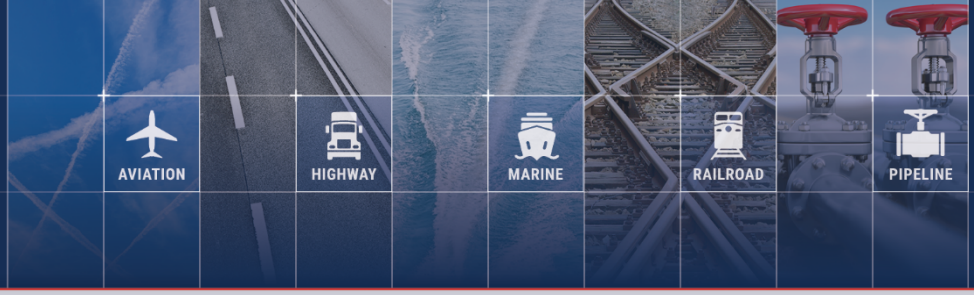

Aviation Investigation Final Report

Location:	Clovis, New Mexico	**Accident Number:**	CEN18LA207
Date & Time:	June 3, 2018, 11:30 Local	**Registration:**	N66ML
Aircraft:	Cessna T210	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot reported that he departed for the local flight in the airplane with 17 gallons of fuel in the right fuel tank and 22 gallons of fuel in the left fuel tank. While he was descending the airplane through 6,500 ft mean sea level and drawing fuel from the right tank, the engine lost total power. The pilot switched to the left fuel tank, turned on the fuel pump, and engaged the engine starter in an attempt to restart the engine to no avail. The pilot subsequently conducted a forced landing, during which the airplane collided with a power line, and the left aileron and fuselage sustained substantial damage.

Examinations of the airframe, fuel system, and engine revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation, and the engine was test-run successfully. At recovery, 2 gallons of fuel were found in the left fuel tank (although a small amount had leaked from the damaged fuel drain), and 9 gallons of fuel were found in the right fuel tank. The investigation could not determine the reason for the engine power loss.

The Pilot's Operating Handbook engine restart procedures stated, in part, to select the fuller fuel tank. Given that there was adequate fuel onboard when the engine lost power, if the pilot had properly conducted the engine restart procedures by selecting the fuller fuel tank, it is possible that engine power could have been restored.

Probable Cause and Findings

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

The total loss of engine power for reasons that could not be determined because examination of the engine revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Enroute-descent	Miscellaneous/other
Enroute-descent	Loss of engine power (total) (Defining event)
Emergency descent	Controlled flight into terr/obj (CFIT)

On June 3, 2018, about 1130 mountain daylight time, a Cessna T210M airplane, N66ML, was substantially damaged during a forced landing near Clovis, New Mexico. The private pilot was not injured. The personal flight was conducted under the provisions of 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed and no Federal Aviation Administration (FAA) flight plan had been filed for the flight. The local flight departed Clovis Municipal Airport (CVN), Clovis, New Mexico, about 1040.

According to the written statement submitted by the pilot, he was descending to land, and was at an altitude of 6,500 ft mean sea level. He had just made an engine throttle adjustment, when the engine lost power. The pilot changed to the left fuel tank, turned the electric auxiliary fuel pump on, and engaged the engine starter in attempted to restart the engine. The engine did not restart. During the forced landing the airplane collided with a wire from powerlines adjacent to the road the pilot was attempting to land on. The left aileron and the fuselage were substantially damaged during the forced landing.

The pilot added that he had departed with 17 gallons of fuel in the right fuel tank and 22 gallons of fuel in the left fuel tank. According to the team that recovered the airplane, 2 gallons of fuel were recovered from the left fuel tank and 9 gallons of fuel were recovered from the right fuel tank. The FAA inspector who responded to the accident reported that the fuel drain on the left wing was impact damaged and a small amount of fuel had leaked out of that wing.

An examination of the fuel system revealed no anomalies or contamination that would have obstructed the fuel flow. An engine run was conducted on the engine and the engine started and ran without interruption. There were no mechanical anomalies with the airframe, fuel system, or engine that would have precluded normal operations.

The Pilot Operating Handbook for the Cessna T210M, Operating Limitations, listed 90 gallons total fuel; 45 gallons in each tank and 1 gallon unusable fuel. In the Emergency Procedures Section, the engine restart procedures during flight were outlined as:

1. Airspeed – 85 KIAS
2. Fuel Quantity – CHECK
3. Fuel Selector Valve – FULLER TANK
4. Mixture – RICH
5. Auxiliary Fuel Pump – ON for 3-5 seconds with throttle ½ open; then OFF
6. Ignition Switch – BOTH (or START if propeller is stopped)
7. Throttle – ADVANCE slowly

The Airplane & Systems Description, Fuel System, goes on to state in part that

"...When the fuel tanks are ¼ full or less, prolonged uncoordinated flight such as slips or skids can uncover the fuel tank outlets, causing fuel starvation and engine stoppage. Therefore, with low fuel reserves, do not allow the airplane to remain in uncoordinated flight for periods in excess of one minute."

It goes on to caution that *"Excessive use of the ON position* [auxiliary fuel pump] *at high altitude and full rich mixture can cause flooding of the engine as indicated by a short period of power followed by a loss of power."*

Pilot Information

Certificate:	Private	**Age:**	68,Male
Airplane Rating(s):	Single-engine land; Multi-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:**	February 6, 2018
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	November 8, 2017
Flight Time:	3551 hours (Total, all aircraft), 180 hours (Total, this make and model), 3551 hours (Pilot In Command, all aircraft), 8.8 hours (Last 90 days, all aircraft), 5.6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N66ML
Model/Series:	T210 M	**Aircraft Category:**	Airplane
Year of Manufacture:	1978	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	21062598
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	November 3, 2017 Annual	**Certified Max Gross Wt.:**	3800 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	1550 Hrs at time of accident	**Engine Manufacturer:**	Continental Motors
ELT:	Installed	**Engine Model/Series:**	TSIO-520R
Registered Owner:		**Rated Power:**	285 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:	KCVS,4215 ft msl	**Distance from Accident Site:**	65 Nautical Miles
Observation Time:	10:58 Local	**Direction from Accident Site:**	318°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	12 knots / 17 knots	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	100°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.32 inches Hg	**Temperature/Dew Point:**	24°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Clovis, NM (CVN)	**Type of Flight Plan Filed:**	None
Destination:	Clovis, NM (CVN)	**Type of Clearance:**	None
Departure Time:	10:40 Local	**Type of Airspace:**	

Airport Information

Airport:	Clovis CVN	**Runway Surface Type:**	
Airport Elevation:	4215 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing;Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	35.506111,-103.169723

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Steven R White; Federal Aviation Administration; Lubbock, TX
Original Publish Date:	April 30, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97392