



Aviation Investigation Final Report

Location:	Rutherfordton, North Carolina	Accident Number:	ERA20CA065
Date & Time:	January 5, 2020, 16:49 Local	Registration:	N9593U
Aircraft:	American Aviation AA5	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Serious, 3 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot had planned for a 40-minute scenic local flight with 3 passengers aboard. The pilot was demonstrating an aerodynamic stall when the right wing "dropped very quickly." He attempted to recover and applied opposite rudder, reduced the airplane's pitch, and increased engine power. The airplane then entered a flat spin to the right. The pilot continued to attempt to decrease the airplane's pitch and continued left rudder application, but the airplane continued to spin. The pilot then applied "full back elevator" as the airplane impacted terrain. During the impact the airplane's right wing, horizontal stabilizer, and fuselage were substantially damaged. The pilot reported that there were no preimpact mechanical malfunctions or failures 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 failure to maintain control of the airplane during an intentional aerodynamic stall, which resulted in a spin and subsequent collision with terrain.

Findings

Personnel issues

Aircraft control - Pilot

Factual Information

History of Flight

Maneuvering	Loss of control in flight (Defining event)
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Pilot Information

Certificate:	Private	Age:	64, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 5, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 18, 2018
Flight Time:	1448 hours (Total, all aircraft), 678 hours (Total, this make and model), 1448 hours (Pilot In Command, all aircraft), 45.2 hours (Last 90 days, all aircraft), 14.8 hours (Last 30 days, all aircraft), 1.6 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	American Aviation	Registration:	N9593U
Model/Series:	AA5 A	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AA5A-0093
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 13, 2019 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3277 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-320
Registered Owner:	On file	Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AVL,2170 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	16:54 Local	Direction from Accident Site:	277°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	4°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hendersonville, NC (0A7)	Type of Flight Plan Filed:	None
Destination:	Hendersonville, NC (0A7)	Type of Clearance:	None
Departure Time:	16:05 Local	Type of Airspace:	Class E

Airport Information

Airport:	Hendersonville 0A7	Runway Surface Type:	
Airport Elevation:	2084 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious, 2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 3 Minor	Latitude, Longitude:	35.387222,-82.109169(est)

Administrative Information

Investigator In Charge (IIC):	Wentz, Peter
Additional Participating Persons:	Stephen Tucker; FAA/FSDO; Charlotte, NC
Original Publish Date:	February 2, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=100765

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).