



Aviation Investigation Final Report

Location:	Greensboro, Georgia	Accident Number:	ERA21LA392
Date & Time:	September 25, 2021, 10:30 Local	Registration:	N5656H
Aircraft:	Piper PA-16	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he and his friend went to purchase an airplane from an airport in North Carolina. After an inspection and test flight of the airplane, he stated that, “we filled both tanks and called it a day.” The pilot returned the next day to pick up the airplane and said that he checked the fuel tanks and they looked full. He departed the airport enroute home and climbed to an altitude of 4,500 ft. He was aloft for 3 hours, using the right tank for 1 hour 30 minutes, followed by the left tank for 1 hour 30 minutes. He said that the engine “quit running” and he switched back to the right fuel tank. The engine started and ran for a few minutes before stopping again. The pilot elected to conduct an emergency landing on a rough logging road. After the emergency landing, the pilot checked the fuel tanks and stated that they were both empty. During a telephone interview with the pilot, he stated that his friend refueled the airplane, and he did not know how much fuel was put into the tanks.

The Federal Aviation Administration inspector who responded to the scene confirmed that both fuel tanks were empty of fuel. He did not observe any breaches of the fuel tanks, nor did he find any anomalies of the fueling system.

During inspection of the airplane by a mechanic, structural damage was discovered on the firewall. The engine mount was also observed buckled.

Probable Cause and Findings

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

The pilot's inadequate preflight planning and fuel system inspection, which resulted in fuel exhaustion.

Findings

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

Factual Information

History of Flight

Enroute-cruise	Fuel exhaustion (Defining event)
Enroute-cruise	Loss of engine power (total)
Emergency descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private; Sport Pilot	Age:	79, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Sport pilot None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 3200 hours (Total, all aircraft), 150 hours (Total, this make and model), 3200 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N5656H
Model/Series:	PA-16	Aircraft Category:	Airplane
Year of Manufacture:	1949	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	16-267
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	June 8, 2021 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1885 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-290-D
Registered Owner:	On file	Rated Power:	125 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:	KATL, 25 ft msl	Distance from Accident Site:	66 Nautical Miles
Observation Time:	10:35 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 20000 ft AGL	Visibility:	10 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	22°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mount Olive, NC (W40)	Type of Flight Plan Filed:	None
Destination:	La Porte, TX (T41)	Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Logging Road	Runway Surface Type:	None
Airport Elevation:		Runway Surface Condition:	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:	33.575935,-83.182625(est)

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Andre Cummings; FAA/FSDO; Atlanta, GA
Original Publish Date:	April 29, 2022
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=104094

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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](#).