



Aviation Investigation Final Report

Location:	Lago Vista, Texas	Accident Number:	CEN11LA186
Date & Time:	February 11, 2011, 13:30 Local	Registration:	N751EW
Aircraft:	GADBOIS EUGENE W APEX CROSS-5	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot recently purchased the aircraft, and the accident flight was intended to be an orientation flight around the traffic pattern followed by a landing. Shortly after departure, the aircraft experienced a simultaneous loss of engine and electrical power. During the forced landing, the aircraft settled into the tops of trees, resulting in substantial damage. A postaccident examination revealed that a fuse was blown which was believed to be associated with the electronic ignition circuit; however, the pilot did not have a schematic for the airplane so this could not be confirmed. The examination of the remaining systems revealed no anomalies. Investigators were unable to determine the reason for the simultaneous loss of engine and electrical power after takeoff.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The simultaneous loss of engine and electrical power after takeoff for undetermined reasons.

Findings

Not determined	(general) - Unknown/Not determined
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Factual Information

History of Flight

Initial climb	Electrical system malf/failure
Initial climb	Loss of engine power (partial) (Defining event)

On February 11, 2011, approximately 1330 central standard time, a Gadbois Apex Cross-5 Weight Shift Control aircraft, N751EW, was substantially damaged when it impacted terrain after departure from Rusty Allen Airport (KRYW), Lago Vista, Texas. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under the provisions of 14 Code of Federal Regulations Part 91 without a flight plan. The commercial pilot sustained minor injuries. The local flight was originating at the time of the accident.

In the written statement submitted by the pilot, he recently purchased the aircraft and the accident flight was intended to be a simple orientation flight around the traffic pattern followed by a landing. Shortly after departure, the aircraft experienced a simultaneous loss of engine and electrical power. During the forced landing, the aircraft settled into the tops of scrub trees.

According to the Federal Aviation Administration (FAA) inspector the brace connecting the main fuselage to the wing assembly was broken. Both wings were bent and twisted. During the examination it was noted that a fuse was blown which was believed to be associated with the electronic ignition circuit. The pilot did not have a schematic for the airplane so this could not be confirmed. The examination of the remaining systems, conducted by the FAA inspector revealed no anomalies.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor; Sport Pilot	Age:	33, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	August 2, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 7, 2011
Flight Time:	7000 hours (Total, all aircraft), 0 hours (Total, this make and model), 5000 hours (Pilot In Command, all aircraft), 240 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GADBOIS EUGENE W	Registration:	N751EW
Model/Series:	APEX CROSS-5	Aircraft Category:	Weight-shift
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental light sport (Special)	Serial Number:	1001
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	October 20, 2010 Condition	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1
Airframe Total Time:	108 Hrs as of last inspection	Engine Manufacturer:	COMPACT RA
ELT:		Engine Model/Series:	MZ202
Registered Owner:	On file	Rated Power:	60 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:	KGTU,790 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	13:49 Local	Direction from Accident Site:	45°
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:	30.29 inches Hg	Temperature/Dew Point:	12°C / -9°C
Precipitation and Obscuration:			
Departure Point:	Lago Vista, TX (KRYW)	Type of Flight Plan Filed:	None
Destination:	Lago Vista, TX (KRYW)	Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	

Airport Information

Airport:	Rusty Allen Airport KRYW	Runway Surface Type:	
Airport Elevation:	1231 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	30.449728,-97.970481(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Tom Fowles; FAA FSDO; San Antonio, TX
Original Publish Date:	June 13, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=78350

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