



# Aviation Investigation Final Report

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<b>Location:</b>	Hedgesville, West Virginia	<b>Accident Number:</b>	ERA16CA259
<b>Date &amp; Time:</b>	July 17, 2016, 11:30 Local	<b>Registration:</b>	N650WP
<b>Aircraft:</b>	HIRN ASSOCIATES LTD ZODIAC CH601XL	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot of the experimental, amateur-built airplane reported that, during the takeoff roll while about 35 knots, he realized that he forgot to turn on the airplane's anticollision lights. He reached over to turn them on, and his forearm brushed across the top of the control stick and activated the electric trim to a full, nose-up position. The airplane suddenly climbed in a steep, nose-high attitude to about 60 ft before it started to roll left toward trees. As the airplane rolled left, the pilot attempted to compensate with right rudder and aileron input, but it had little effect on directional control, so he chose to turn back to the left and try to climb over the trees. The airplane impacted the top of the tree canopy then descended through the trees and impacted the ground. The wings and fuselage were substantially damaged. The pilot reported no preimpact mechanical failures or malfunctions with the airplane that would have precluded normal operation.

## Probable Cause and Findings

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

The pilot's inadvertent activation of the elevator trim, which resulted in a premature takeoff and subsequent loss of airplane control and collision with trees.

## Findings

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<b>Personnel issues</b>	Use of equip/system - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Aircraft</b>	Elevator tab control system - Unintentional use/operation
<b>Environmental issues</b>	Tree(s) - Contributed to outcome

## Factual Information

### History of Flight

<b>Takeoff</b>	Miscellaneous/other
<b>Takeoff</b>	Loss of control in flight (Defining event)
<b>Takeoff</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	80, 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>	4-point
<b>Instrument Rating(s):</b>	None	<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 13, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	HIRN ASSOCIATES LTD	<b>Registration:</b>	N650WP
<b>Model/Series:</b>	ZODIAC CH601XL	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2011	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Normal; Experimental (Special)	<b>Serial Number:</b>	6-7152
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	July 9, 2016 Annual	<b>Certified Max Gross Wt.:</b>	1320 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	100.4 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Jabiru
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	3300A
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	120 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>	MRB,564 ft msl	<b>Distance from Accident Site:</b>	10 Nautical Miles
<b>Observation Time:</b>	16:53 Local	<b>Direction from Accident Site:</b>	180°
<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>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	320°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.17 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Hedgesville, WV (WV22)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Hedgesville, WV (WV22)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	11:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	GREEN LANDINGS WV22	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	490 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	3	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2600 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## 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>	39.574722,-77.971389(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccarter, Lawrence
<b>Additional Participating Persons:</b>	David Cumberbatch; FAA FSDO; Baltimore, MD
<b>Original Publish Date:</b>	September 7, 2017
<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=93618">https://data.nts.gov/Docket?ProjectID=93618</a>

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