



National Transportation Safety Board Aviation Accident Final Report

Location:	Atomic City, ID	Accident Number:	WPR09CA225
Date & Time:	05/01/2009, 1330 MDT	Registration:	N4272M
Aircraft:	RANS S-7	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot/owner and a pilot rated passenger flew to a local airport for a brief stop, and then continued to another nearby airport where the passenger performed a touch-and-go. He had begun a slight right turn during the climbout from the touch-and-go when the engine lost power about 250 feet above ground level (agl). The owner took control, turned back to the left, and tried to land on the end of the runway. He leveled off slightly about 20 feet agl, and then flared for landing. The airplane landed hard on the north side of the runway and the right wheel broke off. The landing gear dug into the turf, the airplane spun 180 degrees, and the right main landing gear collapsed. The airframe around the tailwheel and rudder sustained substantial damage. The owner indicated that the airplane had a header tank that was the only fuel supply for the engine in addition to the wing tanks that were used to supply the header tank. He used an electric fuel pump to manually transfer fuel from the wing tanks to the header tank. He stated that he usually did not let the header tank get less than half full since the fuel pick-up port for the engine driven pump is at the front of the tank. He said that he probably let the fuel level get too low on this flight. During the climbout with the nose up, he surmised that the header tank fuel pick-up unported, resulting in the loss of power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel starvation as a result of the pilot's inadequate fuel management.

Findings

Aircraft	Fuel - Fluid management (Cause)
Personnel issues	Fuel planning - Pilot (Cause)

Factual Information

History of Flight

Initial climb	Fuel starvation (Defining event) Loss of engine power (total)
Emergency descent	Off-field or emergency landing

Pilot Information

Certificate:	Sport Pilot	Age:	68, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Sport Pilot None	Last Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	03/13/2009
Flight Time:	2900 hours (Total, all aircraft), 2593 hours (Total, this make and model), 2900 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Private	Age:	53, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last Medical Exam:	08/28/2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	07/05/2007
Flight Time:	760 hours (Total, all aircraft), 400 hours (Total, this make and model), 700 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	RANS	Registration:	N4272M
Model/Series:	S-7	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental Light Sport	Serial Number:	0693110
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	11/08/2008, Conditional	Certified Max Gross Wt.:	1232 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2593 Hours	Engine Manufacturer:	Rotax
ELT:	Installed, not activated	Engine Model/Series:	912
Registered Owner:	Errol Spaulding	Rated Power:	80 hp
Operator:	Errol Spaulding	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KPIH, 4452 ft msl	Observation Time:	1853 MDT
Distance from Accident Site:	38 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	130°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	12°C / -1°C
Lowest Ceiling:	Broken / 5000 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	7 knots, 320°	Visibility (RVR):	
Altimeter Setting:	30.05 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Atomic City, ID (U46)	Type of Flight Plan Filed:	None
Destination:	Atomic City, ID (U48)	Type of Clearance:	None
Departure Time:	MDT	Type of Airspace:	

Airport Information

Airport:	Coxs Well (U48)	Runway Surface Type:	Grass/turf
Airport Elevation:	5034 ft	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	2700 ft / 100 ft	VFR Approach/Landing:	Forced Landing; Touch and Go

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None		

Administrative Information

Investigator In Charge (IIC):	Howard D Plagens	Adopted Date:	07/14/2009
Additional Participating Persons:	Doug Dymock; Federal Aviation Administration; Boise, ID		
Publish Date:	07/14/2009		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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