



Aviation Investigation Final Report

Location:	SANTA MONICA, California	Accident Number:	LAX92FA094
Date & Time:	January 18, 1992, 17:10 Local	Registration:	N6481U
Aircraft:	MOONEY M-20-C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE 107 HR PVT PLT & PSGR DEPD THE ARPT FOR AN UNKNOWN DESTN. THE RECENTLY PURCHASED ACFT HADN'T FLOWN FOR SVRL MONTHS. THE ACFT HAD BEEN PARKED OUTSIDE & 5.5' OF RAIN HAD FALLEN IN THE LAST 41 DAYS. THE ACFT WAS REFUELED IMMEDIATELY BFR DEPG & THE FUELER SAID THE PLT SAT INSIDE THE ACFT DRG REFUELING, READING A MAP. THE REFUELER DIDN'T SEE THE PLT MAKE A PREFLT INSPN. HE ALSO NOTED THE ACFT WAS VERY DIRTY. THE FUEL FILLER CAPS WERE OF THE THERMOS CAP STYLE, RECESSED INTO WELLS IN THE WING SFC. FAA SDR'S NOTED 20 INSTANCES OF WATER CONTAMINATION OF FUEL IN THIS MODEL ACFT DRG A PERIOD FROM 1/1/86 TO 9/10/92. OF THE 20 RPRTD INSTANCES, 4 WERE ASSOCIATED WITH LEAKAGE THRU LOOSE FUEL CAPS. DRG THE TAKEOFF & INITIAL CLIMB, THE PLT STATED TO THE TWR THAT 'MY ENGINE KEEPS CUTTING IN AND OUT.' HE WAS CLRDR TO LND ON ANY RWY. THE PLT COMPLETED A 180 DEG TURN BACK TWD THE RWY & THE ACFT HIT A PWR POLE OFF THE END & BELOW THE RWY SFC. THE ACFT WAS CONSUMED BY A POST-CRASH FIRE. NO MECH MALFUNCTION/FAILURE WAS FND. SUNSET WAS AT 1712 PST.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FUEL CONTAMINATION BY WATER DUE TO THE; 1) FAILURE OF THE FUEL CAPS TO PROPERLY SEAL AGAINST WATER INGESTION, 2) THE PILOTS FAILURE TO ADEQUATELY PERFORM A PREFLIGHT INSPECTION OF THE AIRCRAFT SUFFICIENT TO DETECT THE PRESENCE OF WATER IN THE FUEL TANKS. FACTORS IN THE ACCIDENT WERE THE INADEQUATE FUEL CAP/WELL DESIGN BY THE MANUFACTURER AND THE PILOTS REDUCED ABILITY TO VISUALLY SEE AND AVOID THE POWER POLE DUE TO THE PREVAILING LIGHT CONDITIONS.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM,CAP - LEAK
2. (F) ACFT/EQUIP,INADEQUATE DESIGN - MANUFACTURER
3. (C) FLUID,FUEL - CONTAMINATION
4. (C) FUEL SYSTEM,DRAIN - NOT ENGAGED
5. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

6. TERRAIN CONDITION - NONE SUITABLE

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

7. (F) LIGHT CONDITION - DUSK
8. (F) VISUAL LOOKOUT - RESTRICTED - PILOT IN COMMAND
9. OBJECT - UTILITY POLE

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

10. TERRAIN CONDITION - RESIDENTIAL AREA

Factual Information

Pilot Information

Certificate:	Private	Age:	28, 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:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	May 17, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	107 hours (Total, all aircraft), 4 hours (Total, this make and model), 50 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N6481U
Model/Series:	M-20-C M-20-C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2228
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 9, 1991 Annual	Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1D
Registered Owner:	JEFFREY R. WIRGLER	Rated Power:	180 Horsepower
Operator:	JEFFREY R. WIRGLER	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:	SMO ,175 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	17:20 Local	Direction from Accident Site:	40°
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	15 miles
Lowest Ceiling:	Broken / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	14°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	17:07 Local	Type of Airspace:	Class D;Class E

Airport Information

Airport:	SANTA MONICA MUNI SMO	Runway Surface Type:	Concrete
Airport Elevation:	175 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	4987 ft / 150 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	34.009311,-118.460945(est)

Administrative Information

Investigator In Charge (IIC): Petterson, George

Additional Participating Persons: JOE GERBINO; LOS ANGELES , CA
CHARLES LITTLE; WILLIAMSPORT , PA

Original Publish Date: May 26, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=27402>

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