Aviation Investigation Final Report

Location:	Santiam, Oregon	**Accident Number:**	SEA01LA040
Date & Time:	January 20, 2001, 14:30 Local	**Registration:**	N94432
Aircraft:	Ercoupe 415G	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While en route at cruise power, the aircraft's engine began to lose power. Soon thereafter the engine slowed to idle rpm, and the pilot elected to make an emergency landing at a nearby snow-covered Oregon State Airport. Although the touchdown was successful, during the landing roll, the aircraft nosed over in the two-foot deep snow. A post-accident carburetor teardown revealed that the orifice to the main metering jet was partially plugged by a putty-like contaminant.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The partial blockage of the carburetor main metering jet orifice by contamination of undetermined origin. Factors include a snow-covered runway upon which the pilot executed a forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings
1. (C) FUEL SYSTEM,CARBURETOR - BLOCKED(PARTIAL)
2. (C) FUEL SYSTEM,CARBURETOR - CONTAMINATION,OTHER THAN WATER

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings
3. (F) TERRAIN CONDITION - SNOW COVERED

Factual Information

On January 20, 2001, approximately 1430 Pacific standard time, an Ercoupe 415G, N94432, nosed over in the snow during a forced landing at Santiam Junction State Airport, Santiam, Oregon. The private pilot, who was the sole occupant, was not injured, but the aircraft, which was owned and operated by the pilot, sustained substantial damage. The 14 CFR Part 91 personal pleasure flight, which was en route to Prineville, Oregon, in visual meteorological conditions, departed Independence, Oregon, about 55 minutes earlier. No flight plan had been filed. The ELT, which was activated by the accident sequence, was turned off at the scene.

According to the pilot, just after he passed Santiam Junction Airport, the aircraft's engine began to lose power. He therefore applied carburetor heat and turned back toward the airport. Soon thereafter, the engine went to idle RPM, and the pilot elected to execute a forced landing on runway 06 at the Santiam Junction Airport. Although the touchdown was successful, as the aircraft slowed, it nosed over in the snow that had accumulated on the runway surface. According to the pilot, the snow was approximately two feet deep.

During a post-accident engine examination, the carburetor was disassembled, and it was discovered that the orifice to the main metering jet was almost completely plugged by ball of putty-like contaminant. No similar material was found anywhere else in or on the carburetor, and it could not be determined when or how the contamination had entered the carburetor bowl.

Pilot Information

Certificate:	Private	**Age:**	29,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	April 15, 1999
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	July 2, 1999
Flight Time:	180 hours (Total, all aircraft), 167 hours (Total, this make and model), 150 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe	**Registration:**	N94432
Model/Series:	415G	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	5078
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	September 10, 2000 Annual	**Certified Max Gross Wt.:**	1400 lbs
Time Since Last Inspection:	31 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1898 Hrs at time of accident	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	C-85-12
Registered Owner:	On file	**Rated Power:**	85 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:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:		**Visibility**	15 miles
Lowest Ceiling:	Overcast / 14000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Independence, OR (7S5)	**Type of Flight Plan Filed:**	None
Destination:	Prineville, OR (S39)	**Type of Clearance:**	None
Departure Time:	13:35 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Santiam Junction State Airport 8S3	**Runway Surface Type:**	Grass/turf
Airport Elevation:	3780 ft msl	**Runway Surface Condition:**	Snow
Runway Used:	06	**IFR Approach:**	None
Runway Length/Width:	3100 ft / 150 ft	**VFR Approach/Landing:**	Forced landing

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:**	44.41053,-121.920158(est)

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	Gordon Reed; Portland FSDO
Original Publish Date:	July 30, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51362

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