



Aviation Investigation Final Report

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| Location: | GORMAN, California | Accident Number: | LAX93LA089 |
| Date & Time: | January 2, 1993, 15:30 Local | Registration: | N6790V |
| Aircraft: | MOONEY M20C | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 Minor |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

THE AIRPLANE WAS IN CRUISE FLIGHT AT ABOUT 9,500 FEET MEAN SEA LEVEL WHEN THE ENGINE HAD A TOTAL LOSS OF POWER. THE PILOT ENTERED A POWER OFF FORCED LANDING AND PERFORMED EMERGENCY PROCEDURES ATTEMPTING TO RE START THE ENGINE. HE COULD NOT GET THE ENGINE STARTED. THE PILOT LANDED THE AIRPLANE ON A TWO LANE ROAD ADJACENT TO AN INTERSTATE HIGHWAY. THE PILOT ENCOUNTERED AN UNFAVORABLE LEFT CROSSWIND WHICH CAUSED THE AIRPLANE TO DRIFT TO THE RIGHT SIDE OF THE ROAD. DURING LANDING ROLL THE AIRPLANE'S RIGHT WING CONTACTED METAL FENCE POSTS AND SPUN THE AIRPLANE INTO AN EMBANKMENT. DURING AN FAA SUPERVISED ENGINE RUN FUEL WAS NOTED AS LEAKING FROM THE CARBURETOR. AN EXAMINATION OF THE CARBURETOR REVEALED THAT THE INLET FUEL FITTING HAD GALLED OR CROSSFED THREADS. METAL SHAVINGS FROM THE THREADS BYPASSED THE FUEL SCREEN AND TRAVELED DIRECTLY INTO THE FUEL FLOAT VALVE WITHOUT GOING THROUGH THE FILTER SCREEN. THIS CAUSED THE FLOAT VALVE TO BECOME INOPERATIVE, WHICH RESULTED IN FLOODING THE ENGINE WITH FUEL CAUSING A TOTAL LOSS OF ENGINE POWER. THE AIRPLANE'S ENGINE HAD A TOTAL TIME OF 7 HOURS SINCE OVERHAUL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: 1) THE CARBURETOR INLET FUEL LINE BEING IMPROPERLY INSTALLED BY MAINTENANCE PERSONNEL WHICH ALLOWED THE CARBURETOR TO BECOME CONTAMINATED WITH METAL PARTICLES, AND 2) THE CARBURETOR FLOAT VALVE BEING JAMMED BY METAL PARTICLES WHICH ALLOWED EXCESSIVE FUEL TO BE INTRODUCED INTO THE CARBURETOR RESULTING IN FLOODING AND THE TOTAL LOSS OF ENGINE POWER. A FACTOR IN THIS

ACCIDENT WAS THE PILOT ENCOUNTERING AN UNFAVORABLE CROSSWIND DURING FINAL APPROACH WHICH LED TO THE AIRPLANE'S WING COLLIDING WITH FENCE POSTS DURING LANDING ROLL.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FUEL SYSTEM,LINE FITTING - CROSS/STRIPPED THREADED
2. (C) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. (C) FUEL SYSTEM,CARBURETOR - CONTAMINATION
4. (C) FUEL SYSTEM,CARBURETOR FLOAT - JAMMED
5. (C) FLUID,FUEL - PRESSURE EXCESSIVE

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

6. (F) WEATHER CONDITION - UNFAVORABLE WIND
7. OBJECT - FENCE POST

Factual Information

Pilot Information

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| Certificate: | Private | Age: | 42, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medical-w/ waivers/lim | Last FAA Medical Exam: | September 16, 1992 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 564 hours (Total, all aircraft), 385 hours (Total, this make and model), 484 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------|---------------------------------------|-----------------|
| Aircraft Make: | MOONEY | Registration: | N6790V |
| Model/Series: | M20C M20C | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 700084 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | December 21, 1992 Annual | Certified Max Gross Wt.: | 2975 lbs |
| Time Since Last Inspection: | 12 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 3091 Hrs | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, not activated | Engine Model/Series: | O-360-A1D |
| Registered Owner: | DANIEL G. OLIVIER | Rated Power: | 180 Horsepower |
| Operator: | DANIEL G. OLIVIER | 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: | Not reported |
| Observation Facility, Elevation: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 20 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 20 knots / 25 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 300° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | PETALUMA , CA (O69) | Type of Flight Plan Filed: | None |
| Destination: | EL MONTE , CA (EMT) | Type of Clearance: | None |
| Departure Time: | 13:30 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|---|----------------------------------|----------------|
| Airport: | | Runway Surface Type: | |
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced landing |

Wreckage and Impact Information

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|----------------------------|---------|-----------------------------|----------------------------|
| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Minor | Latitude, Longitude: | 34.859066,-118.870445(est) |

Administrative Information

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| Investigator In Charge (IIC): | Childress, Richard |
| Additional Participating Persons: | STU PRINCE; VAN NUYS , CA |
| Original Publish Date: | November 15, 1993 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=27903 |

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](#).