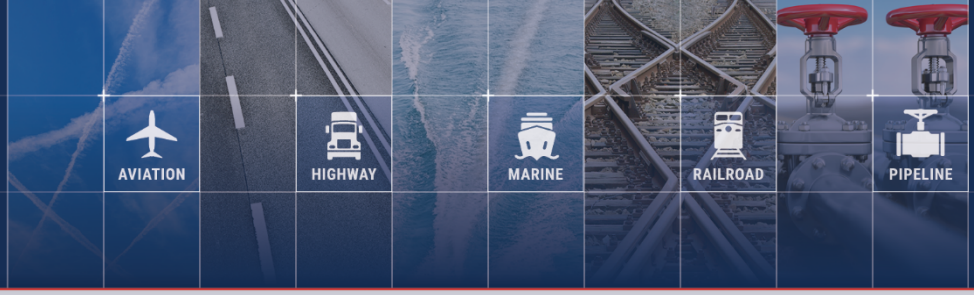

Aviation Investigation Final Report

Location:	Clinton, Arkansas	**Accident Number:**	CEN19LA222
Date & Time:	July 13, 2019, 11:20 Local	**Registration:**	N9651K
Aircraft:	Stinson 108	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	2 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane had been stored in a hangar and not flown for 3 years. On the day of the accident, the pilot departed on a flight to a nearby airport, where he added 100 low-lead aviation fuel to the automotive fuel already contained in the wing tanks and subsequently departed on the return flight. About 150 ft above ground level after takeoff, the engine lost partial power. The airplane descended and impacted terrain, resulting in substantial damage to the left wing and fuselage.

A fuel sample from the carburetor revealed some contamination; however, the contaminant was not identified. Although it is possible that the loss of engine power was the result of fuel contamination, the engine was not examined following the accident and a mechanical failure could not be ruled out; therefore, the reason for the partial loss of engine power could not be determined based on the available information.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A partial loss of engine power for undetermined reasons.

Findings

Aircraft	Fuel - Fluid condition
Aircraft	(general) - Unknown/Not determined

Factual Information

History of Flight

Takeoff	Loss of engine power (partial) (Defining event)

On July 13, 2019, about 1120 central daylight time, a Stinson 108 airplane, N9651K, was substantially damaged when it was involved in an accident near Clinton, Arkansas. The pilot sustained minor injuries, and the passengers were both seriously injured. The airplane operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to information obtained from a Federal Aviation Administration (FAA) inspector, the airplane had been stored in a hangar and not flown for about 3 years. The pilot checked the fuel and then departed for a nearby airport. After landing, the pilot estimated that the airplane's left tank had 8 gallons of automotive fuel and the right wing had 16 gallons of automotive fuel. The age of the fuel could not be determined. The pilot added 12 gallons of 100 low-lead fuel to the left tank and 4 gallons to the right tank, and subsequently departed to the origin airport.

During the initial climb after takeoff, when the airplane was about 150 ft above ground level, the pilot perceived that the airplane's performance was reduced and recalled that the tachometer read 1,850 rpm, which was lower than expected. The airplane settled and the pilot flared the airplane before the collision with terrain to minimize impact forces. The airplane collided with the ground and came to rest against trees, resulting in substantial damage to the left wing and fuselage.

The FAA inspector took a fuel sample from the carburetor and found contaminants in the fuel. When poured into a glass jar, several particles settled to the bottom of the jar. The fuel sample was not secured and was not available for further testing. The engine was not examined.

Pilot Information

Certificate:	Private	**Age:**	66,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 Unknown	**Last FAA Medical Exam:**	September 15, 1998
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	**Registration:**	N9651K
Model/Series:	108 2	**Aircraft Category:**	Airplane
Year of Manufacture:	1947	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	108-2651
Landing Gear Type:	Tailwheel	**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	2231 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Franklin
ELT:		**Engine Model/Series:**	6A4165 SERIES
Registered Owner:	On file	**Rated Power:**	165 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KCCA,516 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	10:35 Local	**Direction from Accident Site:**	86°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Overcast / 2000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	28°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Clinton, AR (CCA)	**Type of Flight Plan Filed:**	None
Destination:	Clinton, AR (2A2)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class E

Airport Information

Airport:	Clinton Muni CCA	**Runway Surface Type:**	
Airport Elevation:	513 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 Serious	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Serious, 1 Minor	**Latitude, Longitude:**	35.599593,-92.456987(est)

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Andrew Finney; FAA FSDO; Little Rock, AR
Original Publish Date:	March 3, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99832