

# **Aviation Investigation Final Report**

**Location:** Pomona, Missouri **Accident Number:** CEN18LA317

Date & Time: August 6, 2018, 12:51 Local Registration: N76524

Aircraft: Cessna 120 Aircraft Damage: Substantial

**Defining Event:** Fuel starvation **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

The private pilot reported that he departed the airport for the local flight with both wing fuel tanks full of fuel and the fuel selector on the left tank. After flying for about 1 hour, he landed at the airport and departed again. When the airplane was about 500 ft above ground level, the pilot intended to change the fuel selector to the right fuel tank. However, he inadvertently switched the fuel selector to the off position, and the engine lost power. The pilot immediately switched the fuel selector back to the left fuel tank and attempted to restart the engine without success. He executed a forced landing to a field, and, during the landing rollout, the airplane collided with a fence and hay bale, which resulted in substantial damage. The pilot mismanaged the fuel during flight, which resulted in fuel starvation.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's inadequate fuel management, which resulted in fuel starvation and a forced landing.

# **Findings**

Personnel issues Use of equip/system - Pilot
Aircraft Fuel - Fluid management

**Environmental issues** Fence/fence post - Contributed to outcome

**Environmental issues** (general) - Contributed to outcome

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### **Factual Information**

## **History of Flight**

Initial climb	Fuel starvation (Defining event)
Initial climb	Loss of engine power (total)
Emergency descent	Off-field or emergency landing
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

On August 6, 2018, about 1251 central daylight time, a Cessna 120, N76524, sustained substantial damage during a forced landing near Pomona, Missouri. The pilot and passenger were not injured. The airplane was owned and operated by the pilot under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight. Visual meteorological conditions prevailed at the time of the flight, which was not on a flight plan. The airplane departed about 1145 from the West Plains Regional Airport (UNO), West Plains, Missouri, on a local flight.

The pilot reported that he departed UNO with both wing fuel tanks full of fuel, and the fuel selector was on the left tank. After flying for about an hour, he landed at UNO and departed again. When the airplane was about 500 ft above ground level, the pilot intended to change the fuel selector to the right fuel tank. However, he inadvertently switched the fuel selector to the OFF position, and the engine stopped producing power. The pilot immediately switched the fuel selector back to the left fuel tank and attempted to restart the engine, but without success. He executed a forced landing to a field and during the landing rollout, the airplane collided with a fence and hay bale, which resulted in substantial damage to the airplane.

#### **Pilot Information**

Certificate:	Private	Age:	84,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
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:	August 4, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 1, 2018
Flight Time:	1576 hours (Total, all aircraft), 1200 hours (Total, this make and model)		

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**Aircraft and Owner/Operator Information** 

Aircraft Make:	Cessna	Registration:	N76524
Model/Series:	120	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	10958
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	January 26, 2018 Annual	Certified Max Gross Wt.:	1451 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4424.11 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-200-A4B
Registered Owner:		Rated Power:	100 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:	UNO,1228 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	340°
<b>Lowest Cloud Condition:</b>	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	N/A /
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	33°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	West Plains, MO (UNO )	Type of Flight Plan Filed:	None
Destination:	West Plains, MO (UNO )	Type of Clearance:	None
Departure Time:	11:45 Local	Type of Airspace:	

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#### **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	Unknown
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	2 None	Latitude, Longitude:	36.878612,-91.904998(est)

#### **Administrative Information**

Investigator In Charge (IIC): Silliman, James

Additional Participating Persons: Randy Ottinger; FAA St Louis FSDO; St Anne, MO

Original Publish Date: November 19, 2019

**Note:** The NTSB did not travel to the scene of this accident.

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=98008">https://data.ntsb.gov/Docket?ProjectID=98008</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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