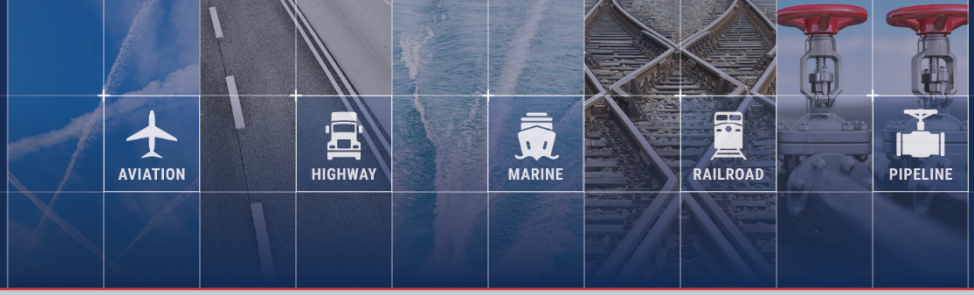

Aviation Investigation Final Report

Location:	Igiugig, Alaska	**Accident Number:**	ANC23LA060
Date & Time:	August 4, 2023, 18:43 Local	**Registration:**	N2262G
Aircraft:	Piper PA-12S	**Aircraft Damage:**	Substantial
Defining Event:	Fuel exhaustion	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported he was about 8 miles from his destination when the engine began to run rough and the power began to surge. He confirmed the fuel selector was set to both tanks, adjusted throttle and mixture, checked the magnetos and primer, and he pulled the carburetor heat on. As he turned to line up for an off-airport landing, the engine regained full power but then resumed a steady power loss until it lost all power. The landing gear contacted a deep hole in the tundra during the landing and the airplane veered right 90° before coming to a complete stop. The airplane sustained substantial damage to the fuselage and left wing.

Postaccident examination of the airplane revealed both the left and right fuel tank contained no usable fuel. After adding fuel to the fuel tank, the engine performed normally with no abnormalities observed.

Probable Cause and Findings

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

The pilot's inadequate fuel management, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Personnel issues	Fuel planning - Pilot
Aircraft	Fuel - Fluid level

Factual Information

History of Flight

Enroute	Fuel exhaustion (Defining event)

On August 04, 2023, about 1843 Alaska daylight time, a Piper PA-12S airplane, N2262G, sustained substantial damage when it was involved in an accident near Igiugig, Alaska. The pilot was not injured. The airplane was operated by the pilot as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported he departed with 3 hours and 40 minutes of fuel on board for the 2 hour and 44-minute flight. He reported that when he was 8 miles from his destination, the airplane engine began to run rough, and the power was surging. He performed the engine rough running procedures, including confirming that the fuel selector was set to both tanks, he adjusted the throttle and mixture, checked the magnetos, verified that the primer was in and locked, and he pulled the carburetor heat on. The pilot turned right to a landing spot and the engine regained full power but then resumed a steady power loss until it lost all power. During the forced landing, the airplane encountered a deep hole in the tundra and the airplane veered right 90° before coming to a complete stop. The airplane sustained substantial damage to the fuselage and left wing.

Postaccident examination of the airplane revealed both the left and right fuel tanks contained no usable fuel. After adding fuel to the left wing fuel tank the engine started normally. The engine idled smoothly at 600 rpm. After the engine was warmed up, it accelerated normally to a static rpm of 2250 rpm. The engine had good oil pressure. Carburetor heat functioned normally when tested. The engine performed normally with no abnormalities observed.

Pilot Information

Certificate:	Airline transport	**Age:**	50,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	January 3, 2023
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	January 3, 2023
Flight Time:	10095 hours (Total, all aircraft), 225 hours (Total, this make and model), 7470 hours (Pilot In Command, all aircraft), 128 hours (Last 90 days, all aircraft), 29 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N2262G
Model/Series:	PA-12S	**Aircraft Category:**	Airplane
Year of Manufacture:	1946	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	12-1183
Landing Gear Type:	Tailwheel	**Seats:**	3
Date/Type of Last Inspection:	June 3, 2023 Annual	**Certified Max Gross Wt.:**	1750 lbs
Time Since Last Inspection:	44.7 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5512 Hrs at time of accident	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, not activated	**Engine Model/Series:**	O-320-A2B
Registered Owner:	On file	**Rated Power:**	150 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:	PAIG,90 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	18:56 Local	**Direction from Accident Site:**	48°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Broken / 5000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	Unknown / Terrain-Induced
Wind Direction:	50°	**Turbulence Severity Forecast/Actual:**	Unknown / Light
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	16°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anchorage, AK (PALH)	**Type of Flight Plan Filed:**	None
Destination:	Igiugig, AK (PAIG)	**Type of Clearance:**	VFR
Departure Time:	15:49 Local	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	59.46,-155.94

Administrative Information

Investigator In Charge (IIC):	Ward, Mark
Additional Participating Persons:	Robert Voight; FAA
Original Publish Date:	May 16, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=192820

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.