



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Eustis, FL	<b>Accident Number:</b>	ERA14LA035
<b>Date &amp; Time:</b>	10/03/2013, 0833 EDT	<b>Registration:</b>	N927H
<b>Aircraft:</b>	AIRBORNE (AUSTRALIA) EDGE EXECUTIVE	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

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## Analysis

The pilot had successfully performed three takeoffs and landings with his instructor earlier that day; no discrepancies were reported with the engine during the 30-minute flight. The pilot was signed off for his solo flight, and he began the flight with 6 gallons of fuel. The engine quit at the departure end of the runway when the airplane was about 400 feet above ground level. Witnesses, including the pilot's flight instructor, reported observing the airplane pitch down consistent with the wing stalling. The airplane impacted the ground hard, which resulted in substantial damage to the airplane and serious injury to the pilot. The examination of the airframe revealed no discrepancies with the flight controls. The examination of the engine revealed no evidence of piston scoring, which would occur if the engine had seized. Further, no issues with the air induction system were found; the carburetors were not inspected. The reason for the loss of engine power could not be determined.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent stalling of the wing following a total loss of engine power for reasons that could not be determined during postaccident examinations, which resulted in a hard landing.

## Findings

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<b>Aircraft</b>	Angle of attack - Not attained/maintained (Cause)
<b>Personnel issues</b>	Use of equip/system - Pilot (Cause)
<b>Not determined</b>	Not determined - Unknown/Not determined (Cause)

## Factual Information

On October 3, 2013, about 0833 eastern daylight time, an Airborne Edge Executive weight shift control aircraft, N927H, registered to and operated by a private individual, was landed hard during a forced landing shortly after takeoff from Mid Florida Air Service Airport (X55), Eustis, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 Code of Federal Regulations (CFR) Part 91 instructional flight from X55. The airplane sustained substantial damage and the pilot, the sole occupant sustained serious injuries. The flight originated about 1 minute earlier from X55.

The pilot had successfully performed 3 takeoff's and landing's earlier that day with his instructor and was then signed off for solo flight. He departed with about 6 gallons of fuel and about the departure end of the runway at 350 feet above ground level, the engine suddenly quit. He turned to the right towards a field then back to the left to line up for the field, and just before touchdown he reported he over-flared. The airplane then hit, bounced 20 feet into the air, cleared a 3 foot-tall fence, then touched down and came to rest.

The pilot's flight instructor reported that the previous 3 takeoff's and landings during a 30 minute flight were uneventful; there were no discrepancies with the engine during the flight. He witnessed the accident flight and noted that when the flight was at the departure end of the runway, he observed the aircraft bank hard to the left then saw the nose pitch down. He did not witness the impact but went to the site. Upon arrival the pilot was out of the aircraft, conscious. He asked the pilot what happened and he said the engine quit. He (flight instructor) reported that he was too far away to hear the engine. Following the accident he recovered the aircraft.

A witness reported hearing the engine "cut-out" then observed the aircraft climbing, followed by the engine "shut down again." The witness reported seeing the aircraft climb to 40 feet, then reported the engine, "cut out completely and [the] aircraft nose dived at that point."

The accident occurred during the Federal Government shutdown in October 2013; therefore, there was no federal inspection of the accident site, aircraft, or engine by FAA and/or NTSB Personnel. Additionally, the aircraft was sold before being investigated by NTSB.

The pilot's flight instructor reported inspecting the airframe and engine following recovery and stated there was nothing wrong with the flight controls. He also noted the fuel lines were full of fuel but the sight level was empty; he attributed that to be because it was broken at the bottom of the fuel tank. He looked into the exhaust port of the cylinders and did not see any scoring of the piston; he reported the cylinders looked perfect. He did not inspect the carburetor bowls, and reported they remained attached. The engine controls remained connected, and he did not observe any issues with the air induction system. He reported that the mast and base tube were broke in half, and one blade of the three bladed composite ground adjustable propeller was broken. No determination was made as to the reason for the reported loss of engine power.

The pilot did not return the NTSB Pilot/Operator Aircraft Accident/Incident Report that was sent to him via e-mail.

## History of Flight

Initial climb	Loss of engine power (total) (Defining event) Loss of control in flight
Uncontrolled descent	Collision with terr/obj (non-CFIT)

## Pilot Information

Certificate:	Sport Pilot	Age:	44
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:	No
Medical Certification:	Sport Pilot	Last Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	AIRBORNE (AUSTRALIA)	Registration:	N927H
Model/Series:	EDGE EXECUTIVE NO SERIES	Aircraft Category:	Weight-Shift
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Experimental Light Sport	Serial Number:	582-179
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	582
Registered Owner:	MORRISON ROBERT J	Rated Power:	64 hp
Operator:	Brook A. Hall	Air Carrier Operating Certificate:	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	LEE, 76 ft msl	Observation Time:	0753 EDT
Distance from Accident Site:	10 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	269°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	19° C / 19° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	3 knots, 40°	Visibility (RVR):	
Altimeter Setting:	30.06 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Eustis, FL (X55)	Type of Flight Plan Filed:	None
Destination:	Eustis, FL (X55)	Type of Clearance:	None
Departure Time:	0832 EDT	Type of Airspace:	

## Airport Information

Airport:	Mid Florida Air Service (X55)	Runway Surface Type:	Grass/turf
Airport Elevation:	167 ft	Runway Surface Condition:	Unknown
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	3200 ft / 80 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious		

## Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Adopted Date:	08/14/2014
Additional Participating Persons:	Keith M Owens; FAA/FSDO; Orlando, FL		
Publish Date:	08/14/2014		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=88381">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=88381</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.