



National Transportation Safety Board Aviation Accident Preliminary Report

Location:	Zelienople, PA	Accident Number:	CEN19LA202
Date & Time:	06/29/2019, 1418 EDT	Registration:	N9325H
Aircraft:	Aeronca L16A	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

On June 29, 2019, at 1418 eastern daylight time, an Aeronca L-16A (7BCM), N9325H, lost engine power shortly after taking off from Zelienople Municipal Airport (PJC), Zelienople, Pennsylvania. The private pilot made a forced landing in a hay field one mile north of PJC. He was not injured, but the airplane was substantially damaged when the right main landing gear buckled. The airplane was registered to and operated by the pilot as a Title 14 *Code of Federal Regulations (CFR)* Part 91 personal flight. Visual meteorological conditions existed near the accident site at the time of the accident, and no flight plan had been filed. The flight originated from PJC about 1400.

In his accident report, the pilot indicated that prior to takeoff, all fuel tanks had been "topped off" with 19 gallons of 100-octane low-lead fuel. After practicing turns, he turned towards the airport with the intention of practicing takeoffs and landings. Approximately 15 minutes after takeoff while flying straight-and-level at 1,900 ft, the engine "abruptly" stopped. There was no warning or rpm changes or abnormal sounds. Attempts to restart the engine were to no avail. He made a "dead stick" forced landing into a nearby hay field. After rolling about 100 ft up the muddy field, the right main landing gear buckled and the airplane came to a halt. The pilot said there was an issue with the ventilator in the main fuel tank cap that would have been undetectable.

Federal Aviation Administration (FAA) inspectors examined the airplane. The engine was a Continental C85-12 that had been modified in 2003 via STC00979AT with the installation of a crankshaft, connecting rods and pistons from a Continental O-200 engine. The inspectors confirmed engine control continuity, and noted spark from both magnetos and all plugs. The inspectors found fuel leaking from the filler cap. The salvage recovery crew told the inspectors that no fuel had been leaking prior to their loosening the fuel cap to prepare the airplane for transport. They said they drained 11 gallons from the fuel tanks.

The inspectors consulted an Aeronca mechanic and former FAA Inspector. He stated that if a lineman left the fuel nozzle resting in the filler neck instead of holding it, it would bend the filler neck. The fuel cap incorporates 4 vent holes around the circumference. If the cap was installed with a bent or deformed filler neck, the gasket around the filler neck would block the

vent holes. This would cause the fuel not to be vented to atmosphere, resulting in fuel starvation to the engine.

The pilot later retained the services of another L-16 specialist and airframe and powerplant (A&P) mechanic. He told him that there was a known problem with the fuel cap on the L-16. The original cap isn't available, and the one most commonly used in its place is screwed on. If the fuel tanks had just been topped off, the vent can become blocked and create a vacuum and the engine loses power.

Aircraft and Owner/Operator Information

Aircraft Make:	Aeronca	Registration:	N9325H
Model/Series:	L16A 7BCM	Aircraft Category:	Airplane
Amateur Built:	No		
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:	BTP, 1248 ft msl	Observation Time:	1418 EDT
Distance from Accident Site:	10 Nautical Miles	Temperature/Dew Point:	21 °C / 19 °C
Lowest Cloud Condition:	Few / 4000 ft agl	Wind Speed/Gusts, Direction:	4 knots / , 160°
Lowest Ceiling:	Broken / 8500 ft agl	Visibility:	7 Miles
Altimeter Setting:	30.1 inches Hg	Type of Flight Plan Filed:	None
Departure Point:	Zelienople, PA (PJC)	Destination:	Zelienople, PA (PJC)

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:	40.857778, -80.195000

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott
Additional Participating Persons:	Scott Alexander; FAA Flight Standards District Office; Pittsburgh, PA Brad Cossin; FAA Flight Standards District Office; Pittsburgh, PA
Note:	The NTSB did not travel to the scene of this accident.