



Aviation Investigation Final Report

Location: EUFAULA, Alabama Accident Number: ATL92LA143

Date & Time: July 23, 1992, 18:30 Local Registration: N6730N

Aircraft: MOONEY M20F Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

FOLLOWING A TEST FLIGHT AFTER MAINTENANCE, ON FINAL APPROACH TO THE RUNWAY, THE PILOT FELT HE WAS BELOW GLIDE PATH. AS HE ATTEMPTED TO ADD POWER TO ADJUST HIS DESCENT RATE, THE ENGINE FAILED TO RESPOND. THE PILOT WAS FORCED TO ATTEMPT AN EMERGENCY LANDING IN ROUGH TERRAIN NEAR THE APPROACH END OF THE RUNWAY, WHICH RESULTED IN SUBSTANTIAL DAMAGE TO THE AIRCRAFT AND MINOR INJURY TO THE PILOT. EXAMINATION OF THE ENGINE REVEALED THAT THE FUEL INJECTOR SERVO WAS PRODUCING A RICH MIXTURE, AT THE LOW POWER SETTING, AS A RESULT OF THE BUSHING BETWEEN THE DIAPHRAGMS STICKING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE FUEL INJECTOR SERVO AS A RESULT OF THE STICKING BUSHING BETWEEN THE DIAPHRAGMS.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) FUEL SYSTEM, INJECTOR - PRESSURE EXCESSIVE

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
2. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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Factual Information

Pilot Information

Certificate:	Private	Age:	53,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 16, 1992
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	730 hours (Total, all aircraft), 140 hours (Total, this make and model), 705 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N6730N
Model/Series:	M20F M20F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	680181
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	July 13, 1992 Annual	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3294 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360-A1A
Registered Owner:	BROWN, CARL A.	Rated Power:	200 Horsepower
Operator:	BROWN, CARL A.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CSG ,397 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	17:51 Local	Direction from Accident Site:	10°
Lowest Cloud Condition:	Scattered / 1400 ft AGL	Visibility	7 miles
Lowest Ceiling:	Overcast / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	(EUF)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:00 Local	Type of Airspace:	Class G

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Airport Information

Airport:	EUFAULA EUF	Runway Surface Type:	Asphalt
Airport Elevation:	275 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	31.899822,-85.149162(est)

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Administrative Information

Investigator In Charge (IIC): Sasser, Roff

Additional Participating Persons:

Original Publish Date: June 11, 1993

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=8633

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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