



National Transportation Safety Board Aviation Accident Final Report

Location:	Manila, AR	Accident Number:	CEN17LA329
Date & Time:	08/24/2017, 1000 CDT	Registration:	N61LR
Aircraft:	JAMES M RAULERSON CH 750	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot stated that he flew the airplane earlier in the day with no engine anomalies noted. During the return flight at 2,000 ft above ground level, the cylinder head temperature (CHT) on one of the engine's cylinders was higher than normal. He reduced engine power and the CHT decreased, then later increased again. He subsequently heard a loud "bang" from the engine, and the airplane and engine both shuddered. He reduced the throttle to idle and made a forced landing in a bean field. During the landing roll, the nose wheel collapsed in the mud and the airplane nosed over.

A postaccident exterior examination of the engine did not reveal any abnormalities. The airplane was not made available for examination during the course of the investigation; therefore, 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 the airplane was not available for examination.

Findings

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

On August 24, 2017, about 1000 central daylight time, a Zenith CH 750 airplane, N61LR, experienced a loss of engine power and landed in a field near Manila, Arkansas. The private rated pilot and one passenger were not injured and the airplane sustained substantial damage. The airplane was registered to and operated by the pilot under the provisions of 14 *Code of Federal Regulations* Part 91 as a personal flight. Visual meteorological conditions prevailed at the time of the accident and no flight plan had been filed. The cross-country flight departed Delta Regional Airport (DRP), Colt, Arkansas, about 0930 and was en route to Steele Municipal Airport (M12), Steele, Missouri.

The pilot stated that earlier in the day he flew from M12 to DRP with no engine anomalies noted. During the return flight at 2,000 ft above ground level, the cylinder head temperature (CHT) on one cylinders was higher than normal. He reduced the throttle and the CHT decreased, then later increased to 340°F. He then heard a loud "bang" from the engine, and the airplane and engine both shuttered. He reduced the throttle to idle and made a forced landing in a bean field. During the landing roll the nose wheel collapsed in the mud and the airplane nosed over.

The responding Federal Aviation Administration (FAA) inspector sent photos of the airplane in the bean field and confirmed substantial damage to the right wing and firewall. An exterior examination of the engine did not reveal any abnormalities.

The airplane was not made available during the investigation; therefore, an engine examination was not possible.

History of Flight

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

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	08/28/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	08/29/2017
Flight Time:	495 hours (Total, all aircraft), 401 hours (Total, this make and model), 41.9 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1.1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	JAMES M RAULERSON	Registration:	N61LR
Model/Series:	CH 750	Aircraft Category:	Airplane
Year of Manufacture:	2014	Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	75-8464
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/16/2017, Continuous Airworthiness	Certified Max Gross Wt.:	1440 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	400 Hours as of last inspection	Engine Manufacturer:	UL Power
ELT:	Installed, not activated	Engine Model/Series:	350i
Registered Owner:	On file	Rated Power:	118 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:	KBYH, 254 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	0955 CDT	Direction from Accident Site:	61°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	24° C / 16° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	COLT, AR (DRP)	Type of Flight Plan Filed:	None
Destination:	STEELE, MO (M12)	Type of Clearance:	None
Departure Time:	0930 CDT	Type of Airspace:	Class G

Airport Information

Airport:	MANILA MUNI (MXA)	Runway Surface Type:	
Airport Elevation:	242 ft	Runway Surface Condition:	Rough; Vegetation
Runway Used:	N/A	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:	35.859167, -90.192500 (est)

Administrative Information

Investigator In Charge (IIC):	Joshua D Lindberg	Report Date:	03/18/2019
Additional Participating Persons:	Brian Love; Federal Aviation Administration; Little Rock, AR		
Publish Date:	03/18/2019		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=95892		

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