Aviation Investigation Final Report

Location:	TOLEDO, Washington	**Accident Number:**	SEA98LA072
Date & Time:	May 7, 1998, 13:45 Local	**Registration:**	N8659K
Aircraft:	Stinson 108-1	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Fatal, 1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that during the takeoff, and just after liftoff, the engine lost partial power. The pilot continued to fly the airplane straight ahead and under power lines that were near the end of the airstrip. The tailwheel struck a barbed wire fence before the airplane touched down in a field that was populated with small Christmas trees. The airplane nosed over before coming to rest. Post accident inspection of the engine did not reveal any evidence of a mechanical failure or malfunction, however, contamination was found in the carburetor and the accelerator pump failed to function properly.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Partial loss of power for undetermined reasons.

Findings

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

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: NOSE OVER
Phase of Operation: LANDING

Factual Information

On May 7, 1998, at about 1345 Pacific daylight time, a Stinson 108-1, N8659K, registered to a private owner and operated by the pilot as a 14 CFR Part 91 personal flight, nosed over in a field near Toledo, Washington, after the pilot aborted the takeoff due to a partial loss of engine power. Visual meteorological conditions prevailed at the time and no flight plan was filed for the local flight. The airplane was substantially damaged. The airline transport pilot was not injured. One of the two passengers received minor injuries, the second passenger survived the accident and was hospitalized with serious injuries. The second passenger remained in the hospital and died 23 days after the accident.

In a written statement, the pilot reported that earlier in the day the airplane was flown for one hour and thirty minutes without incident. The pilot stated that during takeoff for a third flight, and just after liftoff, the engine lost partial power, rolling back to about 1500 rpm. The pilot continued to fly the airplane straight ahead under power lines that were near the end of the airstrip. The tailwheel struck a barbed wire fence before the airplane touched down in a field populated with small Christmas trees and subsequently nosed over.

After the aircraft was removed from the field and secured, a Federal Aviation Administration inspector from the Seattle, Washington, Flight Standards District Office examined the engine. The inspector removed the air filter from the lower cowling and found it to be clean and clear. The air passageway through the carburetor heat box was clear of obstructions. The carburetor heat valve was functional. The main fuel line to the carburetor was clear. The fuel filter was clean and dry. The carburetor was removed and fuel was present in the carburetor fuel bowl. The accelerator pump discharge nozzle was partially plugged with an unknown substance. The substance was removed and the accelerator pump then functioned normally. The carburetor screen was clean and clear. The spark plugs displayed normal operating signatures. The magnetos produced a spark with hand rotation. Compression was developed in each cylinder and accessory gear and valve train continuity was established. The function of the fuel selector valve was checked and found functional. The valve was disassembled and no leaks or blockages were noted.

The pilot observed that several airworthiness directives on the carburetor had not be complied with, and that he believed that the contamination found in the carburetor was from deteriorating fuel lines.

Pilot Information

Certificate:	Airline transport; Commercial; Flight engineer; Flight instructor	**Age:**	51,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):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	November 6, 1997
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	12000 hours (Total, all aircraft), 31 hours (Total, this make and model), 7500 hours (Pilot In Command, all aircraft), 168 hours (Last 90 days, all aircraft), 59 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	**Registration:**	N8659K
Model/Series:	108-1 108-1	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	108-1659
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	March 4, 1998 Annual	**Certified Max Gross Wt.:**	2230 lbs
Time Since Last Inspection:	5 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1665 Hrs	**Engine Manufacturer:**	Franklin
ELT:	Installed, not activated	**Engine Model/Series:**	6A4-150-B3
Registered Owner:	RICK SATCHER	**Rated Power:**	150 Horsepower
Operator:	MICHAEL H. MESSMORE	**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:	TDO ,375 ft msl	**Distance from Accident Site:**	3 Nautical Miles
Observation Time:	13:50 Local	**Direction from Accident Site:**	295°
Lowest Cloud Condition:	Unknown	**Visibility**	20 miles
Lowest Ceiling:	Overcast / 2500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	14°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	13:45 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	SATCHER FARMS	**Runway Surface Type:**	Grass/turf
Airport Elevation:	200 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	25	**IFR Approach:**	None
Runway Length/Width:	1550 ft / 35 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Fatal, 1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal, 1 Minor, 1 None	**Latitude, Longitude:**	46.450019,-122.759834(est)

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	CHUCK REYNOLDS; SEATTLE , WA
Original Publish Date:	September 12, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42783