

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

Page 2 of 6 CEN18LA317

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)		

Page 3 of 6 CEN18LA317

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:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Day
UNO,1228 ft msl	Distance from Accident Site:	2 Nautical Miles
12:53 Local	Direction from Accident Site:	340°
Few / 5000 ft AGL	Visibility	10 miles
None	Visibility (RVR):	
10 knots /	Turbulence Type Forecast/Actual:	/
210°	Turbulence Severity Forecast/Actual:	N/A /
30.14 inches Hg	Temperature/Dew Point:	33°C / 21°C
No Obscuration; No Precipitation		
West Plains, MO (UNO)	Type of Flight Plan Filed:	None
West Plains, MO (UNO)	Type of Clearance:	None
11:45 Local	Type of Airspace:	
	UNO,1228 ft msl 12:53 Local Few / 5000 ft AGL None 10 knots / 210° 30.14 inches Hg No Obscuration; No Precipitate West Plains, MO (UNO) West Plains, MO (UNO)	UNO,1228 ft msl Distance from Accident Site: 12:53 Local Direction from Accident Site: Few / 5000 ft AGL Visibility None Visibility (RVR): 10 knots / Turbulence Type Forecast/Actual: 210° Turbulence Severity Forecast/Actual: 30.14 inches Hg Temperature/Dew Point: No Obscuration; No Precipitation West Plains, MO (UNO) Type of Flight Plan Filed: West Plains, MO (UNO) Type of Clearance:

Page 4 of 6 CEN18LA317

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)

Page 5 of 6 CEN18LA317

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
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=98008

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.

Page 6 of 6 CEN18LA317