# Aviation Investigation Final Report

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| **Location:** | Chaka Creek, Alaska | **Accident Number:** | ANC23LA062 |
| **Date & Time:** | August 10, 2023, 12:10 Local | **Registration:** | N42610 |
| **Aircraft:** | Cessna 180J | **Aircraft Damage:** | Substantial |
| **Defining Event:** | Loss of engine power (partial) | **Injuries:** | 2 None |
| **Flight Conducted Under:** | Part 91: General aviation - Personal | | |

## Analysis

The pilot and passenger were performing a high pass over a remote airstrip to ensure the surface was suitable for landing. About ½ down the 850 ft airstrip, the pilot initiated a go-around with the throttle, mixture, and propeller controls in the full forward position and then realized the engine was not producing full power. With rising terrain ahead and the airspeed near the stall speed, the pilot elected to attempt a forced landing on the remaining airstrip. During the forced landing, the right main landing gear impacted brush, and the airplane spun about 120° and came to rest upright. Postaccident examination of the airplane revealed substantial damage to the left horizontal stabilizer and right wing. The pilot stated that the engine likely experienced carburetor icing during the approach and attempted go-around.

The pilot reported no preimpact mechanical failures with the airplane that would have precluded normal operation. Based on the pilot's report of the temperature and dew point at the time of the accident, the airplane was operating in conditions conducive to the formation of serious icing (at cruise power). The pilot reported he did not apply the carburetor heat when the engine began to lose power due to the low altitude and airspeed during the attempted go-around maneuver. It is likely the engine sustained a partial loss of engine power due to the formation of carburetor ice.

## Probable Cause and Findings

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

A partial loss of engine power as a result of carburetor ice. Contributing to the outcome was the pilot's failure to effectively use carburetor heat in conditions conducive to the formation of carburetor ice.

## Findings

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| **Environmental issues** | Conducive to carburetor icing - Effect on equipment |
| **Aircraft** | Intake anti-ice, deice - Not used/operated |
| **Personnel issues** | Lack of action - Pilot |

# Factual Information

## History of Flight

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| **Landing** | Loss of engine power (partial) (Defining event) |
| **Landing** | Collision with terr/obj (non-CFIT) |

## Pilot Information

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| **Certificate:** | Airline transport; Commercial; Private | **Age:** | 47,Male |
| **Airplane Rating(s):** | Single-engine land; Multi-engine land | **Seat Occupied:** | Left |
| **Other Aircraft Rating(s):** | None | **Restraint Used:** | 4-point |
| **Instrument Rating(s):** | Airplane | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | None | **Toxicology Performed:** | |
| **Medical Certification:** | Class 1 Without waivers/limitations | **Last FAA Medical Exam:** | July 18, 2023 |
| **Occupational Pilot:** | No | **Last Flight Review or Equivalent:** | June 24, 2023 |
| **Flight Time:** | 8000 hours (Total, all aircraft), 390 hours (Total, this make and model), 6400 hours (Pilot In Command, all aircraft), 103 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft) | | |

## Aircraft and Owner/Operator Information

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| **Aircraft Make:** | Cessna | **Registration:** | N42610 |
| **Model/Series:** | 180J | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | | **Amateur Built:** | |
| **Airworthiness Certificate:** | Normal | **Serial Number:** | 18052366 |
| **Landing Gear Type:** | Tailwheel | **Seats:** | 6 |
| **Date/Type of Last Inspection:** | May 10, 2023 Annual | **Certified Max Gross Wt.:** | 2950 lbs |
| **Time Since Last Inspection:** | | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | 8235 Hrs at time of accident | **Engine Manufacturer:** | Lycoming |
| **ELT:** | C91 installed | **Engine Model/Series:** | O-470-R-50 |
| **Registered Owner:** | On file | **Rated Power:** | 275 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:** | | **Distance from Accident Site:** | |
| **Observation Time:** | 12:10 Local | **Direction from Accident Site:** | |
| **Lowest Cloud Condition:** | Scattered / 6000 ft AGL | **Visibility** | 10 miles |
| **Lowest Ceiling:** | Broken / 6000 ft AGL | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | / | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 29.64 inches Hg | **Temperature/Dew Point:** | 11.7°C / 10.6°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | Wasilla, AK (PAWS) | **Type of Flight Plan Filed:** | None |
| **Destination:** | Chaka Creek, AK | **Type of Clearance:** | None |
| **Departure Time:** | 11:00 Local | **Type of Airspace:** | Class G |

## Wreckage and Impact Information

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| **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:** | 60.943687,-150.40466(est) |

## Administrative Information

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| **Investigator In Charge (IIC):** | Sauer, Aaron |
| **Additional Participating Persons:** | Thomas Cunningham; FAA; Anchorage, AK |
| **Original Publish Date:** | October 26, 2023 |
| **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=192882 |

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.