



Aviation Investigation Final Report

Location:	Placerville, California	Accident Number:	LAX02LA187
Date & Time:	June 7, 2002, 18:12 Local	Registration:	N1285X
Aircraft:	Mooney M20E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

About 6 miles from the pilot's home airport, all engine power was lost. The airplane impacted trees during its approach to a landing. A witness reported observing the airplane glide in very quietly with its propeller barely turning "as if only from the wind." The witness indicated that the airplane "skipped off the ground once, as if trying to land, and then lifted back into the air again." Thereafter, the airplane came back down and crashed into a grove of trees. The accident site was about 6 miles from the pilot's destination airport. No evidence of fuel spillage was noted on the ground around the crashed airplane. Between 10 and 15 drops of fuel were found in fuel lines. No evidence of preimpact mechanical malfunctions was observed during the engine examination.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to the pilot's inadequate in-flight planning/decision which led to fuel exhaustion.

Findings

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

Findings

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

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

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

Findings

3. OBJECT - TREE(S)

Factual Information

HISTORY OF FLIGHT

On June 7, 2002, about 1812 Pacific daylight time, a Mooney M20E, N1285X, collided with trees and hilly terrain during a forced landing following a loss of power about 6 miles east of Placerville, California. The commercial certificated pilot was the sole occupant in the airplane, which he owned and operated. The pilot was seriously injured, and the airplane was substantially damaged. The personal flight was being operated under the provisions of 14 CFR Part 91. Visual meteorological conditions prevailed, and no flight plan had been filed. The pilot's family reported that, during the accident flight, the pilot was returning home to the Placerville airport following his departure from Bridgeport, California, at an undetermined time.

In a report from the El Dorado County Sheriff's Department, Placerville, California, a deputy indicated that a witness had observed the accident airplane glide in very quietly with its propeller barely turning "as if only from the wind." The witness reported that the airplane "skipped off the ground once, as if trying to land, and then lifted back into the air again." Thereafter, the airplane came back down and crashed into a grove of trees.

WRECKAGE AND IMPACT INFORMATION

The accident site is about 6 miles east of the Placerville Airport, and is near 38 degrees 42 minutes north latitude by 120 degrees 39 minutes west longitude. The accident site is near a road named Starkes Grade, which is adjacent to an open field. The accident airplane was found in the field imbedded in a grove of oak trees.

TESTS AND RESEARCH

A Federal Aviation Administration (FAA) inspector verbally reported to the National Transportation Safety Board investigator that there was no evidence of fuel spillage on the ground around the crashed airplane. Also, he removed the airplane's fuel lines at the engine's firewall, fuel pump, and servo. The FAA inspector reported observing between 10 and 15 drops (cumulative) of fuel in these lines.

The airplane was recovered from the accident site. Under the direction of the Safety Board investigator, the airplane's engine was examined by the designated Lycoming engine participant. The participant noted that the propeller blades appeared undamaged. The tip area of each blade exhibited a localized chordwise burnished appearance. The fuel pump, screens, magnetos, spark plugs, ignition harness, lubricating system, and other components were examined. The engine participant stated that, during the examination, no evidence of preimpact mechanical malfunctions had been observed.

Pilot Information

Certificate:	Commercial	Age:	74, 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:	April 25, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	6100 hours (Total, all aircraft), 5100 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N1285X
Model/Series:	M20E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	158
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-360-A1A
Registered Owner:	Donald A. Rogers	Rated Power:	200
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MHR,96 ft msl	Distance from Accident Site:	32 Nautical Miles
Observation Time:	18:45 Local	Direction from Accident Site:	236°
Lowest Cloud Condition:	Scattered / 20000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.68 inches Hg	Temperature/Dew Point:	29°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BRIDGEPORT, CA (O57)	Type of Flight Plan Filed:	None
Destination:	PLACERVILLE, CA (PVF)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	38.704723,-120.649444

Administrative Information

Investigator In Charge (IIC):	Pollack, W.
Additional Participating Persons:	Ken Meyer; Federal Aviation Administration; Sacramento, CA Mark Platt; Textron Lycoming; Van Nuys, CA
Original Publish Date:	July 29, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=54898

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](#).