Aviation Investigation Final Report

Location:	Pacoima, California	**Accident Number:**	WPR16LA074
Date & Time:	February 22, 2016, 13:34 Local	**Registration:**	N201KY
Aircraft:	Mooney M20J	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

About 3 minutes after takeoff, the engine started to run roughly. The private pilot contacted the tower controller and advised that he was turning back to the runway. While on short final, he pulled back on the power, and the engine lost total power. The pilot was able to restart the engine, but it again lost total power. The airplane was unable to reach the runway, and the pilot subsequently initiated a forced landing to a street, during which, the airplane struck a moving car and numerous parked vehicles.

A postaccident engine test run did not reveal any evidence of preimpact mechanical malfunctions or failures that would have precluded normal operation. The reason for the loss of engine power could not be determined.

Probable Cause and Findings

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

A total loss of engine power for reasons that could not be determined because postaccident examination did not reveal any evidence of preimpact mechanical failures or malfunctions that would have precluded normal operation.

Findings

Not determined	(general) - Unknown/Not determined
Environmental issues	(general) - Contributed to outcome

Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Landing	Collision with terr/obj (non-CFIT)

On February 22, 2016, at 1334 Pacific standard time, a Mooney M20J, N201KY, experienced a loss of engine power after takeoff and the pilot made a forced landing onto a city street near Whiteman Airport (WHP), Pacoima, California. The airplane was operated by the pilot under the provisions of 14 *Code of Federal Regulations* Part 91. The private pilot was not injured. The airplane sustained substantial damage during the accident sequence. The local personal flight departed Pacoima about 1330. Visual meteorological conditions prevailed, and no flight plan had been filed.

The pilot reported that about three minutes after takeoff the engine started to run rough. He contacted the tower controller and advised that he was turning back. While on short final, he pulled back on the power and the engine lost power. The pilot was able to re-start the engine but it again lost power. The pilot was unable to make it to the runway and subsequently initiated a forced landing to a city street. During the landing, the airplane struck a moving car and numerous parked vehicles; substantially damaging both wings and the fuselage.

The airplane was recovered to a secured facility for a postaccident engine examination. The engine was visually examined and determined that an engine run was possible. The engine was subsequently mounted onto an engine test stand. No modifications were accomplished except to add oil which had leaked out during storage. The engine started and was run at 2,700 rpm and 28 inches of manifold pressure. A magneto check was accomplished which recorded a 50 rpm drop. When the rpm was reduced to 1,200 rpm, it was noted that the engine ran lean.

A review of the maintenance logbooks revealed a discrepancy as to when the last annual/100 hour inspection was accomplished. An entry dated 6/15/15 identified a recoding tach time and total time in service of 2,052 hours. A sticker had been applied to the page indicating "Remove plugs check compression. Removed injectors and cleaned and inspected IAW 100 hr and was determined to be in an airworthy condition." There was no mechanics signature, certificate number and Inspection Authorization identified for return to service.

A previous hand written entry dated 2/1/13, indicated that the engine had been inspected in accordance with a 100 hour inspection and was determined to be in an airworthy condition. This entry revealed the appropriate mechanic signature and certificate number. The mechanic reported that he did not inspect the engine on 6/15/15.

Pilot Information

Certificate:	Private	**Age:**	62,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	October 1, 2015
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	December 25, 2015
Flight Time:	952 hours (Total, all aircraft), 176 hours (Total, this make and model), 952 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 11 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	**Registration:**	N201KY
Model/Series:	M20J NO SERIES	**Aircraft Category:**	Airplane
Year of Manufacture:	1978	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	24-0462
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 1, 2013 Annual	**Certified Max Gross Wt.:**	2899 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2052 Hrs at time of accident	**Engine Manufacturer:**	LYCOMING
ELT:	Installed	**Engine Model/Series:**	IO-360 1A
Registered Owner:	On file	**Rated Power:**	200 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:	KWHP,1003 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	21:36 Local	**Direction from Accident Site:**	320°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots / 21 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	330°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.97 inches Hg	**Temperature/Dew Point:**	27°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pacoima, CA (WHP)	**Type of Flight Plan Filed:**	None
Destination:	Pacoima, CA (WHP)	**Type of Clearance:**	None
Departure Time:	13:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	WHITEMAN WHP	**Runway Surface Type:**	Asphalt
Airport Elevation:	1003 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	30	**IFR Approach:**	None
Runway Length/Width:	4120 ft / 75 ft	**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:**	34.254722,-118.408607(est)

Administrative Information

Investigator In Charge (IIC):	Jones, Patrick
Additional Participating Persons:	Frank Motter; Federal Aviation Administration; Van Nuys, CA
Original Publish Date:	March 5, 2018
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=92755