Aviation Investigation Final Report

Location:	Norwood, Colorado	**Accident Number:**	CEN19LA061
Date & Time:	December 23, 2018, 15:10 Local	**Registration:**	N3120S
Aircraft:	Cessna 182	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was conducting a personal flight. During the flight, he monitored the carburetor temperature gauge and used full, partial, and no carburetor heat settings as appropriate. While landing at his private, high-elevation airport, he initially had partial carburetor heat selected but then turned it off as he typically did to preclude ingestion of unfiltered air into the engine while landing on a dirt runway. During the approach, the airplane drifted left of the runway, so the pilot decided to go around. He advanced the engine power slightly, but the engine did not respond. He then advanced the engine power to full, but the engine still did not respond. The pilot then conducted a steep right turn and applied right rudder to land the airplane on the runway and avoid trees. He was not certain if the airplane stalled, but the right wingtip contacted the ground, and the airplane "pancaked" on the runway. The airplane sustained substantial damage to the fuselage and both wings.

After the accident, the pilot stated that he did not “adequately” clear the carburetor during the approach and that it was possible the carburetor had "iced up" during the descent. However, the temperature and dew point at the time of the accident put the airplane outside of conditions conducive for icing; therefore, it is unlikely that carburetor accumulated icing. Thus, the reason for the loss of engine power could not be determined based on the available evidence.

Probable Cause and Findings

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

The partial loss of engine power for undetermined reasons.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Landing	Loss of engine power (partial) (Defining event)
Landing	Attempted remediation/recovery
Landing	Collision during takeoff/land

On December 23, 2018, about 1510 mountain standard time, a Cessna 182G, N3120S, sustained substantial damage when it was involved in an accident near Norwood, Colorado. The private pilot sustained no injury. The airplane was operated as a Title 14 C*ode of Federal Regulations* Part 91 personal flight.

The pilot reported he was flying his airplane south of Telluride, Colorado, over the San Juan mountain range which is in the San Juan National Forest. He said that the weather conditions at the time were clear visibility, cold temperatures, no visible moisture, and a few scattered clouds. While in a descent profile, he observed "backlit ice crystals" for a short period and noted no airframe icing. During the flight, he utilized full, partial, and no carburetor heat settings while monitoring the carburetor temperature gauge. He stated that the carburetor temperature gauge indicated normal range during operations with partial and full carburetor heat.

The pilot decided to perform a straight in approach to his private airport, landing to the northeast. He initially had partial carburetor heat selected but turned the carburetor heat off as he typically did to preclude the ingestion of unfiltered air into his engine while landing on a dirt runway. During the approach the airplane drifted to the west so the pilot elected to go around. He advanced the engine power slightly but the engine did not respond. He then advanced the engine power to full with no response from the engine.

The pilot then performed a steep right turn and applied right rudder to put the airplane down on the dry dirt runway and avoid trees. He was not certain if the airplane stalled, but the right-wing tip contacted the ground and the airplane "pancaked" on the runway which resulted in damage to the nose landing gear, the propeller, and wrinkles in the skins of both wings. Various propeller impact marks were made to the dirt prior to the final resting spot of the airplane on the runway. The pilot shut down the engine and egressed without further incident.

The airplane sustained substantial damage to the fuselage and both wings. The pilot reported that he did not clear the carburetor "adequately" during his straight in approach. He said it was possible that the carburetor had "iced up." Per the carburetor icing probability graph from the Federal Aviation Administration Special Airworthiness Information Bulletin CE-09-35 Carburetor Icing Prevention, the weather conditions at the time of the accident would have put the flight just outside of conditions conducive for icing at glide and cruise power settings.

Pilot Information

Certificate:	Private	**Age:**	64,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:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 23, 2017
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	May 28, 2017
Flight Time:	(Estimated) 863 hours (Total, all aircraft), 813 hours (Total, this make and model), 814 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N3120S
Model/Series:	182 G	**Aircraft Category:**	Airplane
Year of Manufacture:	1964	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	18255620
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 22, 2018 Annual	**Certified Max Gross Wt.:**	2800 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	5878 Hrs at time of accident	**Engine Manufacturer:**	Continental
ELT:	C91 installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-470-R
Registered Owner:		**Rated Power:**	230 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:	KTEX,9091 ft msl	**Distance from Accident Site:**	23 Nautical Miles
Observation Time:	21:55 Local	**Direction from Accident Site:**	124°
Lowest Cloud Condition:	Scattered / 6000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	Light / N/A
Altimeter Setting:	30.22 inches Hg	**Temperature/Dew Point:**	2°C / -9°C
Precipitation and Obscuration:	N/A - None - Ice crystals		
Departure Point:	Nucla, CO (AIB)	**Type of Flight Plan Filed:**	None
Destination:	Nucla, CO (AIB)	**Type of Clearance:**	None
Departure Time:	14:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Private Airstrip None	**Runway Surface Type:**	Dirt
Airport Elevation:	7000 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	05	**IFR Approach:**	None
Runway Length/Width:	2000 ft / 85 ft	**VFR Approach/Landing:**	Forced landing;Go around;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	38.165832,-108.305831(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael		
Additional Participating Persons:	Kevin Harvey; FAA Salt Lake City FSDO; Salt Lake City, UT		
Original Publish Date:	May 5, 2021	**Investigation Class:**	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=98879		