



# Aviation Investigation Final Report

<b>Location:</b>	Rosenberg, Texas	<b>Accident Number:</b>	CEN23LA345
<b>Date &amp; Time:</b>	August 2, 2023, 15:59 Local	<b>Registration:</b>	N38483
<b>Aircraft:</b>	Piper PA-28-181	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel exhaustion	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The student pilot stated that in preparation for his solo cross-country flight, he reviewed his flight planning with his flight instructor. He said he flew to the destination airport, where he performed one approach and landing, followed by flight maneuvers north of the airport, and then landed. The pilot shut the airplane down to use the restroom. Prior to departure from the destination airport, he did not visually check the airplane fuel level through the fuel filler ports. During the return flight, he visually observed the fuel quantity, and it was “dropping rapidly,” and he decided to land at an alternate airport. During the approach to the alternate airport, the engine “sputtered” and quit. He landed the airplane with a tailwind and “slammed on the brakes” to try to slow the airplane down as soon as possible. The airplane overran the runway and impacted a fence and construction equipment that resulted in substantial damage to both wings. Postaccident examination of the airplane revealed no useable fuel in the airplane fuel tanks.

## Probable Cause and Findings

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

The student pilot’s improper fuel management that resulted in fuel exhaustion, a total loss of engine power, and a subsequent forced landing and landing overrun at an alternate airport.

## Findings

<b>Aircraft</b>	Fuel - Fluid management
<b>Aircraft</b>	Fuel - Fluid level
<b>Personnel issues</b>	Decision making/judgment - Pilot

## Factual Information

### History of Flight

Enroute	Fuel exhaustion (Defining event)
Enroute	Loss of engine power (total)
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

### Pilot Information

Certificate:	Commercial; Student	Age:	34,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Unknown	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	55.7 hours (Total, all aircraft), 10.8 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N38483
Model/Series:	PA-28-181	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	28-7790556
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 14, 2023 100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	12546.5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A4M
Registered Owner:	KDRD HOLDINGS LLC	Rated Power:	
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:	SGR,81 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	19:53 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	38°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	San Antonio, TX (5C1)	Type of Flight Plan Filed:	VFR
Destination:	Houston, TX (LVJ)	Type of Clearance:	None
Departure Time:	14:34 Local	Type of Airspace:	Class E

## Airport Information

Airport:	Lane Airpark T54	Runway Surface Type:	Asphalt
Airport Elevation:	96 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	3020 ft / 35 ft	VFR Approach/Landing:	Forced landing

## Wreckage and Impact Information

Crew Injuries:	N/A	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	N/A	Latitude, Longitude:	29.523331,-95.779758(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gallo, Mitchell
<b>Additional Participating Persons:</b>	Rick Bolton; Federal Aviation Administration; Houston, TX
<b>Original Publish Date:</b>	November 30, 2023
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=192784">https://data.nts.gov/Docket?ProjectID=192784</a>

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](#).