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

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,

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

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°
Lowest Cloud Condition:	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 Precipitation		
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:		**Runway Surface Condition:**	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)

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