



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Osage, Arkansas	Accident Number:	CEN23LA020
Date & Time:	October 26, 2022, 15:27 Local	Registration:	N8457D
Aircraft:	Piper PA-22-160	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he conducted a preflight inspection and filled both of the airplane's fuel tanks. While enroute, the airplane's engine lost power. The pilot switched fuel tanks but was unable to restore power. The pilot then conducted a forced landing to a rough field, during which the airplane impacted a hay bale. The airplane sustained substantial damage to the fuselage. Postaccident examination of the airplane revealed that the fuel tanks contained no usable fuel. No other postaccident malfunctions or failures that would have precluded normal operations were found. Immediately following the accident, the pilot stated that he ran out of fuel.

The pilot wrote on NTSB Accident/Incident Reporting Form 6120.1 that it was possible either or both fuel tanks were not completely full "due to difficulty with the ladder and fuel pump."

Probable Cause and Findings

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

A total loss of engine power due to fuel exhaustion. Contributing to the accident was the pilot's inadequate preflight inspection.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Preflight inspection - Pilot
Personnel issues	Fuel planning - Pilot
Environmental issues	Rough terrain - Contributed to outcome

Factual Information

History of Flight

Enroute	Fuel exhaustion (Defining event)
Prior to flight	Aircraft inspection event
Landing-flare/touchdown	Off-field or emergency landing

Pilot Information

Certificate:	Private	Age:	87,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	BasicMed None	Last FAA Medical Exam:	January 8, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 24, 2021
Flight Time:	(Estimated) 2721 hours (Total, all aircraft), 1093 hours (Total, this make and model), 2687 hours (Pilot In Command, all aircraft), 31 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N8457D
Model/Series:	PA-22-160	Aircraft Category:	Airplane
Year of Manufacture:	1957	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-5713
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 3, 2022 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1
Airframe Total Time:	4020 Hrs as of last inspection	Engine Manufacturer:	
ELT:	C126 installed, activated	Engine Model/Series:	
Registered Owner:	On file	Rated Power:	
Operator:	SBSB, LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KHRO	Distance from Accident Site:	11 Nautical Miles
Observation Time:		Direction from Accident Site:	49°
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	3004 inches Hg	Temperature/Dew Point:	24°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Smith , AR (KFSM)	Type of Flight Plan Filed:	None
Destination:	Harrison , AR (KHRO)	Type of Clearance:	None
Departure Time:	19:21 UTC	Type of Airspace:	Class G

Airport Information

Airport:	Field	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Dry;Rough
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36940.21,-932048.49(est)

Administrative Information

Investigator In Charge (IIC):	Otterstrom, Kevin
Additional Participating Persons:	Nathan Bradshaw; FAA ; Little Rock , AR
Original Publish Date:	January 9, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=106211

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](#).