



Aviation Investigation Final Report

Location:	Louisburg, North Carolina	Accident Number:	GAA18CA394
Date & Time:	July 5, 2018, 15:30 Local	Registration:	N902HB
Aircraft:	Evektor Aerotechnik SPORTSTAR	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that, after completing a touch-and-go landing without incident, during the takeoff, the airplane drifted left off the runway toward a wooded area. He attempted to slow and stop the airplane, but it struck a culvert, which "launched" the airplane back into the air. He then increased the engine power to full, pitched the nose up, flew the airplane back into the traffic pattern, and landed without further incident.

After taking time to gather himself, the student took off again, this time to conduct a basic navigation exercise in the local area, but he became disoriented and used the airplane's GPS to return to the departure airport. The student stated that he was distracted during the downwind leg due to the previous runway excursion and the navigation issues he experienced during the accident flight and allowed the airspeed to decrease, which resulted in the airplane stalling. While making the turn to base, the student overcorrected with left rudder, which resulted in the airplane entering a spin and subsequently colliding with trees.

The airplane sustained substantial damage to both wings.

The student reported that there were no preaccident 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 student pilot's distraction due to a previous runway excursion and navigational issues during the accident flight and his failure to maintain adequate airspeed and his exceedance of the airplane's critical angle of attack during the downwind leg, which resulted in an aerodynamic stall/spin.

Findings

Aircraft	Airspeed - Not attained/maintained
Aircraft	Angle of attack - Capability exceeded
Personnel issues	Aircraft control - Student/instructed pilot
Personnel issues	Attention - Student/instructed pilot
Environmental issues	Tree(s) - Contributed to outcome

Factual Information

History of Flight

Prior to flight	Miscellaneous/other
Approach-VFR pattern final	Aerodynamic stall/spin (Defining event)
Approach-VFR pattern final	Collision with terr/obj (non-CFIT)

Student pilot Information

Certificate:	Student	Age:	45, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None Without waivers/limitations	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 14 hours (Total, all aircraft), 14 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Evektor Aerotechnik	Registration:	N902HB
Model/Series:	SPORTSTAR No Series	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Special light-sport (Special)	Serial Number:	2006 0604
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Bombardier
ELT:	Installed, not activated	Engine Model/Series:	Rotax
Registered Owner:		Rated Power:	
Operator:		Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLHZ,369 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:35 Local	Direction from Accident Site:	227°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.25 inches Hg	Temperature/Dew Point:	32°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Louisburg, NC (LHZ)	Type of Flight Plan Filed:	VFR
Destination:	Louisburg, NC (LHZ)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	TRIANGLE NORTH EXECUTIVE LHZ	Runway Surface Type:	Asphalt
Airport Elevation:	367 ft msl	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	5498 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.032501,-78.317497(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Dustin Ellington; FAA; Greensboro, NC
Original Publish Date:	June 5, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97703

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.

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