



# Aviation Investigation Final Report

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<b>Location:</b>	Hancock, Minnesota	<b>Accident Number:</b>	CEN21LA461
<b>Date &amp; Time:</b>	September 29, 2021, 11:15 Local	<b>Registration:</b>	N130GH
<b>Aircraft:</b>	Piper PA-32-260	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel exhaustion	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot reported that before he departed for a cross country flight, he asked the fuel servicing personnel to fill the left fuel tank. While enroute and burning fuel only from the left tank, the airplane lost all engine power and the pilot executed a forced landing into a field, which resulted in substantial damage to the right wing and fuselage.

During a post-accident inspection, the left fuel tank was found to be empty. The pilot stated that he assumed all of his fuel tanks were full at the time of departure but did not confirm the fuel level by looking in the tanks or at the fuel gauges. He also stated that his failure to verify the fuel quantity resulted in a fuel exhaustion event when the 6.6 gallons of fuel in the left main tank were consumed. He did not use fuel from the right tank during the flight.

## 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 as a result of fuel starvation. Contributing to the accident was the pilot's failure to properly manage the fuel on board the airplane and his failure to perform an adequate preflight inspection.

## Findings

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<b>Aircraft</b>	Fuel - Fluid level
<b>Aircraft</b>	Fuel - Fluid management
<b>Personnel issues</b>	Preflight inspection - Pilot
<b>Personnel issues</b>	Use of checklist - Pilot

## Factual Information

### History of Flight

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

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	57, 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>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	July 21, 2021
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	September 25, 2020
<b>Flight Time:</b>	(Estimated) 586.6 hours (Total, all aircraft), 217 hours (Total, this make and model), 528.2 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N130GH
<b>Model/Series:</b>	PA-32-260	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1965	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	32-124
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	November 2, 2020 Annual	<b>Certified Max Gross Wt.:</b>	3400 lbs
<b>Time Since Last Inspection:</b>	100 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4530 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-540
<b>Registered Owner:</b>	BRAD INFLUENCE LLP	<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>	BRAD INFLUENCE LLP	<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>	KMOX, 1130 ft msl	<b>Distance from Accident Site:</b>	8 Nautical Miles
<b>Observation Time:</b>	11:15 Local	<b>Direction from Accident Site:</b>	300°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.92 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Elbow Lake, MN (Y63)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Benson, MN (KBBB)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	11:00 Local	<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>	45.4967,-95.7967(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Williams, David
<b>Additional Participating Persons:</b>	Greg Thurston; FAA; Minneapolis, MN
<b>Original Publish Date:</b>	March 25, 2022
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=104002">https://data.ntsb.gov/Docket?ProjectID=104002</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](#).