



Aviation Investigation Final Report

Location:	Georgetown, Texas	Accident Number:	CEN17LA239
Date & Time:	June 4, 2017, 16:09 Local	Registration:	N169BZ
Aircraft:	LEVY ADAM V LEGACY 2000	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After reaching 12,500 ft altitude, the private pilot attempted to adjust the boost control of the experimental amateur-built airplane's engine. When he did so, the engine experienced a total loss of power. The pilot subsequently performed a forced landing to a field. A postaccident examination of the engine revealed no anomalies. The examination revealed that the airplane was powered by an aircraft engine that was modified to employ a belt-driven automotive centrifugal supercharger. Due to the experimental nature of the supercharger installation, no determination could be made regarding its installation or operation; however, no outward signs of a failure or malfunction were observed. Based on the available evidence, 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 based on the available information.

Findings

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

History of Flight

Enroute-cruise	Loss of engine power (total) (Defining event)
Landing	Collision with terr/obj (non-CFIT)

On June 4, 2017, about 1609 central daylight time, an amateur-built Lancair Legacy 2000 airplane, N169BZ, sustained substantial damage during a forced landing following a loss of engine power during cruise flight near Georgetown, Texas. The pilot and passenger were not injured. The airplane received substantial damage to its wings and fuselage when the landing gear separated from the airplane. The airplane was registered to DA Leasing LLC and operated by the pilot under the provisions of 14 *Code of Federal Regulations* Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which was not on a flight plan. The local flight originated from the Georgetown Municipal Airport (GTU), Georgetown, Texas, about 1540.

The pilot reported that the flight was to evaluate airplane performance. Upon reaching an altitude of 12,500 feet above mean sea level (msl), the pilot adjusted the engine boost control and the engine lost all power. He returned the boost control to its previous position, but the engine did not resume power production. He reported that he was unable to restart the engine and attempted to glide back to GTU. Insufficient altitude resulted in the airplane landing about 1.5 miles southeast of GTU.

A postaccident examination of the airplane was conducted by Federal Aviation Administration inspectors. The airplane was equipped with a Continental Motors IO-550-C engine. The engine was outfitted with an automotive belt driven centrifugal supercharger. The supercharger fed pressurized air to the engine's fuel injection throttle body and the manifold pressure (boost) was controlled by the pilot using a vernier control in the cockpit. Examination of the basic Continental engine found no anomalies. Due to the experimental nature of the supercharger installation, no determination could be made regarding its installation or operation; however, no outward signs of a failure or malfunction were observed.

Pilot Information

Certificate:	Private	Age:	40,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 6, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	500 hours (Total, all aircraft), 115 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	LEVY ADAM V	Registration:	N169BZ
Model/Series:	LEGACY 2000 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	L2K-241
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:		Engine Model/Series:	IO-550-C
Registered Owner:		Rated Power:	300 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:	GTU	Distance from Accident Site:	2 Nautical Miles
Observation Time:	21:10 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Few / 5500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.76 inches Hg	Temperature/Dew Point:	31°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GEORGETOWN, TX (GTU)	Type of Flight Plan Filed:	
Destination:	GEORGETOWN, TX (GTU)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	GEORGETOWN MUNI GTU	Runway Surface Type:	
Airport Elevation:	789 ft msl	Runway Surface Condition:	Vegetation
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	30.678888,-97.679443

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	Frank Fortman; FAA - San Antonio FSDO; San Antonio, TX
Original Publish Date:	November 15, 2018
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=95410

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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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).