



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Clearwater, Florida	Accident Number:	ERA23LA290
Date & Time:	July 5, 2023, 12:15 Local	Registration:	N8579W
Aircraft:	Piper PA-28-235	Aircraft Damage:	Substantial
Defining Event:	Fuel contamination	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was attempting to take off when the engine lost total power about 100-200 ft above the runway. He attempted to re-start the engine by switching the fuel selector from the right main tank to the left main tank, but the engine did not re-start. The pilot made a forced landing to a grassy area beyond the runway. The airplane traveled down an embankment, struck a pole and a metal gate, which resulted in substantial damage to the left wing and several engine mounts.

Postaccident examination of the airplane revealed the right main fuel tank was intact and fuel was observed in the tank. When the fuel was drained from the tank's quick drain valve, as well as the fuel strainer located on the lower fuselage, a large amount of water was drained prior to any fuel being drained. Water was also drained from the carburetor bowl and the drain plug was corroded. The pilot said that he performed a preflight inspection "per the checklists" and had drained fuel from both the left and right main fuel tanks prior to the flight; however, he did not drain the fuselage fuel strainer as part of the preflight inspection, which is required per the checklist. According to the airplane's pilot operating handbook (POH), *"This strainer should be drained regularly to avoid the accumulation of water or sediment."* Though the pilot said he drained the right main fuel tank prior to flight, he did not drain the fuselage fuel strainer as required per the checklist. As such, the loss of engine power on takeoff was most likely due to water contamination in the available fuel supply.

Probable Cause and Findings

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

The pilot's improper preflight inspection which resulted in a loss of engine power due to fuel contamination (water).

Findings

Personnel issues	Preflight inspection - Pilot
Aircraft	Fuel - Fluid condition

Factual Information

History of Flight

Takeoff	Fuel contamination (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	62, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Waiver time limited special	Last FAA Medical Exam:	February 17, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 14, 2023
Flight Time:	176 hours (Total, all aircraft), 10 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N8579W
Model/Series:	PA-28-235	Aircraft Category:	Airplane
Year of Manufacture:	1963	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-10091
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	February 1, 2023 Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1269 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	O-540-B2B5
Registered Owner:	HARMON TROY L	Rated Power:	235 Horsepower
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:	KCLW,66 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	11:45 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 2900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.08 inches Hg	Temperature/Dew Point:	32°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Clearwater, FL	Type of Flight Plan Filed:	None
Destination:	Sarasota, FL (SRQ)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	CLEARWATER AIR PARK CLW	Runway Surface Type:	Concrete
Airport Elevation:	71 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	4108 ft / 75 ft	VFR Approach/Landing:	Forced landing;Full stop

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:	27.977214,-82.759057

Administrative Information

Investigator In Charge (IIC):	Read, Leah
Additional Participating Persons:	Angel Negron; FAA/FSDO; Tampa, FL
Original Publish Date:	October 5, 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=192544

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](#).