



# **Aviation Investigation Final Report**

Location:	Sligo, Pennsylvania	Accident Number:	ERA22LA028
Date & Time:	October 23, 2021, 09:50 Local	Registration:	N7371P
Aircraft:	Piper PA-24-250	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

### Analysis

According to the pilot, he was in cruise flight when the engine lost full power. The pilot reported that he did not have enough time to attempt a restart of the engine or to switch fuel tanks, due to the low altitude of the airplane. He elected to conduct an off-field emergency landing. During the landing, the airplane impacted a tree, which resulted in substantial damage to the left outboard wing, right horizontal stabilizer and fuselage.

Examination of the airplane by a Federal Aviation Administration inspector revealed the fuel selector was positioned on the right fuel tank- AUX position. The right fuel tank-AUX fuel tank was checked, and no fuel was discovered in the tank, however, about 75 gallons of fuel was drained from the remaining tanks.

In a telephone interview with the pilot, he stated that took off on the right AUX tank. The postaccident examination did not reveal any mechanical malfunctions or anomalies that would have precluded normal operation.

### **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 as a result of the pilots mismanagement of fuel.

### Findings

Personnel issues	Use of equip/system - Pilot	
Aircraft	Fuel - Fluid management	
Aircraft	Fuel selector/shutoff valve - Incorrect use/operation	
Personnel issues	Use of checklist - Pilot	

## **Factual Information**

### History of Flight

Enroute-cruise	Loss of engine power (total) (Defining event)	
Emergency descent	Fuel starvation	

#### **Pilot Information**

Certificate:	Private	Age:	60,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Airship	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	July 2, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 1, 2020
Flight Time:	(Estimated) 352 hours (Total, all aircraft), 32 hours (Total, this make and model), 194 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft)		

#### **Passenger Information**

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

### Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7371P
Model/Series:	PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:	1961	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-2552
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	September 23, 2021 100 hour	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	23 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5913 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O540-A1D5
Registered Owner:	On file	Rated Power:	250 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:	Cleveland Center	Distance from Accident Site:	
Observation Time:	09:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	3500 ft AGL	Visibility	20 miles
Lowest Ceiling:	Overcast / 3500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	6°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Youngstown, OH (YNG)	Type of Flight Plan Filed:	None
Destination:	Hilton Head Island, SC (HXD)	Type of Clearance:	VFR
Departure Time:	09:20 Local	Type of Airspace:	Class E

### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.1466,-79.466(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Gary Ankney; FAA/FSDO; Pittsburgh, PA
Original Publish Date:	May 26, 2022
Last Revision Date:	
Investigation Class:	<u>Class 4</u>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=104155

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 <u>here</u>.