



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Coquille Bay, Oregon | Accident Number: | WPR23LA267 |
| Date & Time: | July 8, 2023, 14:33 Local | Registration: | N9507D |
| Aircraft: | Piper PA-22-160 | Aircraft Damage: | Substantial |
| Defining Event: | Fuel starvation | Injuries: | 1 Serious |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot of the airplane reported that, after completing a preflight inspection of the airplane he departed for a local flight. While enroute, at about 1500 above ground level (agl), the right tank ran out of fuel and the "engine cut out." As he was switching tanks, the airplane impacted terrain and nosed over. The airplane sustained substantial damage to both wings and forward fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane 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:

The pilot's improper fuel management, which resulted in fuel starvation, a total loss of engine power, and impact with terrain.

Findings

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|-------------------------|-----------------------------|
| Personnel issues | Use of equip/system - Pilot |
| Aircraft | Fuel - Fluid management |
| Personnel issues | Fuel planning - Pilot |
| Aircraft | Fuel - Fluid level |

Factual Information

History of Flight

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|---------|----------------------------------|
| Enroute | Fuel starvation (Defining event) |
| Enroute | Loss of engine power (total) |
| Enroute | Off-field or emergency landing |

Pilot Information

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|---------------------------|----------------------------------------------------------------------------------------|-----------------------------------|---------------|
| Certificate: | Private | Age: | 78,Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 4-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | |
| Medical Certification: | Class 3 With waivers/limitations | Last FAA Medical Exam: | June 30, 2005 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | (Estimated) 862.4 hours (Total, all aircraft), 11.9 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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|-------------------------------|--------------------------------|--------------------------------|-----------------|
| Aircraft Make: | Piper | Registration: | N9507D |
| Model/Series: | PA-22-160 | Aircraft Category: | Airplane |
| Year of Manufacture: | 1958 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 22-6422 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1287.9 Hrs at time of accident | Engine Manufacturer: | LYCOMING |
| ELT: | Installed | Engine Model/Series: | O-320 SERIES |
| Registered Owner: | On file | Rated Power: | 180 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|-----------------------------------------|----------------------------------|-------------------------------------------------|-------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | KOTH, 17 ft msl | Distance from Accident Site: | 14 Nautical Miles |
| Observation Time: | 13:56 Local | Direction from Accident Site: | 7° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 9 knots / | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | 300° | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 30.01 inches Hg | Temperature/Dew Point: | 17°C / 10°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Bandon, OR (S05) | Type of Flight Plan Filed: | None |
| Destination: | Bandon, OR (S05) | Type of Clearance: | Unknown |
| Departure Time: | | Type of Airspace: | Class G |

Wreckage and Impact Information

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|----------------------------|-----------|---------------------------------|---------------------------|
| Crew Injuries: | 1 Serious | Aircraft Damage: | Substantial |
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | 43.174194,-124.27574(est) |

Administrative Information

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|------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Investigator In Charge (IIC): | Gutierrez, Eric |
| Additional Participating Persons: | Keith Ruconich; Federal Aviation Administration; Portland, OR |
| Original Publish Date: | November 2, 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=192585 |

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](#).