



National Transportation Safety Board Aviation Accident Final Report

Location:	Elberta, AL	Accident Number:	ERA16LA199
Date & Time:	05/31/2016, 1045 CDT	Registration:	N156WB
Aircraft:	AMERICAN LEGEND AIRCRAFT CO AL3	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The sport pilot reported that he had conducted two uneventful touch-and-go landings in the light-sport airplane. After the pilot climbed the airplane to about 200 ft above ground level, the engine lost total power. The pilot tried to turn back to the airport, but the airplane lost altitude and struck some trees about 50 ft short of the runway. The pilot observed fuel "pouring out" of the airplane and shut off the electrical system before exiting the airplane.

During a postaccident test run of the engine at several power settings, the engine performed normally with no anomalies noted. 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:

A total loss of engine power for reasons that could not be determined because the engine ran normally during a postaccident engine test run with no anomalies noted.

Findings

Environmental issues	Tree(s) - Contributed to outcome
Not determined	Not determined - Unknown/Not determined (Cause)

Factual Information

On May 31, 2016, about 1045 central daylight time, an American Legend Aircraft Company AL3, N156WB, collided with terrain following a total loss of engine power after takeoff from Perdido Winds Airpark (ALO8), Elberta, Alabama. The sport pilot incurred minor injuries and the airplane was substantially damaged. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight. The airplane was registered to and operated by MHOC LLC, under the provisions of 14 *Code of Federal Regulations* Part 91.

The pilot was a mechanic for the company that owned the light-sport airplane. He stated that the airplane was due for a condition inspection, and he wanted to "warm the airplane up" before starting the inspection. He arrived at 82J and fueled the airplane with 17 gallons of fuel, waited a period of time, and sampled fuel from the fuel tanks. He completed the preflight inspection and took off for ALO8.

The pilot made one full stop landing at ALO8, taxied back, and departed runway 35 for two touch-and-go landings. After an uneventful touch-and-go landing to runway 35, he made a teardrop turn and planned to land on runway 17. He again performed another uneventful touch and go landing, and while climbing out decided he would return for another full stop landing on runway 35. During his slight right climbing turn, the engine "just quit." The airplane was approximately 200 feet above the ground, and he attempted to continue the turn back to runway 35; however, the airplane subsequently impacted trees about 50 feet short of the runway. The pilot observed fuel "pouring out" and shut off the electrical system prior to exiting the airplane.

The engine was then sent to the manufacturer for a full power test-run. The engine was set on an engine run stand and a slave carburetor was installed, since the original carburetor was fractured during impact. The engine started immediately and was idled for several minutes to warm up before the high power runs. The engine was run at several different power settings, from idle to full power, and all parameters were within the manufacturer's specification limits. After approximately 30 minutes of run time, the engine was shut down and no anomalies were noted.

History of Flight

Initial climb

Loss of engine power (total) (Defining event)

Pilot Information

Certificate:	Sport Pilot	Age:	52, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Sport Pilot	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	02/12/2016
Flight Time:	196 hours (Total, all aircraft), 190 hours (Total, this make and model), 163 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AMERICAN LEGEND AIRCRAFT CO	Registration:	N156WB
Model/Series:	AL3 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	2012	Amateur Built:	No
Airworthiness Certificate:	Special Light-Sport	Serial Number:	AL-1173
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	05/28/2015, Condition	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	275.7 Hours as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-200-D
Registered Owner:	On file	Rated Power:	100 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	JKA, 17 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	1535 UTC	Direction from Accident Site:	200°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	29° C / 22° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Elberta, AL (AL08)	Type of Flight Plan Filed:	None
Destination:	Elberta, AL (AL08)	Type of Clearance:	None
Departure Time:	CDT	Type of Airspace:	Class G

Airport Information

Airport:	PERDIDO WINDS AIRPARK (AL08)	Runway Surface Type:	Grass/turf
Airport Elevation:	75 ft	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	3100 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	30.424444, -87.535278 (est)

Administrative Information

Investigator In Charge (IIC):	Daniel P Boggs	Report Date:	10/02/2017
Additional Participating Persons:	Nina McBride; FAA; Birmingham, AL Kurt Gibson; Continental Motors; Mobile, AL		
Publish Date:	10/02/2017		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93287		

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