



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Forney, Texas	Accident Number:	CEN24LA068
Date & Time:	December 18, 2023, 14:20 Local	Registration:	N66RC
Aircraft:	Piper PA-23-250	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

The pilot reported that while returning from a 5-hour aerial survey flight, she noticed about a quarter tank of fuel indicated on each fuel gauge and continued the flight toward the destination airport. While on the approach, the pilot noticed that both engines sputtered and both fuel gauges indicated empty. The pilot conducted a forced landing to a highway median, and the airplane impacted guardrails. Both wings, the empennage, and fuselage sustained substantial damage. Postaccident examination of the airplane revealed that the fuel tanks contained no usable fuel.

Probable Cause and Findings

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

The pilot's inadequate fuel planning and improper in-flight decision-making, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot
Personnel issues	Decision making/judgment - Pilot
Environmental issues	Fence/fence post - Contributed to outcome

Factual Information

History of Flight

Approach	Fuel exhaustion (Defining event)
Landing-flare/touchdown	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)
Approach	Loss of engine power (total)

Pilot Information

Certificate:	Commercial	Age:	50,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	November 28, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 15, 2022
Flight Time:	872 hours (Total, all aircraft), 69 hours (Total, this make and model), 624 hours (Pilot In Command, all aircraft), 82 hours (Last 90 days, all aircraft), 48 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N66RC
Model/Series:	PA-23-250	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	27-8054046
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	October 2, 2023 Annual	Certified Max Gross Wt.:	5165 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	3329.1 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	TIO-540-C1A
Registered Owner:	PACIFIC FLEET AVIATION LLC	Rated Power:	250 Horsepower
Operator:	PACIFIC FLEET AVIATION LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KHQZ, 447 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	14:50 Local	Direction from Accident Site:	261°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.25 inches Hg	Temperature/Dew Point:	17°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mesquite, TX (HQZ)	Type of Flight Plan Filed:	None
Destination:	Mesquite, TX (HQZ)	Type of Clearance:	VFR
Departure Time:	09:31 Local	Type of Airspace:	Class D

Wreckage and Impact Information

Crew Injuries:	N/A	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	N/A	Latitude, Longitude:	32.75467,-96.46528(est)

Administrative Information

Investigator In Charge (IIC):	Rutt, Brian
Additional Participating Persons:	Gary Watson; FAA - North Texas FSDO
Original Publish Date:	February 20, 2024
Last Revision Date:	February 22, 2024
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=193540

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](#).