



National Transportation Safety Board Aviation Accident Data Summary

Location:	RED BAY, AL	Accident Number:	ATL84LA214
Date & Time:	07/01/1984, 1800 CDT	Registration:	N3207F
Aircraft:	MOONEY M-20F	Injuries:	1 Serious, 1 Minor, 2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

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

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

Findings

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

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

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

Pilot Information

Certificate:	Private	Age:	56
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	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

Aircraft Make:	MOONEY	Registration:	N3207F
Model/Series:	M-20F M-20F	Engines:	1 Reciprocating
Operator:	HORACE V. MORROW	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:	None	Engine Model/Series:	IO-360-A1A
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MSC, 0 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	7 knots / , 300°
Temperature:	29° C	Visibility	7 Miles
Precipitation and Obscuration:			
Departure Point:		Destination:	SIKESTON, MO (SIK)

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
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): JOHN B DRAKE

Adopted 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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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