



# Aviation Investigation Final Report

<b>Location:</b>	Creswell, Oregon	<b>Accident Number:</b>	SEA05LA099
<b>Date &amp; Time:</b>	May 14, 2005, 14:45 Local	<b>Registration:</b>	N81PU
<b>Aircraft:</b>	Horvath Pitts S-1C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that approximately 15 minutes after takeoff, while in straight and level flight at 4,000 feet MSL, the engine began to run rough and eventually lost power. After experiencing the loss of engine power, the pilot initiated a landing to a nearby open field. During the landing roll out, the airplane encountered tall grass and nosed over resulting in substantial damage. The pilot reported that post accident examination of the airplane's engine revealed that the brass carburetor float travel (total drop travel) was approximately 3/16 of an inch, 5/16 of an inch less than specified for normal operations. The carburetor float level is a means of regulating the amount of total fuel delivered to the engine via the metering jet.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Loss of engine power as a result of a carburetor float drop restriction during cruise flight. Tall grass in the landing area was a factor in the accident.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FUEL SYSTEM,CARBURETOR FLOAT - RESTRICTED  
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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING  
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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

2. (F) TERRAIN CONDITION - GRASS  
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Occurrence #4: NOSE OVER

Phase of Operation: EMERGENCY LANDING

## Factual Information

On May 14, 2005, about 1445 Pacific daylight time, an experimental amateur-built Horvath Pitts S-1C, N81PU, sustained substantial damage following an in-flight loss of engine power and subsequent off airport forced landing near Creswell, Oregon. The airplane is registered to the pilot and was being operated as a visual flight rules (VFR) local flight under the provisions of Title 14, CFR Part 91, when the accident occurred. The private pilot, the sole occupant of the airplane, was not injured. The flight originated from Creswell (77S) approximately 15 minutes prior to the accident.

The pilot reported that approximately 15 minutes after takeoff, while in straight and level flight at 4,000 feet MSL, the engine began to run rough and eventually quit.

After experiencing the loss of engine power, the pilot initiated a landing to a nearby open field. During the landing roll out, the airplane encountered tall grass and nosed over resulting in substantial damage.

The airplane was issued an experimental amateur-built airworthiness certificate on April 19, 2005, and was on its sixth hour of phase one flight-testing (per FAA Order 8130.2F) when the accident occurred.

The pilot reported that post accident examination of the airplane's engine revealed that the brass carburetor float travel (total drop travel) was approximately 3/16 of an inch, 5/16 of an inch less than specified for normal operations.

The carburetor float level is a means of regulating the amount of total fuel delivered to the engine via the metering jet.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	23, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	November 1, 2002
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	September 1, 2003
<b>Flight Time:</b>	98 hours (Total, all aircraft), 4 hours (Total, this make and model), 49 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Horvath	<b>Registration:</b>	N81PU
<b>Model/Series:</b>	Pitts S-1C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	01
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	April 1, 2005 Annual	<b>Certified Max Gross Wt.:</b>	1100 lbs
<b>Time Since Last Inspection:</b>	5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-235
<b>Registered Owner:</b>	Anthony P. Horvath	<b>Rated Power:</b>	108 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KEUG,538 ft msl	<b>Distance from Accident Site:</b>	9 Nautical Miles
<b>Observation Time:</b>	14:54 Local	<b>Direction from Accident Site:</b>	343°
<b>Lowest Cloud Condition:</b>	Few / 3000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	40°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.96 inches Hg	<b>Temperature/Dew Point:</b>	23°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	CRESWELL, OR (77S )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:30 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	HOBBOY FIELD 77S	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	538 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	33	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3101 ft / 60 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	43.933055,-123.05194

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hogenson, Dennis
<b>Additional Participating Persons:</b>	Terry Wilmeth; FAA FSDO; Hillsboro, OR
<b>Original Publish Date:</b>	March 28, 2006
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=61489">https://data.ntsb.gov/Docket?ProjectID=61489</a>

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