



National Transportation Safety Board Aviation Accident Final Report

Location:	China Lake, CA	Accident Number:	LAX06CA050
Date & Time:	12/01/2005, 1720 PST	Registration:	N6004X
Aircraft:	Mooney M20A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane made a hard landing on a road after losing engine power. The flight was the return leg of a long cross-country from Kansas, that included an intermediate refueling stop in New Mexico. The pilot departed the intermediate airport with 49 gallons of fuel on board and thought he had enough fuel to make it to his destination. As the flight neared the destination airport the pilot reported to the TRACON controller that he had a low fuel state. The controller suggested a closer alternate airport. While attempting to land at the alternate airport, the pilot encountered adverse weather conditions including turbulence and crosswinds that exceeded the capabilities of the airplane. He decided instead to make a forced landing on a winding and undulating road. The engine lost power at this point and the pilot switched fuel tanks. The engine restarted for about 20 seconds and then lost power again. The pilot was unable to see the rising road in the darkness and did not perform a flare. The airplane landed hard and came to rest in between the road and a ditch.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: fuel exhaustion due to the pilot's inadequate in-flight planning and fuel consumption calculations.

Findings

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

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
3. (C) FUEL CONSUMPTION CALCULATIONS - INADEQUATE - PILOT IN COMMAND

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

Occurrence #3: HARD LANDING
Phase of Operation: EMERGENCY LANDING

Findings

4. TERRAIN CONDITION - ROADWAY/HIGHWAY
5. TERRAIN CONDITION - UPHILL
6. LIGHT CONDITION - DUSK

Factual Information

Pilot Information

Certificate:	Private	Age:	61, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	06/01/2005
Occupational Pilot:		Last Flight Review or Equivalent:	10/01/2005
Flight Time:	170 hours (Total, all aircraft), 94 hours (Total, this make and model), 117 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6004X
Model/Series:	M20A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	1592
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	04/01/2005, Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	49 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3207 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360 A1D
Registered Owner:	Bradley Glasco	Rated Power:	180 hp
Operator:	Bradley Glasco	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	NID	Distance from Accident Site:	
Observation Time:	0056 UTC	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 9000 ft agl	Visibility	50 Miles
Lowest Ceiling:	Broken / 20000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	14° C / -2° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ALBUQUERQUE, NM (AEG)	Type of Flight Plan Filed:	None
Destination:	INYOKERN, CA (IYK)	Type of Clearance:	VFR Flight Following
Departure Time:	1300 MST	Type of Airspace:	

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:	35.686667, -117.697778

Administrative Information

Investigator In Charge (IIC):	Howard Plagens	Report Date:	03/28/2006
Additional Participating Persons:	; Federal Aviation Administration; Riverside, CA		
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).