Aviation Investigation Final Report

Location:	Creswell, Oregon	**Accident Number:**	SEA05LA099
Date & Time:	May 14, 2005, 14:45 Local	**Registration:**	N81PU
Aircraft:	Horvath Pitts S-1C	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	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

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

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

Findings
2. (F) TERRAIN CONDITION - GRASS

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

Certificate:	Private	**Age:**	23,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
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 Without waivers/limitations	**Last FAA Medical Exam:**	November 1, 2002
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	September 1, 2003
Flight Time:	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

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

Meteorological Information and Flight Plan

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

Airport Information

Airport:	HOBBY FIELD 77S	**Runway Surface Type:**	Asphalt
Airport Elevation:	538 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	33	**IFR Approach:**	None
Runway Length/Width:	3101 ft / 60 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:**	43.933055,-123.05194

Administrative Information

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