



National Transportation Safety Board Aviation Accident Final Report

Location:	Brentwood, CA	Accident Number:	WPR13LA353
Date & Time:	08/01/2013, 0945 PDT	Registration:	N199BW
Aircraft:	WEBER GPA-2	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that he was on a short cross-country flight when he felt a slight vibration in the airplane. An instrument panel scan revealed that the engine's cylinder head temperatures had risen above 450 degrees F. The pilot diverted toward the nearest airport, but the engine lost power before the airplane reached the airport. During the forced landing in a cornfield, both wings sustained substantial damage. A postaccident engine examination and test run revealed no evidence of any preimpact anomalies with the engine that would have prevented normal operation. 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 loss of engine power for reasons that could not be determined because postaccident examination did not reveal any anomalies that would have precluded normal operation.

Findings

Aircraft	Engine (reciprocating) - Malfunction
Environmental issues	Rough terrain - Contributed to outcome
Not determined	Not determined - Unknown/Not determined (Cause)

Factual Information

On August 1, 2013, about 0945 Pacific daylight time, a Weber GPA-2 (Long-EZ) experimental amateur-built airplane, N199BW, was substantially damaged during a forced landing following a loss of engine power near Brentwood, California. The airline transport pilot, the sole occupant, received minor injuries. The pilot was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed for the cross-country flight, which had originated from Livermore Municipal Airport, Livermore, California, approximately 30 minutes before the accident. A flight plan had not been filed.

The pilot stated that he was at an altitude of 4,500 feet when he noticed a slight vibration in the airplane. He examined the instrument panel and saw that the engine's cylinder head temperatures were rising above 450 degrees Fahrenheit. He did not remember looking at oil temperature or pressure indications. He diverted toward the nearest airport, but the engine lost power. He selected a road for a forced landing, but during the approach to the road he saw power lines ahead, so he attempted to make a 180-degree turn and land in the opposite direction on the road. He was unable to complete the turn, and he landed in a corn field. Both wings sustained substantial damage.

A Federal Aviation Administration (FAA) inspector examined the airplane at the accident site the day after the accident. He reported that the engine was still in place in the rear of the fuselage, and it was upright and appeared to be level. He checked the engine's oil level and found that it was full, and the oil appeared to be very clean. The airplane was then retrieved to a secure salvage yard. The inspector again examined the airplane on August 9, 2013. He found the engine still mounted to the airframe, and he was able to rotate it by hand. When he attempted an engine start, the engine immediately started. He moved the throttle back and forth, and the engine accelerated smoothly and without hesitation. Following the engine run, the inspector removed and split the oil filter. It was clean with no metal debris. The inspector also removed the carburetor's fuel screen/filter, and it was clean. The examination and test run revealed no evidence of any pre-impact discrepancies with the engine that would have prevented normal operation.

History of Flight

Enroute-cruise	Loss of engine power (total) (Defining event)
Landing	Off-field or emergency landing

Pilot Information

Certificate:	Airline Transport	Age:	57
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last Medical Exam:	07/29/2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	01/29/2013
Flight Time:	18850 hours (Total, all aircraft), 170 hours (Total, this make and model), 5070 hours (Pilot In Command, all aircraft), 240 hours (Last 90 days, all aircraft), 90 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	WEBER	Registration:	N199BW
Model/Series:	GPA-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	2001
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360 SERIES
Registered Owner:	EWINS JOHN H	Rated Power:	180 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	SCK, 24 ft msl	Observation Time:	0855 PDT
Distance from Accident Site:	19 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	100°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear / 1500 ft agl	Temperature/Dew Point:	19° C / 9° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	8 knots/ 24 knots, 270°	Visibility (RVR):	
Altimeter Setting:	30.01 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Livermore, CA (LVK)	Type of Flight Plan Filed:	None
Destination:	Sacramento, CA (MHR)	Type of Clearance:	None
Departure Time:	0915 PDT	Type of Airspace:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	James F Struhsaker	Adopted Date:	06/11/2014
Additional Participating Persons:	David T Jensen; FAA; Oakland, CA		
Publish Date:	06/11/2014		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=87655		

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