



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Baytown, Texas	<b>Accident Number:</b>	CEN23LA259
<b>Date &amp; Time:</b>	June 23, 2023, 14:58 Local	<b>Registration:</b>	N8446B
<b>Aircraft:</b>	Piper PA-28RT-201T	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Unknown or undetermined	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

About 30 minutes into the local flight, 5 to 7 miles east of the airport, the engine began to run rough. The pilot leaned the fuel mixture and the engine returned to a normal operating condition. A few minutes later the engine began to run rough again. The pilot enriched the fuel mixture, turned on the auxiliary fuel pump to the low position, and the engine returned to a normal operating condition. The pilot returned to the airport, entered a left downwind, and elected to fly a normal traffic pattern. When the airplane was on the final leg of the traffic pattern and about 1/2 to 1 mile from the airport, the engine lost total power. The pilot was unable to make the airport and executed a forced landing to an adjacent field. During the forced landing, the landing gear collapsed, and the airplane came to rest upright. The airplane sustained substantial damage to both wings and the fuselage.

A postaccident examination of the airframe and engine revealed no mechanical malfunctions or failures that would have precluded normal operation. Due to impact related damage, the engine could not be functionally tested and the reason for the total loss of engine power was not determined.

## 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 undetermined reasons and the subsequent impact with terrain.

## Findings

Not determined	(general) - Unknown/Not determined
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# Factual Information

## History of Flight

Maneuvering	Unknown or undetermined (Defining event)
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On June 23, 2023, about 1458 central daylight time, a Piper PA-28RT-201T airplane, N8446B, sustained substantial damage when it was involved in an accident near Baytown, Texas. The pilot sustained minor injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to the pilot, he planned to locally practice some instrument flight maneuvers in preparation for an upcoming instrument flight rules check ride. After about 30 minutes of flight time, while 5 to 7 miles east of the airport, the engine began to run rough. The pilot leaned the fuel mixture and the engine returned to a normal operating condition. A few minutes later the engine began to run rough again. The pilot enriched the fuel mixture, turned on the auxiliary fuel pump to the low position, and the engine returned to a normal operating condition. The pilot returned to the airport, entered a left downwind, and elected to fly a normal traffic pattern. When the airplane was on the final leg of the traffic pattern and about about 1/2 to 1 mile from the airport, the engine lost total power. The pilot was unable to make the airport and executed a forced landing to an adjacent field. During the forced landing, the landing gear collapsed and the airplane came to rest upright. The airplane sustained substantial damage to both wings and the fuselage (see Figure 1).The pilot estimated the airplane contained about 50 gallons of fuel before takeoff.



Figure 1. Accident airplane (Source: Pilot/owner of the airplane)

A postaccident examination of the airframe and engine revealed an unspecified amount of usable fuel in both wing fuel tanks and no contamination. Fuel was present in the engine fuel lines forward of the firewall, engine fuel pump, throttle body, and fuel manifold valve. The magnetos were manually rotated and produced spark at each spark plug. Mechanical continuity was confirmed throughout the engine and accessories when the propeller was manually rotated. The engine turbocharger compressor and turbine wheels were free to rotate. Due to impact damage to the underside of the engine and engine crankshaft, the engine could not be functionally tested.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	69,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	July 18, 2023
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	September 27, 2021
<b>Flight Time:</b>	480 hours (Total, all aircraft), 310 hours (Total, this make and model), 430 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N8446B
<b>Model/Series:</b>	PA-28RT-201T	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1981	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28R-8231001
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 10, 2023 Annual	<b>Certified Max Gross Wt.:</b>	2900 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4020 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	TSIO-360-FB
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KEFD,32 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	15:54 Local	<b>Direction from Accident Site:</b>	223°
<b>Lowest Cloud Condition:</b>	Scattered / 4600 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots / 11 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.89 inches Hg	<b>Temperature/Dew Point:</b>	35°C / 24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Baytown, TX	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Baytown, TX	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class E

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	29.802339,-94.969755(est)

## Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	Jonathan Petitjean; FAA; Houston, TX
Original Publish Date:	April 18, 2024
Last Revision Date:	
Investigation Class:	<a href="#">Class 3</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=192451">https://data.nts.gov/Docket?ProjectID=192451</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](#).