



Aviation Investigation Final Report

Location:	LAWRENCEVILLE, Georgia	Accident Number:	ATL88LA217
Date & Time:	July 21, 1988, 14:30 Local	Registration:	N6810V
Aircraft:	MOONEY M20E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT REPORTED THAT THE ENGINE FAILED SHORTLY AFTER TAKEOFF. THE PILOT MADE A 180 DEGREE TURN AND LANDED DOWNWIND ON THE RUNWAY. HE ELECTED TO LAND GEAR UP TO AVOID A DROP-OFF PAST THE RUNWAY END. THE ACFT SLID OFF THE RUNWAY END, BUT CAME TO A STOP BEFORE REACHING THE DROP-OFF. EXAM OF THE ENGINE REVEALED THAT THE #4 ROD BEARING HAD FAILED DUE TO LACK OF LUBRICATION, ALTHOUGH THERE WAS OIL IN THE CRANKCASE. THE PILOT STATED THAT THE ENGINE HAD EXPERIENCED AN INFLIGHT LOSS OF OIL PRESSURE 2 DAYS BEFORE, AND HE MADE A PRECAUTIONARY LANDING. THE MECHANIC WHO SUBSEQUENTLY EXAMINED THE ENGINE FOUND AN IMPROPERLY SECURED FITTING ON THE PROP GOV OIL LINE. HE ALSO FOUND 1 QUART OF OIL REMAINING. THE MECHANIC SECURED THE FITTING, CHECKED THE OIL FILTER AND SCREEN FOR METAL, THEN SERVICED THE ENGINE WITH OIL. THE ENGINE WAS TEST RUN SEVERAL TIMES THEN RELEASED TO THE OWNER. THE ENGINE MANUFACTURER STATES IN THE ENGINE SPECS THAT THE MINIMUM SAFE OIL QUANTITY IN THE ENGINE IS 2 QUARTS.

Probable Cause and Findings

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. (F) MAINTENANCE - IMPROPER - UNKNOWN
2. (F) FLUID,OIL - STARVATION
3. (F) ENGINE ASSEMBLY,BEARING - PREVIOUS DAMAGE
4. (C) PROCEDURES/DIRECTIVES - NOT UNDERSTOOD - OTHER MAINTENANCE PERSONNEL
5. (C) MAINTENANCE - INADEQUATE - OTHER MAINTENANCE PERSONNEL
6. (C) ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: GEAR NOT EXTENDED

Phase of Operation: LANDING

Findings

7. WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Findings

8. TERRAIN CONDITION - RUNWAY

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	59, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	October 5, 1987
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4441 hours (Total, all aircraft), 1648 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N6810V
Model/Series:	M20E M20E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	21-0004
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 1988 Annual	Certified Max Gross Wt.:	2525 lbs
Time Since Last Inspection:	19 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3046 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A1A
Registered Owner:	BROWN, EUGENE A	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	WINDER, GA (WDR)	Type of Clearance:	None
Departure Time:	14:29 Local	Type of Airspace:	Class G

Airport Information

Airport:	GWINNETT CO. BRISCOE FLD 17A	Runway Surface Type:	Asphalt
Airport Elevation:	1036 ft msl	Runway Surface Condition:	Dry
Runway Used:	7	IFR Approach:	None
Runway Length/Width:	4000 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:	

Administrative Information

Investigator In Charge (IIC):	Strickland, Scott
Additional Participating Persons:	CHARLES GALLOWAY; ATLANTA , GA
Original Publish Date:	December 3, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=7790

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