported no injuries. The flight was originating at the time of the accident and had the intended destination of Brighton Airport, Brighton, Michigan.

According to the pilot's written statement, he was attempting a short and soft field takeoff at the time of the accident. The pilot reported that during the takeoff roll he set full engine power, held the yoke aft, and the airplane lifted off into ground effect. The pilot stated that after the liftoff the airplane settled back to the runway, and at which time he aborted the takeoff. The pilot reported that he reduced the engine power, set the mixture control to idle cutoff, and applied full brake pressure. The pilot stated that he was unable to stop prior to impacting the airport perimeter fence. The pilot reported no airframe or engine malfunctions or anomalies.

According to an inspector with the Federal Aviation Administration (FAA), the aircraft was approximately 75 pounds below the certified maximum gross weight at the time of the accident.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	69, Male
<b>Airplane Rating(s):</b>	Single-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>	May 29, 2001
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	March 21, 2001
<b>Flight Time:</b>	395 hours (Total, all aircraft), 256 hours (Total, this make and model), 257 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N9310S
<b>Model/Series:</b>	C23	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1633
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	March 1, 2001 Annual	<b>Certified Max Gross Wt.:</b>	2450 lbs
<b>Time Since Last Inspection:</b>	44.1 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-360-A4K
<b>Registered Owner:</b>	Richard Frederick Strauss	<b>Rated Power:</b>	180 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>	HTL,1150 ft msl	<b>Distance from Accident Site:</b>	12 Nautical Miles
<b>Observation Time:</b>	12:55 Local	<b>Direction from Accident Site:</b>	268°
<b>Lowest Cloud Condition:</b>	Scattered / 2800 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	250°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.8 inches Hg	<b>Temperature/Dew Point:</b>	25°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	St. Helen, MI (6Y6)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Brighton, MI (45G)	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	13:10 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	St. Helen Airport 6Y6	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	1198 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2600 ft / 110 ft	<b>VFR Approach/Landing:</b>	None

## 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>	44.359451,-84.410324(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Fox, Andrew
<b>Additional Participating Persons:</b>	Don Finney; Federal Aviation Administration- Grand Rapids FSDO; Grand Rapids, MI
<b>Original Publish Date:</b>	April 1, 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=53470">https://data.ntsb.gov/Docket?ProjectID=53470</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](#).