



Aviation Investigation Final Report

Location:	Leander, Texas	Accident Number:	CEN11LA449
Date & Time:	June 30, 2011, 16:15 Local	Registration:	N59VA
Aircraft:	ABBEY VICTOR RV9-A	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot departed in an experimental amateur-built airplane for a series of local test flights after a recent engine installation. During the first flight, the engine overheated and the pilot returned for a landing. The second flight was uneventful; however, during the third flight, the pilot noticed that the engine did not sound right, so he returned to the airport. The pilot and a mechanic inspected the engine and did not find any anomalies. When the pilot departed on the fourth flight, the engine lost partial power shortly after takeoff. The pilot turned back to the airport and, during the forced landing, the nose gear impacted a depression in the turf runway and the airplane nosed over. Examination of the airplane’s engine did not reveal a reason for the loss of engine power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The partial loss of engine power for reasons that could not be determined because examination of the engine did not reveal any anomalies that would have precluded normal operation.

Findings

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

Factual Information

History of Flight

Takeoff	Unknown or undetermined
Takeoff	Loss of engine power (partial) (Defining event)
Emergency descent	Off-field or emergency landing
Landing-landing roll	Nose over/nose down

On June 30, 2011, about 1615 central daylight time, an experimental amateur built RV9A airplane, N59VA, experienced a partial loss of engine power on initial climb after takeoff from the Kittie Hill Airport (77T), Leander, Texas. The commercial rated pilot sustained minor injuries and the airplane sustained substantial damage during the forced landing. The airplane was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which operated without a flight plan.

According to the pilot, following the installation of an Eggenfellner Subaru E6 engine, he flew the airplane three times before the accident flight. During the first flight, the engine overheated and the pilot returned to the airport and landed. A second flight of 30 to 45 minutes was performed maintaining higher airspeeds and the engine performed with no observed anomalies. After takeoff on the third flight, the pilot noted that the engine didn't sound right, so he returned to the airport and landed. The pilot, along with his mechanic, examined the engine and could not locate any issues, so the pilot departed for his fourth flight. After takeoff from runway 17, when the airplane reached an altitude of 200 to 300 feet, the engine lost partial power. The pilot elected to make a left turn and performed a landing to runway 30. As the airplane neared the end of its landing rollout, the nose gear impacted a depression in the turf runway and the airplane nosed over.

Examination of the engine by a Federal Aviation Administration (FAA) inspector revealed that the airplane sustained substantial damage to its vertical stabilizer and damage to the left wing tip, canopy, nose gear, and propeller. Examination of the engine did not reveal a reason for the loss of engine power.

Pilot Information

Certificate:	Commercial	Age:	30, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
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 3 Without waivers/limitations	Last FAA Medical Exam:	July 28, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 5, 2010
Flight Time:	1690 hours (Total, all aircraft), 108 hours (Total, this make and model), 1629 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ABBEY VICTOR	Registration:	N59VA
Model/Series:	RV9-A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	90928
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	June 15, 2011 Condition	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	310 Hrs at time of accident	Engine Manufacturer:	Eggenfellner
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	E-6
Registered Owner:	On file	Rated Power:	200 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,790 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	15:46 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Scattered / 8000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	37°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Leander, TX (77T)	Type of Flight Plan Filed:	Unknown
Destination:	Leander, TX (77T)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Kittie Hill Airport 77T	Runway Surface Type:	Grass/turf
Airport Elevation:	1020 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	2620 ft / 55 ft	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:	30.601943,-97.818885(est)

Administrative Information

Investigator In Charge (IIC):	LeBaron, Timothy
Additional Participating Persons:	David Benningfield; Federal Aviation Administration; San Antonio, TX
Original Publish Date:	April 10, 2013
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=80993

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).