



# **Aviation Investigation Final Report**

Location: Dunn, North Carolina Accident Number: LAX08LA181

Date & Time: June 14, 2008, 06:30 Local Registration: N9393S

Aircraft: Airborne Edge Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 1 Fatal

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

During the student pilot's first supervised solo flight in a weight-shift-control airplane, the pilot departed a private field and remained within the traffic pattern. Witnesses reported that the airplane appeared to be on a stable approach for landing. Just before touchdown, the pilot applied full throttle to initiate a go-around and the airplane immediately turned to the left. Subsequently, the left wing struck the ground and the airplane began to cartwheel. A postaccident examination of the airplane revealed no anomalies with the airframe or flight control system. The student pilot's instructor reported that the 2-cycle engine installed in the airplane produced left-hand torque with a subsequent tendency of the airplane to turn left. He added that the student pilot had been instructed on compensation techniques for the left torque and turning tendencies prior to his solo flight. Witnesses reported that the weather at the time of the accident was clear sky and calm wind.

## **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 control of the airplane during a go-around.

#### **Findings**

Personnel issues Aircraft control - Student/instructed pilot

Aircraft (general) - Not attained/maintained

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#### **Factual Information**

#### **History of Flight**

Approach-VFR go-around Loss of control in flight (Defining event)

**Approach-VFR go-around** Collision with terr/obj (non-CFIT)

On June 14, 2008, approximately 0630 eastern daylight time, an Airborne Edge (Experimental Light Sport A) weight-shift control airplane, N9393S, was substantially damaged when it impacted terrain during a go-around at a private field near Dunn, North Carolina. The student pilot, the sole occupant of the airplane, was killed. The airplane was registered to, and operated by, the pilot under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the supervised solo flight. The local flight originated from the private field about 5 minutes prior to the accident.

In a written statement, the flight instructor who was supervising the student pilot's first solo flight reported that the pilot departed and remained within the traffic pattern with no apparent difficulties. The pilot appeared to conduct a stable approach to landing. The instructor stated just before the airplane was going to touch down, the pilot applied full power to initiate a go-around and the airplane began to turn to the left. Subsequently, the left wing struck the ground and the airplane cartwheeled before coming to rest. The pilot was extracted from the wreckage and transported to a local hospital where he later succumbed to his injuries.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed that all components of the airplane exhibited impact related damage. No anomalies were observed with the airplane's flight control system.

The student pilot's flight instructor reported that prior to the accident, the pilot had received about 16 hours of flight training in weight-shift control airplanes, and had accumulated about 85 hours of flight time in powered parachutes. The flight instructor stated that the airplane was equipped with a two-cycle engine, which produced left-hand torque and turning tendencies. He added that the student pilot had been instructed on compensation techniques for the left torque and turning tendencies prior to his solo flight.

Witnesses reported that the weather at the time of the accident was clear sky and calm wind.

The Office of the Chief Medical Examiner, Chapel Hill, North Carolina, conducted an autopsy on the pilot on June 15, 2008. The medical examiner determined that the cause of death was "Blunt force trauma."

The FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma, performed toxicology tests on the pilot. According to CAMI's report, carbon monoxide, cyanide, volatiles,

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and drugs were tested with positive results for 12 (mg/dl, mg/hg) of Ethanol in the blood, 16 (mg/dl, mg/hg) of Ethanol in the liver, 2 (mg/dL, mg/hg) N-Propanol in the liver and 8 (mg/dL, mg/hg) N-Propanol in the blood. It was also reported that no ethanol was detected in the Vitreous and that the ethanol "found in this case is [was] from sources other than ingestion." The test was also positive for unspecified amounts of Atropine and Etomidate within the blood and liver.

#### **Pilot Information**

Certificate:	Student	Age:	59,Male
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	101 hours (Total, all aircraft), 16 hours (Total, this make and model), 85 hours (Pilot In Command, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	Airborne	Registration:	N9393S
Model/Series:	Edge	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental light sport (Special)	Serial Number:	503302
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	992 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	262 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	503
Registered Owner:	Charles R. Zeigra	Rated Power:	50 Horsepower
Operator:	Charles R. Zeigra	Operating Certificate(s) Held:	None

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HRJ,202 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	06:21 Local	Direction from Accident Site:	290°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	22°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Dunn, NC (PRIV)	Type of Flight Plan Filed:	None
Destination:	Dunn, NC (PRIV)	Type of Clearance:	None
Departure Time:	06:30 Local	Type of Airspace:	

## **Airport Information**

Airport:	Private	Runway Surface Type:	Grass/turf
Airport Elevation:		<b>Runway Surface Condition:</b>	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	1800 ft / 100 ft	VFR Approach/Landing:	Go around;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	35.273612,-78.445831(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	Wayne Strader; Federal Aviation Administration; Greensboro, NC
Original Publish Date:	April 15, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=68227

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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.

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