



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Jiggs, NV	<b>Accident Number:</b>	WPR17LA062
<b>Date &amp; Time:</b>	01/27/2017, 1645 PST	<b>Registration:</b>	N382US
<b>Aircraft:</b>	AVIAT AIRCRAFT INC A-1C-200	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The private pilot reported that, about 10 minutes after departing for a personal, local flight and when the airplane was about 1,000 ft above ground level, the engine began running roughly, and the rpm surged several times despite the engine monitoring gauges all indicating normal operation. The pilot chose to make a precautionary landing on a snow-covered dirt airstrip. The pilot reported that, after reducing power to land, he did not recall the engine experiencing further roughness or surging. During the landing roll, the airplane nosed over in the deep snow and then came to rest inverted.

During postaccident test runs, the engine ran normally through various power settings with no anomalies noted that would have precluded normal operation. The reason for the engine momentarily running roughly and surging could not be determined.

## Probable Cause and Findings

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

An engine anomaly for reasons that could not be determined, which resulted in a precautionary landing in deep snow and a subsequent noseover.

## Findings

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<b>Environmental issues</b>	Snow/slush/ice covered surface - Effect on operation (Cause)
<b>Not determined</b>	Not determined - Unknown/Not determined (Cause)

## Factual Information

On January 27, 2017, about 1645 Pacific standard time, an Aviat Aircraft Inc. A-1C, N382US, was substantially damaged when it nosed over in the snow during a precautionary landing at an airstrip near Jiggs, Nevada. The private pilot was not injured. The airplane was registered to Canyon State Aviation LLC., and operated by the pilot as a Title 14 *Code of Federal Regulations* Part 91 personal flight. Visual meteorological conditions prevailed, and no flight plan had been filed for the local flight which originated from Elko Regional Airport (EKO), Elko, Nevada, around 1630.

The pilot stated that the purpose of the flight was to overfly the vicinity of his ranch and look for horse tracks. About 10 minutes after departure, with the airplane at an altitude of about 1,000 ft above ground level (agl), the engine began to run rough and the rpm surged several times. The cockpit gauges and engine monitoring device all indicated normal ranges, with no anomalies. The pilot opted to make a precautionary landing and observed he was about 2 miles from the snow-covered dirt airstrip on Corta Ranch, which his family owns and where he frequently lands during the summer months. The pilot reported that after reducing power to land, he did not recall the engine experiencing further roughness or surging. He touched down about five minutes later and during the landing roll, the airplane nosed over in the snow coming to rest inverted. He estimated the snow was between 24 to 30 inches deep. The airplane incurred substantial damage to the struts and wings as a result of the impact.

A Federal Aviation Administration inspector spoke with maintenance personnel at Aviat that examined the engine after the accident. The mechanic stated that he ran the engine and no anomalies could be found. The engine operated normally through various power settings without incident.

## History of Flight

Enroute	Miscellaneous/other
Landing	Off-field or emergency landing
Landing-landing roll	Nose over/nose down (Defining event)

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	68, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With Waivers/Limitations	<b>Last FAA Medical Exam:</b>	12/09/2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	07/20/2016
<b>Flight Time:</b>	7165 hours (Total, all aircraft), 850 hours (Total, this make and model), 6886 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AVIAT AIRCRAFT INC	<b>Registration:</b>	N382US
<b>Model/Series:</b>	A-1C-200 UNDESIGNAT	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2010	<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3082
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	12/01/2016, Annual	<b>Certified Max Gross Wt.:</b>	2250 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	IO-360-A1D6
<b>Registered Owner:</b>	CANYON STATE AVIATION LLC	<b>Rated Power:</b>	200 hp
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KEKO, 5074 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	1656 PST	Direction from Accident Site:	312°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.68 inches Hg	Temperature/Dew Point:	-8° C / -12° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ELKO, NV (EKO)	Type of Flight Plan Filed:	None
Destination:	ELKO, NV (EKO)	Type of Clearance:	None
Departure Time:	1630 PST	Type of Airspace:	

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	40.705278, -115.610278 (est)

## Administrative Information

Investigator In Charge (IIC):	Zoe Keliher	Report Date:	04/13/2020
Additional Participating Persons:	Donald Morgan; Federal Aviation Administration; Salt Lake City, UT		
Publish Date:	04/13/2020		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=94699">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=94699</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).