



# Aviation Investigation Final Report

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<b>Location:</b>	Sheridan, Wyoming	<b>Accident Number:</b>	WPR13CA263
<b>Date &amp; Time:</b>	June 6, 2013, 19:30 Local	<b>Registration:</b>	N540TH
<b>Aircraft:</b>	Garland Avipro Bearhawk	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Aerodynamic stall/spin	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot stated that the purpose of the flight was to return back to his home airport. He configured the airplane for a three-point takeoff and added full power. During the takeoff roll, the airplane began to veer to the left and subsequently became airborne. As the airplane ascended to about 50 feet above ground level (agl), the left wing dropped and subsequently struck the ground. The airplane was substantially damaged when it tumbled in a cartwheel-type maneuver with the right wing flipping over and striking the terrain. The airplane came to rest on its belly in a grassy area adjacent to the taxiway.

The pilot stated that there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation. He noted that the wind was calm. He thought that the airplane initially veered left because of p-factor and his delay in recognizing this aerodynamic phenomenon.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain airspeed, which resulted in a stall and a loss of aircraft control during the initial takeoff.

## Findings

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**Personnel issues**

Aircraft control - Pilot

**Aircraft**

Airspeed - Not attained/maintained

## Factual Information

### History of Flight

<b>Initial climb</b>	Aerodynamic stall/spin (Defining event)
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### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	61, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	
<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 With waivers/limitations	<b>Last FAA Medical Exam:</b>	December 30, 2012
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4326 hours (Total, all aircraft), 56 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Garland	<b>Registration:</b>	N540TH
<b>Model/Series:</b>	Avipro Bearhawk	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	029-43-44-590
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	Condition	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	81 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated	<b>Engine Model/Series:</b>	O-540-L35D
<b>Registered Owner:</b>	Garland Air LLC	<b>Rated Power:</b>	235 Horsepower
<b>Operator:</b>	Garland Air LLC	<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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.2 inches Hg	<b>Temperature/Dew Point:</b>	24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Sheridan, WY (SHR )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Buffalo, WY (BYG )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	19:30 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Sheridan County Airport SHR	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	4021 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	23	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5000 ft / 75 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<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>	1 Minor	<b>Latitude, Longitude:</b>	44.769165,-106.980278(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Keliher, Zoe
<b>Additional Participating Persons:</b>	Phil Gohde; Federal Aviation Administration; Denver, CO
<b>Original Publish Date:</b>	July 23, 2013
<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.ntsb.gov/Docket?ProjectID=87116">https://data.ntsb.gov/Docket?ProjectID=87116</a>

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