Aviation Investigation Final Report

Location:	MARTINSBURG, West Virginia	**Accident Number:**	NYC99LA141
Date & Time:	June 14, 1999, 13:30 Local	**Registration:**	N8190J
Aircraft:	Prendergast SEAWIND	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane's engine started on the first attempt, and ran 'smoothly.' The pilot then taxied the airplane short of the runway, and completed the run-up checks. No anomalies were noted. He then taxied onto the runway, advanced the throttle, and scanned the engine instruments. No deficiencies were observed, so the pilot executed the takeoff. After retracting the flaps, and reaching about 500 feet agl, the pilot executed a left turn to stay within glided distance of the airport. Approximately 30 degrees through the turn, the airplane experienced a loss in power. The propeller continued to windmill, but the engine did not responded to throttle movements. With insufficient altitude to reach the runway the pilot executed a forced landing to a field. Examination of the engine revealed that the inner liner of the air-intake had separated from the outer liner, blocking airflow to the fuel servo.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The air-intake's inner liner separating from its outer liner, which blocked airflow to the fuel servo, resulting in a loss of engine power. A factor in the accident was the owner/builder's inadequate inspection of the airplane.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) INDUCTION AIR DUCTING - SEPARATION
2. (F) MAINTENANCE,INSPECTION - INADEQUATE - OWNER/BUILDER

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

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

Findings
3. TERRAIN CONDITION - RISING

Factual Information

On June 14, 1999, about 1330 eastern daylight time, a Seawind homebuilt airplane, N8190J, was substantially damage after experiencing a loss of power during climbout from Eastern West Virginia Regional Shepherd Airport, Martinsburg, West Virginia. The certificated commercial pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight conducted under 14 CFR Part 91.

The pilot stated that he arrived at the airport about 1100. He then reinstalled the airplane's engine cowling, and propeller before conducting a preflight. After boarding and completing the pre-start checks, the pilot started the airplane's engine on the first attempt. It ran "smoothly", and he noticed no anomalies. He then taxied the airplane short of runway 26, and completed the run-up checks. During the run-up checks, he stabilized the engine rpm at 4,500, and scanned the instrument panel for deficiency, but found none.

While holding short of runway 26, the pilot visually checked for traffic, announced his intentions on UNICOM, taxied on to the runway, and advanced the throttle. The pilot scanned both the flight instruments and engine instrument during the ground roll, and noticed no discrepancies. He estimated that the airplane became airborne approximately 2,000 feet down the runway. Once airborne, he retracted the flaps, and raised the landing gear. About 500 feet agl, the pilot executed a left turn to stay within glided distance of the airport. Approximately 30 degrees through the turn, the airplane experienced a loss in power. The propeller continued to windmill, but the engine did not responded to throttle movements.

The pilot realized he was not going to make the runway, so he positioned the airplane to land in a grassy field. He felt the airplane would slide better with the landing gear retracted, so he left it up. The pilot reported that the airplane touched down smoothly. Then, the left wing made contact with rising terrain. The airplane rolled right, and the right wing separated on ground contact. The airplane continued to slide on its right side until coming to a stop. The pilot estimated the ground slide was approximately 500 feet. After coming to a stop, the pilot secured the ignition and shut off the electrical master before exiting. He estimated that the airplane had approximately 20 gallons of fuel onboard when the engine lost power.

The pilot added that he had acquired the electronic ignition equipped engine from a "junk yard." Adding, that this was the airplane's third flight since completion. During the previous two flights, the airplane had accumulated about 1 hour of flight time. In addition, on the previous flight, the engine overheated, and lost all of its coolant. Because of the overheating problem, the pilot checked the engine baffling, and cooling system. He also enlarged an opening in the engine cowling to increase airflow.

According to the pilot, he had logged approximately 2,100 hours of total flight

experience. About 1,050 hours in single engine land, and about 1,050 hours in multi engine land.

The pilot stated that he examined the airplane's engine after the accident and found the inner liner of the air-intake had separated from the outer liner, blocking airflow to the fuel servo.

Pilot Information

Certificate:	Commercial	**Age:**	59,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	March 31, 1999
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	2100 hours (Total, all aircraft), 10 hours (Total, this make and model), 1300 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Prendergast	**Registration:**	N8190J
Model/Series:	SEAWIND SEAWIND	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:		**Serial Number:**	024
Landing Gear Type:	Retractable - Tricycle; Amphibian	**Seats:**	4
Date/Type of Last Inspection:	April 7, 1999 Annual	**Certified Max Gross Wt.:**	3400 lbs
Time Since Last Inspection:	10 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	10 Hrs	**Engine Manufacturer:**	Subaru
ELT:	Installed, not activated	**Engine Model/Series:**	SVX 3.3L
Registered Owner:	JOHN PRENDERGAST	**Rated Power:**	230 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	MRB ,557 ft msl	**Distance from Accident Site:**	
Observation Time:	15:28 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Scattered / 1200 ft AGL	**Visibility**	6 miles
Lowest Ceiling:	Broken / 3000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	12 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	270°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	23°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	, WV (MRB)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	15:30 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	EASTERN W VIRGINIA REG MRB	**Runway Surface Type:**	Asphalt
Airport Elevation:	557 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	26	**IFR Approach:**	None
Runway Length/Width:	7000 ft / 150 ft	**VFR Approach/Landing:**	Forced landing;Traffic pattern

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:**	39.460174,-77.969383(est)

Administrative Information

Investigator In Charge (IIC):	Muzio, David
Additional Participating Persons:	RICK THOMAS; BALTIMORE , MD
Original Publish Date:	November 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46542