



National Transportation Safety Board Aviation Accident Final Report

Location:	GORMAN, CA	Accident Number:	LAX93LA089
Date & Time:	01/02/1993, 1530 PST	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

Certificate:	Private	Age:	42, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
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:	09/16/1992
Occupational Pilot:		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

Aircraft Make:	MOONEY	Registration:	N6790V
Model/Series:	M20C M20C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	700084
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	12/21/1992, Annual	Certified Max Gross Wt.:	2975 lbs
Time Since Last Inspection:	12 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3091 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1D
Registered Owner:	DANIEL G. OLIVIER	Rated Power:	180 hp
Operator:	DANIEL G. OLIVIER	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Not Reported
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	20 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
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:			
Departure Point:	PETALUMA, CA (O69)	Type of Flight Plan Filed:	None
Destination:	EL MONTE, CA (EMT)	Type of Clearance:	None
Departure Time:	1330 PST	Type of Airspace:	Class G

Wreckage and Impact Information

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:	

Administrative Information

Investigator In Charge (IIC):	RICHARD V CHILDRESS	Report Date:	11/15/1993
Additional Participating Persons:	STU PRINCE; VAN NUYS, CA		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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