



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Williamson, SC	<b>Accident Number:</b>	ERA13LA264
<b>Date &amp; Time:</b>	06/01/2013, 1110 EDT	<b>Registration:</b>	N3715K
<b>Aircraft:</b>	GLOBE GC-1B	<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The pilot performed a preflight inspection and engine run up with no anomalies noted. He noted the wind favored runway 10. He then taxied to the 2,400-ft turf runway, which had 50-ft tall trees located 1,000 ft from the departure end, and began the takeoff. When the airplane reached climb speed, the pilot lifted the airplane off the runway. He then realized that the airplane was not going to be able to climb above the trees located near the end of the runway. Therefore, the pilot decided to perform a precautionary landing in a nearby field. During the landing roll, the airplane struck a tree and incurred substantial damage. The pilot and pilot-rated passenger, who were both airframe and powerplant mechanics, reported no preimpact mechanical malfunctions with the airplane that would have precluded normal operation.

The wind reported at an airport 10 miles north of the accident location and at other surrounding airports was such that the airplane would have experienced a 5- to 8-knot right-quartering tailwind on runway 10 around the time of the accident. Density altitude was 2,307 feet above mean sea level.

It is therefore likely, that the airplane experienced a reduction in performance during takeoff due to the tailwind, density altitude, and the weight (within about 120 lbs of the maximum gross weight) at which the airplane was being operated.

## Flight Events

- Initial climb - Loss of lift
- Initial climb - Off-field or emergency landing
- Landing-landing roll - Collision with terr/obj (non-CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's decision to takeoff with a quartering tailwind at high density altitude, close to gross takeoff weight, on a short turf runway with trees at the departure end.

## Findings

- Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Climb rate-Not attained/maintained - C
- Aircraft-Aircraft oper/perf/capability-Aircraft capability-Maximum weight-Not specified - C
- Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C

Environmental issues-Conditions/weather/phenomena-Wind-Tailwind-Contributed to outcome - C  
 Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-High density altitude-Contributed to outcome - C  
 Environmental issues-Physical environment-Runway/land/takeoff/taxi surface-(general)-Contributed to outcome - F  
 Environmental issues-Physical environment-Object/animal/substance-Tree(s)-Contributed to outcome - F

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	44
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	1068 hours (Total, all aircraft), 65 hours (Total, this make and model), 778 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	GLOBE	<b>Registration:</b>	N3715K
<b>Model/Series:</b>	GC-1B	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	Lycoming
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	O-360 Series
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	GYH, 956 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	Broken / 2300 ft agl
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	5 knots, 252°
<b>Temperature:</b>	24°C / 18°C	<b>Visibility:</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Williamson, SC (SC82)	<b>Destination:</b>	Woodruff, SC (SC00)

## Airport Information

<b>Airport:</b>	Oakhill Airpark (SC82)	<b>Runway Surface Type:</b>	Grass/turf
<b>Runway Used:</b>	10	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	2400 ft / 100 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Serious	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

Investigator In Charge (IIC): Todd G Gunther

Adopted Date: 06/02/2014

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=87054>

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