



# Aviation Investigation Final Report

<b>Location:</b>	MACON, Missouri	<b>Accident Number:</b>	CHI94LA245
<b>Date &amp; Time:</b>	July 27, 1994, 06:55 Local	<b>Registration:</b>	N6327Q
<b>Aircraft:</b>	MOONEY M20C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported he experienced a partial loss of engine power while cruising at 9,500 feet MSL. He made an emergency descent and landed on a closed runway. During the landing roll, the airplane collided with construction equipment and departed the runway. Inspection of the airplane and an engine run revealed no anomalies. The pilot stated the airplane had a history of intermittent engine power loss due to cracked sealant in the fuel tanks.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the student pilot's decision to land on a closed runway under construction. A factor associated with the accident is the partial loss of engine power for an undetermined reason.

## Findings

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

Findings  
1. (F) REASON FOR OCCURRENCE UNDETERMINED  
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

Findings

2. OBJECT - VEHICLE
3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

## Factual Information

On July 27, 1994, at 0655 central daylight time, a Mooney M20C airplane, N6327Q, sustained substantial damage while landing at the Macon-Fower Memorial Airport, Macon, Missouri. The student pilot sustained no injuries. The personal flight departed the Kansas City Downtown Airport at 0555 and was conducted under 14 CFR Part 91 in visual meteorological conditions. The planned destination was Quincy, Illinois and no flight plan was filed.

The pilot reported that he was cruising at 9,500 feet MSL and experienced a partial loss of engine power. He said he applied carburetor heat and full rich mixture but the engine did not recover. He turned on the fuel boost pump and the engine recovered to normal operation. About 10 minutes later, he experienced a second partial loss of engine power and elected to divert to the nearest airport for a precautionary landing. He reduced power and descended to land at the Macon Airport.

He reported that he saw a large black runway and no markings were noted. He saw vehicles near the runway which he thought were lawn mowers. During the landing roll on runway 02, the airplane collided with a piece of construction equipment and then a construction vehicle. The airplane came to rest in the grass on the edge of the runway.

A Federal Aviation Administration inspector examined the airplane. He reported that the left wing was sheared near the outboard edge of the flap and the right main landing gear was collapsed. The tail tie down was bent and skin was wrinkled near the horizontal stabilizer. He said the construction equipment sustained superficial damage.

A fuel sample was checked and revealed no contamination. Examination of engine and flight control continuity revealed no anomalies. The inspector stated that during a static engine run, the engine performed normally. Additionally, he said that at the time of the accident, runway 02 was closed. He said it was properly marked and that a notice to airmen (NOTAM) was issued.

During a telephone interview, the pilot stated that the airplane had a history of fuel contamination. He said he was aware of several previous engine anomalies which were attributed to cracked sealant in the fuel tanks. He said pieces of the sealant broke free and created an intermittent restriction in the fuel system.

## Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	March 8, 1994
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	85 hours (Total, all aircraft), 85 hours (Total, this make and model), 28 hours (Pilot In Command, all aircraft), 62 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MOONEY	<b>Registration:</b>	N6327Q
<b>Model/Series:</b>	M20C M20C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	670126
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 4, 1993 Annual	<b>Certified Max Gross Wt.:</b>	2550 lbs
<b>Time Since Last Inspection:</b>	193 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4065 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-360-A1D
<b>Registered Owner:</b>	FULL MOONIES	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	FULL MOONIES	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	IRK ,966 ft msl	<b>Distance from Accident Site:</b>	340 Nautical Miles
<b>Observation Time:</b>	06:45 Local	<b>Direction from Accident Site:</b>	23°
<b>Lowest Cloud Condition:</b>	Scattered / 8000 ft AGL	<b>Visibility</b>	20 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	KANSAS CITY , MO (MKC )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	QUINCY , IL (UIN )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	05:55 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	MACON-FOWER MEMORIAL K89	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	874 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	2	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3300 ft / 59 ft	<b>VFR Approach/Landing:</b>	Precautionary landing;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	39.209121,-94.630439(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Robbins, Wesley
<b>Additional Participating Persons:</b>	RICHARD J CODDINGTON; SPRINGFIELD , IL
<b>Original Publish Date:</b>	January 25, 1995
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=9609">https://data.nts.gov/Docket?ProjectID=9609</a>

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