



Aviation Investigation Final Report

Location:	Texico, New Mexico	Accident Number:	GAA19CA053
Date & Time:	November 5, 2018, 16:55 Local	Registration:	N3214P
Aircraft:	Piper PA24	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	2 Minor, 2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, the day before the accident flight, he had fully refueled the airplane's fuel tanks (60 gallons of fuel), conducted a run-up of the engine, and conducted a local flight around the pattern to troubleshoot an electrical issue that was later resolved.

The pilot reported that, on the day of the accident, during the preflight inspection for the cross-country flight, the airplane was only "two gallons shy of full." About 2.5 hours into the flight, after switching the fuel tanks multiple times en route, he switched to the left main fuel tank to prepare for landing. He added that, about 4 miles south of the destination airport, the engine lost power, the airplane was "too low," and he set up to land on a nearby road. The airplane landed with the gear retracted and struck multiple signs before coming to rest.

The airplane sustained substantial damage to the right wing, fuselage, and empennage.

During a postaccident examination by a Federal Aviation Administration inspector, both fuel tanks were found empty, and no evidence of fuel leakage was found at the accident site.

During a telephone conversation, the pilot reported that the total flight time the day of the accident was about 3.1 hours and that he was not aware of any preaccident mechanical failures. He estimated that the fuel burn was about 14 gallons per hour and that, during the accident flight, there was about a 17-knot headwind.

The Pilot's Operating Handbook for the airplane stated that, while at 75% power, the airplane has about 3.7 hours of fuel endurance. Given the evidence, it is likely that the pilot did not ensure that there was adequate fuel onboard for the accident flight, which led to fuel exhaustion and a total loss of engine power.

Probable Cause and Findings

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

The pilot's improper preflight fuel planning, which resulted in fuel exhaustion and a total loss of engine power.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot
Environmental issues	Sign/marker - Contributed to outcome

Factual Information

History of Flight

Enroute	Fuel exhaustion (Defining event)
Enroute	Loss of engine power (total)
Enroute	Attempted remediation/recovery
Landing	Off-field or emergency landing
Landing	Landing gear not configured
Landing	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	25,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
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 1 Without waivers/limitations	Last FAA Medical Exam:	June 28, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 28, 2018
Flight Time:	153 hours (Total, all aircraft), 29 hours (Total, this make and model), 73 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3214P
Model/Series:	PA24 250	Aircraft Category:	Airplane
Year of Manufacture:	1958	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-292
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 2018 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3433.83 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	O-540-A1A5
Registered Owner:		Rated Power:	250 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	KCVN, 4216 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	23:56 Local	Direction from Accident Site:	325°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.84 inches Hg	Temperature/Dew Point:	16°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Austin, TX (EDC)	Type of Flight Plan Filed:	None
Destination:	Texico, NM (CVN)	Type of Clearance:	VFR; VFR flight following
Departure Time:	15:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	CLOVIS MUNI CVN	Runway Surface Type:	Asphalt
Airport Elevation:	4215 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	5697 ft / 150 ft	VFR Approach/Landing:	Forced landing;Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 2 None	Latitude, Longitude:	34.38861,-103.044998(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Steve Miller; FAA; Lubbock, TX
Original Publish Date:	June 10, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98610

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