



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	RED BAY, AL	<b>Accident Number:</b>	ATL84LA214
<b>Date &amp; Time:</b>	07/01/1984, 1800 CDT	<b>Registration:</b>	N3207F
<b>Aircraft:</b>	MOONEY M-20F	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 Minor, 2 None

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

THE ACFT LANDED GEAR UP SHORT OF THE RWY IN AN ATTEMPT TO RETURN TO THE RWY AFTER A POWER LOSS AT LOW ALT. DURING TAKEOFF THE ARPT MANAGER SAID THE ENGINE SOUND CHANGE WAS CONSISTENT WITH POWER LOSS FROM FUEL STARVATION. FAA DID A POST ACCIDENT ENGINE TEST RUN AND HAD TO RUN THE ENGINE RICH WITH BOOST PUMP ON TO KEEP IT RUNNING. THE FUEL SYSTEM WAS EXAMINED TO DETERMINE WHY IT WAS RUNNING LEAN. THE FUEL INJECTOR INLET SCREEN SHOWED EVIDENCE OF CORROSION AND RUST. FUEL FLOW WAS FOUND TO BE LEAN. INJECTORS AND FLOW DIVIDER WERE REMOVED FOR A CHECK. THE INJECTOR WAS FOUND TO BE CONTAMINATED WITH DIRT, RUST AND WATER. THE THROTTLE LINKAGE WAS WORN AND BINDING. THE IDLE MIXTURE SETTING WAS ADJUSTED TO THE LEAN SIDE. WHEN THE FUEL INJECTOR WAS REINSTALLED, THE ENGINE RAN ROUGH AND RICH. LEANED WITH THE MIXTURE CONTROL THE ENGINE RAN SMOOTHLY AT ALL SETTINGS. THERE WAS NO PROBLEM WITH THE THROTTLE LINKAGE.

## Probable Cause and Findings

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

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) FUEL SYSTEM,INJECTOR - FOREIGN OBJECT
2. (C) FUEL SYSTEM,INJECTOR - BLOCKED(PARTIAL)
3. (F) FLUID,FUEL - WATER
4. (F) FLUID,FUEL - CONTAMINATION
5. (C) FLUID,FUEL - STARVATION

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

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

6. (F) WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND
7. OBJECT - FENCE

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<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--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	04/09/1984
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	468 hours (Total, all aircraft), 92 hours (Total, this make and model), 428 hours (Pilot In Command, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MOONEY	<b>Registration:</b>	N3207F
<b>Model/Series:</b>	M-20F M-20F	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	670361
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	08/22/1983, Annual	<b>Certified Max Gross Wt.:</b>	2740 lbs
<b>Time Since Last Inspection:</b>	95 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2383 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-360-A1A
<b>Registered Owner:</b>	HORACE V. MORROW	<b>Rated Power:</b>	200 hp
<b>Operator:</b>	HORACE V. MORROW	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MSC, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1750 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 5000 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29° C / 16° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	SIKESTON, MO (SIK)	Type of Clearance:	None
Departure Time:	1800 CDT	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor, 2 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	JOHN B DRAKE	Report Date:	
Additional Participating Persons:	JOHNNY R HARDY; BIRMINGHAM, AL HARLEY B PICKETT; BIRMINGHAM, AL LEONARD R ABBOTT; ATLANTA, GA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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