



National Transportation Safety Board Aviation Accident Data Summary

Location:	Ashland, VA	Accident Number:	ERA10LA294
Date & Time:	06/01/2010, 1255 EDT	Registration:	N858JK
Aircraft:	SWANSON RV-9A	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot/builder was in the process of conducting the experimental airplane's 40-hour Phase 1 test flights. He departed his home airport and landed at an airport about 30 miles away without incident. Shortly after takeoff, the engine experienced a momentary sudden reduction in rpm. The pilot elected to return to his home airport and while en route the engine experienced additional sudden and intermittent power reductions. The pilot was able to restore power either by applying full throttle or the application of carburetor heat. With the airplane approximately 2.5 miles from his home airport, the engine rpm decreased again and the pilot applied carburetor heat without any affect. The engine ceased producing power completely and the pilot elected to attempt to lose altitude and perform a forced landing to the runway. The pilot overshot the runway and the airplane touched down in the grass past the runway surface and nosed over. A postaccident examination of the airplane and engine did not reveal any mechanical malfunctions that would have resulted in a loss of engine power. Removal of several of the engine's spark plugs revealed that they were dark in coloration, consistent with a rich mixture. A weather observation taken at the airport, about the time of the accident included, wind from 210 degrees at 10 knots, gusting to 19 knots, a temperature 30 degrees Celsius (C), and a dew point of 20 degrees C. Review of a carburetor icing envelope chart revealed that the reported temperature and dew point at the time of the accident was within the "serious icing" at glide power area of the chart.

Flight Events

Approach - Loss of engine power (total)
Emergency descent - Off-field or emergency landing
Emergency descent - Landing area overshoot

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to obtain the proper touchdown point during a forced landing in gusting wind. Contributing to the accident was a total loss of engine power, likely due to carburetor ice.

Findings

Aircraft-Aircraft power plant-(general)-(general)-Failure - F
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Descent/approach/glide path-Not attained/maintained - C
Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C
Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to carburetor icing-Effect on equipment - F
Environmental issues-Conditions/weather/phenomena-Wind-(general)-Effect on operation

Pilot Information

Certificate:	Private	Age:	56
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	261 hours (Total, all aircraft), 30 hours (Total, this make and model), 159 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	SWANSON	Registration:	N858JK
Model/Series:	RV-9A	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	ECi
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-320
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	OFP, 207 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	10 knots/ 19 knots, 210°
Temperature:	30°C / 20°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Tappahannock, VA (XSA)	Destination:	Ashland, VA (OFP)

Airport Information

Airport:	Hanover County (OFP)	Runway Surface Type:	Asphalt
Runway Used:	34	Runway Surface Condition:	Dry
Runway Length/Width:	5402 ft / 1647 ft		

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Luke Schiada	Adopted Date:	04/07/2011
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=76195		

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