Aviation Investigation Final Report

Location:	BURLINGTON, Washington	**Accident Number:**	SEA99LA066
Date & Time:	May 18, 1999, 17:19 Local	**Registration:**	N6700N
Aircraft:	Mooney M-20G	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot attempted a forced landing after a loss of engine power. While attempting to restart the engine, he overshot the road he had selected for his forced landing, turned, retracted the landing gear, and 'waited for the impact.' After the wreckage was recovered, FAA inspectors ran the engine to 1600 rpm. They also removed the main fuel screen, and found it full of a 'gel-like' substance. The carburetor finger screen had captured some foreign matter, but was not judged to have been blocked. Upon disassembly of the carburetor, foreign material was found blocking the main metering jet orifice, along with some large particles, with a surface area similar to that of a small thumbtack. It could not be determined how those particles bypassed the finger screen. The airplane had been recently painted and then an annual inspection had been performed. The main fuel screen and the safety wire on the main fuel screen were covered with overspray. Fresh safety wire on the carburetor float bowl was consistent with the carburetor float bowl having been drained.

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 carburetor contamination. Factors include the pilot's misjudgment of altitude and distance when he performed his forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING

Findings
1. (C) FUEL SYSTEM,CARBURETOR - CONTAMINATION,OTHER THAN WATER
2. FUEL SYSTEM,SCREEN - CONTAMINATION,OTHER THAN WATER
3. MAINTENANCE,ANNUAL INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

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

Occurrence #3: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
4. (F) DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND

Factual Information

On May 18, 1999, at 1719 Pacific daylight time, a Mooney M-20G, N6700N, sustained substantial damage during a forced landing near Burlington, Washington, after a loss of engine power. The private pilot, the sole occupant, was uninjured. No flight plan was filed for the flight. Visual meteorological conditions prevailed at the time of the accident. There was no fire. The ELT activated and was turned off by the pilot.

The pilot had departed Skagit Regional airport (Burlington) about an hour before the accident. While performing maneuvers at about 2600-3000 feet, "the engine fluttered and produced minimal power. I tried the boost pump, full mixture, and pumping the throttle, but to no avail. I was three miles from the airport when I spotted a road with no power lines or obstructions. The airport was on a hill surrounded by trees. I decided the airport was too much of a risk, so I opted for the road. I circled the road, observed three mail boxes as the only obstacles that would damage the airplane. I crabbed into position over the road. Attempted to start the engine one last chance. It sputtered. I tried again, it sputtered and quit. By this time I had been dragged down the road too far to make a safe landing so I turned off the road, pulled up the landing gear and waited for the impact. The left wing hit the ground first which spun the aircraft to the left and slammed into the ground and slid backwards to a full stop."

During the course of investigation after the wreckage was recovered, FAA inspectors ran the engine to 1600 rpm. They also removed the main fuel screen, and found it full of a "gel-like" substance. The carburetor finger screen had captured some foreign matter, but was not judged to have been blocked. Upon disassembly of the carburetor, foreign material was found blocking the main metering jet orifice, along with some large particles, with a surface area similar to that of a small thumbtack. It could not be determined how those particles bypassed the finger screen. No other anomalies of the fuel system or powerplant were noted. The airplane had been recently painted and then an annual inspection had been performed. The main fuel screen and the safety wire on the main fuel screen were covered with overspray. Fresh safety wire on the carburetor float bowl was consistent with the carburetor float bowl having been drained.

Pilot Information

Certificate:	Private	**Age:**	36,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
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 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	February 4, 1997
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	892 hours (Total, all aircraft), 793 hours (Total, this make and model), 8862 hours (Pilot In Command, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	**Registration:**	N6700N
Model/Series:	M-20G M-20G	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	680079
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	April 2, 1999 Annual	**Certified Max Gross Wt.:**	2525 lbs
Time Since Last Inspection:	12 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-360-A1D
Registered Owner:	MARK S FLITTON	**Rated Power:**	180 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:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	50 miles
Lowest Ceiling:	Unknown	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	220°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BURLINGTON , WA (75S)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	16:10 Local	**Type of Airspace:**	

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	None
Runway Length/Width:		**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:**	48.179267,-121.669075(est)

Administrative Information

Investigator In Charge (IIC):	Stockhill, Michael
Additional Participating Persons:	LLOYD HOLLY; RENTON , WA BILL REICHARDT; RENTON , WA
Original Publish Date:	March 31, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46446