



# Aviation Investigation Final Report

<b>Location:</b>	Calhoun, Georgia	<b>Accident Number:</b>	GAA18CA273
<b>Date &amp; Time:</b>	May 4, 2018, 20:00 Local	<b>Registration:</b>	N533EA
<b>Aircraft:</b>	CHRISTOPHER LORD ELA ECLIPSE 10	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Miscellaneous/other	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The solo student gyroplane pilot reported that he "was flying behind the power curve," and the gyroplane lost altitude. He added that he couldn't tell if there were power lines ahead and decided to conduct a "hard vertical de[s]cent landing." The terrain was uneven, and the gyroplane rolled onto its side during landing. The student added that, before he decided to land, he got distracted for a few seconds and descended below a safe altitude.

The gyroplane sustained substantial damage to the rotor, fuselage, and empennage.

The student reported that there were no preaccident mechanical failures or malfunctions with the gyroplane 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 student pilot's failure to maintain sufficient airspeed, which resulted in a loss of altitude and necessitated a sudden descent to unsuitable terrain.

## Findings

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<b>Aircraft</b>	Altitude - Not attained/maintained
<b>Aircraft</b>	Airspeed - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Personnel issues</b>	Attention - Student/instructed pilot
<b>Environmental issues</b>	Sloped/uneven terrain - Contributed to outcome

## Factual Information

### History of Flight

<b>Enroute</b>	Miscellaneous/other (Defining event)
<b>Enroute</b>	Collision with terr/obj (non-CFIT)
<b>Landing</b>	Roll over

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<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>	Unknown	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 150 hours (Total, all aircraft), 35 hours (Total, this make and model), 150 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1.5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CHRISTOPHER LORD	<b>Registration:</b>	N533EA
<b>Model/Series:</b>	ELA ECLIPSE 10 NO SERIES	<b>Aircraft Category:</b>	Gyroplane
<b>Year of Manufacture:</b>	2017	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	05175331014
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	November 1, 2017 Condition	<b>Certified Max Gross Wt.:</b>	1234 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	75 Hrs at time of accident	<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	914
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	115 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	Rotorcraft external load (133)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KDNN,710 ft msl	<b>Distance from Accident Site:</b>	18 Nautical Miles
<b>Observation Time:</b>	23:53 Local	<b>Direction from Accident Site:</b>	11°
<b>Lowest Cloud Condition:</b>	Scattered / 6000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 15000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	230°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Calhoun, GA (CZL)	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Calhoun, GA (CZL)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:30 Local	<b>Type of Airspace:</b>	Class G

## 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>	34.421665,-84.939163(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Swenson, Eric
<b>Additional Participating Persons:</b>	Edmundo Rolon; FAA; Atlanta, GA
<b>Original Publish Date:</b>	October 24, 2018
<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=97231">https://data.nts.gov/Docket?ProjectID=97231</a>

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