



# Aviation Investigation Final Report

<b>Location:</b>	Dowagiac, Michigan	<b>Accident Number:</b>	CEN11CA362
<b>Date &amp; Time:</b>	May 11, 2011, 16:15 Local	<b>Registration:</b>	N9321S
<b>Aircraft:</b>	Beech B24R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Aerodynamic stall/spin	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

While demonstrating a power-off spot landing to a student, the certified flight instructor (CFI) recognized that the airplane would not make it to the 1,000 foot runway markings he was aiming for, but felt that he would make it to the runway. He allowed the airplane to get too low on the approach at too slow an airspeed. When the airplane was about 30 feet from the runway end at 10 feet above the ground, he began to add engine power, but the airplane stalled and impacted the ground. The airplane sustained substantial damage to the left wing and left landing gear. The CFI reported no mechanical failures or malfunctions.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to maintain an appropriate glide path and airspeed during the landing approach, which resulted in an aerodynamic stall.

## Findings

<b>Aircraft</b>	Descent/approach glide path - Not attained/maintained
<b>Aircraft</b>	Airspeed - Not attained/maintained
<b>Personnel issues</b>	Incorrect action performance - Instructor/check pilot

## Factual Information

### History of Flight

<b>Approach-VFR pattern final</b>	Aerodynamic stall/spin (Defining event)
<b>Approach-VFR pattern final</b>	Collision with terr/obj (non-CFIT)

### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	64, 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>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	August 31, 2010
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 3, 2010
<b>Flight Time:</b>	3518 hours (Total, all aircraft), 250 hours (Total, this make and model), 3249 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Student pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	69, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<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>	July 1, 2009
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	755 hours (Total, all aircraft), 12 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N9321S
<b>Model/Series:</b>	B24R	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	MC-341
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	October 13, 2010 Annual	<b>Certified Max Gross Wt.:</b>	2750 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4380 Hrs at time of accident	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C126 installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	I0360 SER
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	On file	<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>	BEH,643 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	15:53 Local	<b>Direction from Accident Site:</b>	315°
<b>Lowest Cloud Condition:</b>	Few / 4300 ft AGL	<b>Visibility</b>	8 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots / 16 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.85 inches Hg	<b>Temperature/Dew Point:</b>	30°C / 19°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Benton Harbor, MI (BEH )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Benton Harbor, MI (BEH )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:15 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Dowagiac Municipal C91	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	747 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4700 ft / 100 ft	<b>VFR Approach/Landing:</b>	Simulated forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<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>	41.993057,-86.128334

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Brannen, John
<b>Additional Participating Persons:</b>	Robert Helbing; FAA-South Bend FSDO; South Bend, IL
<b>Original Publish Date:</b>	August 22, 2011
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=79270">https://data.nts.gov/Docket?ProjectID=79270</a>

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