



# National Transportation Safety Board Aviation Accident Final Report

<b>Location:</b>	Foley, Alabama	<b>Accident Number:</b>	ERA16LA171
<b>Date &amp; Time:</b>	April 26, 2016, 14:24 Local	<b>Registration:</b>	N3372Q
<b>Aircraft:</b>	Cessna 421	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	Collision during takeoff/land	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The private pilot of the twin-engine airplane departed on the personal flight. During the takeoff roll, all indications were normal. When the airplane accelerated to between 75 and 80 knots, the pilot pulled back on the yoke slowly, and the airplane began to climb. After he raised the landing gear, the pilot noticed that the airplane was not continuing to climb and that the airspeed was 80 knots; he then heard the stall warning horn. The airplane impacted trees about 1/4 mile from the runway, caught fire, and was destroyed; the pilot egressed with minor injuries. The airplane's published minimum control speed was 86 knots and the break ground and climb speed was 106 knots. Given that information, it is likely that the pilot's attempt to rotate and climb the airplane below 80 knots resulted in the airplane being unable to gain altitude and climb above trees at the end of the runway.

## Probable Cause and Findings

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

The pilot's failure to obtain proper takeoff speed before breaking ground, which resulted in the airplane's failure to gain altitude and a collision with trees and terrain.

## Findings

<b>Aircraft</b>	Airspeed - Not attained/maintained
<b>Environmental issues</b>	Tree(s) - Contributed to outcome

# Factual Information

On April 26, 2016, at 1424 central daylight time, a Cessna 421B, N3372Q, was destroyed when it impacted trees and terrain in Foley, Alabama. The private pilot sustained minor injuries. Visual meteorological conditions prevailed, and no flight plan had been filed for the flight from Foley Municipal Airport (5R4), Foley, Alabama, to West Georgia Regional Airport (CTJ), Carrollton, Georgia. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91.

During a postaccident interview with a Federal Aviation Administration Inspector, the pilot recounted that he taxied out and lined up for takeoff on the runway. With brakes on, he cycled the propellers and they "checked good." The magneto check at 1,500 rpm was also "good," as were the oil pressure and oil temperature. The pilot then ensured that the fuel selectors were position to both main fuel tanks, the throttles were full, mixtures were all the way forward, the fuel boost pumps were on low, and the propellers were all the way forward. He selected the flaps to the takeoff position and released the brakes.

During the takeoff roll, everything was "normal" (temperatures and pressures were "in the green"), and when the airplane had accelerated to 75-80 knots, the pilot pulled back on the yoke slowly, and the airplane began to climb. The pilot raised the landing gear and noticed that the airplane wasn't climbing. He looked at the airspeed indicator, which indicated 80 knots. The pilot heard the stall warning and pulled back on the yoke. He then shut the boost pumps off and lowered the flaps before a hard impact.

After impact, the pilot found himself upside down. He released his seat belt, saw fire and went to the back of the airplane. He opened the aft hatch and rolled forward, landing flat on his back. Two men then helped him up and led him to a nearby building. When asked about the performance of the airplane's engines the pilot stated, "the engines were operating fine and I screwed up." Review of the normal takeoff checklist for the airplane revealed that the minimum control speed was 86 knots, and the break ground and climb out speed was 106 knots.

A witness stated that during the takeoff from runway 18, the airplane left the ground at the departure runway end, just clearing the airport's perimeter fence. The airplane was unable to gain sufficient altitude to clear the trees less than ¼ of a mile south of the runway. The airplane began hitting tree tops, and impacted a large oak tree with the left wing, then spun into two other large oak trees 30 feet to the southwest. The airplane then flipped over, hit the ground, exploded and was consumed by fire. The pilot jumped from the rear entry door and landed on his back. The pilot refused medical attention and sustained burns and a cut to his left hand.

## History of Flight

Takeoff	Collision during takeoff/land (Defining event)
Post-impact	Fire/smoke (post-impact)

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	70, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<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 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 31, 2011
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	5450 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N3372Q
<b>Model/Series:</b>	421 B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1972	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	421B0256
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	7449 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>		<b>Engine Model/Series:</b>	GTS10-520-H
<b>Registered Owner:</b>		<b>Rated Power:</b>	375 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	JKA, 17 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	14:15 Local	Direction from Accident Site:	160°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 17 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	26° C / 19° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Foley, AL (5R4 )	Type of Flight Plan Filed:	None
Destination:	Carrollton, GA (CTJ )	Type of Clearance:	None
Departure Time:	14:24 Local	Type of Airspace:	Class G

## Airport Information

Airport:	Foley Municipal Airport 5R4	Runway Surface Type:	Asphalt
Airport Elevation:	73 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3700 ft / 74 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	30.416389, -87.700279

## Administrative Information

Investigator In Charge (IIC):	Hill, Millicent
Additional Participating Persons:	Joseph M Arvay; FAA/FSDO; Birmingham, AL
Original Publish Date:	April 13, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=93076">https://data.nts.gov/Docket?ProjectID=93076</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).