



# Aviation Investigation Final Report

<b>Location:</b>	ASTORIA, Oregon	<b>Accident Number:</b>	SEA96LA178
<b>Date &amp; Time:</b>	August 5, 1996, 11:30 Local	<b>Registration:</b>	N2564M
<b>Aircraft:</b>	Piper PA-12	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During the initial climb after takeoff, the aircraft experienced a complete loss of engine power at about 200 feet above ground level (AGL). The pilot maneuvered the aircraft to a forced landing in high vegetation, where it received substantial damage during touchdown. An inspection of the engine revealed that the carburetor heat box flapper valve had broken off and was restricting air flow in the carburetor throat.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the carburetor heat box flapper valve, and the resultant air flow restriction to the carburetor. A factor relating to the accident was: high vegetation in the area where the forced landing was executed.

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

#### Findings

1. (C) CARBURETOR HEAT,AIR BOX - FAILURE
2. (C) RAM/INDUCTION AIR - FLOW RESTRICTED

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. (F) TERRAIN CONDITION - HIGH VEGETATION

## Factual Information

On August 5, 1996, approximately 1130 Pacific daylight time, a Piper PA-12, N2564M, registered to and being flown by a private pilot, was substantially damaged during a forced landing into high vegetation following a total loss of power during the initial climb after takeoff from the Astoria Airport, Astoria, Oregon. The pilot sustained minor injuries. Visual meteorological conditions prevailed and no flight plan had been filed. The flight, which was personal, was to have been operated under 14CFR91, and was destined for Troutdale, Oregon. The ELT was activated by the impact.

The pilot reported that he executed a mid-field takeoff from runway 26, and while climbing through 200 feet above ground level (AGL), the engine abruptly stopped. Unable to achieve a restart, he executed a forced landing into an area of heavy brush slightly west of the upwind end of runway 26.

An FAA monitored engine inspection determined that the carburetor heat box flapper valve had broken loose and moved into a position where it restricted the airflow in the carburetor throat.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	60, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	June 10, 1996
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2130 hours (Total, all aircraft), 330 hours (Total, this make and model), 2130 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N2564M
<b>Model/Series:</b>	PA-12 PA-12	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	12-937
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	July 20, 1996 Annual	<b>Certified Max Gross Wt.:</b>	1750 lbs
<b>Time Since Last Inspection:</b>	15 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3147 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320
<b>Registered Owner:</b>	STEFFECK, JAMES, A.	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	AST ,10 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	10:56 Local	<b>Direction from Accident Site:</b>	70°
<b>Lowest Cloud Condition:</b>	Scattered / 5500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	17°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(AST )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	TROUTDALE , OR (TTD )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	11:28 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	ASTORIA REGIONAL AST	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	9 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	26	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5796 ft / 150 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<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 Minor	<b>Latitude, Longitude:</b>	46.119079,-123.670417(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccreary, Steven
<b>Additional Participating Persons:</b>	MARY SALAZAR; HILLSBORO , OR
<b>Original Publish Date:</b>	May 23, 1997
<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=42436">https://data.ntsb.gov/Docket?ProjectID=42436</a>

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