Aviation Investigation Final Report

Location:	The Gap, Arizona	**Accident Number:**	LAX03LA087
Date & Time:	February 10, 2003, 14:16 Local	**Registration:**	N5029D
Aircraft:	Cessna 182A	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After flying for 1.6 hours, and while cruising at 9,500 feet msl, all engine power was lost. The pilot made a forced landing in soft desert terrain, resulting in the airplane abruptly decelerating in a nose down attitude. According to the pilot, the airplane's fuel tanks were full when she initiated the flight. En route, the sky was clear of clouds. The pilot stated that when the mishap occurred, she felt a "slight shudder and noticed that the sound of the engine went to idle." The pilot reportedly applied full carburetor heat, enrichened the mixture, and repositioned the fuel selector to the "both tanks" position. However, engine power was not restored, and the propeller continued rotating at idle speed throughout the forced landing. Subsequently, the airplane's engine was examined. It was run up to full power, and no evidence of any mechanical abnormality was found. The cause of the nonmechanical loss of engine power was not determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A total loss of engine power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE - NORMAL

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings
2. (F) TERRAIN CONDITION - SOFT

Factual Information

On February 10, 2003, about 1416 mountain standard time, a Cessna 182A, N5029D, experienced a loss of engine power while cruising near The Gap, Arizona. The commercial pilot made a forced landing on sandy desert terrain. The airplane abruptly decelerated in a nose down attitude and was substantially damaged. The pilot sustained minor injuries. The airplane was operated by the pilot on a personal flight under the provisions of 14 CFR Part 91. Visual meteorological conditions prevailed, and no flight plan had been filed. The flight originated from Bullhead City, Arizona, about 1240.

The pilot reported to the National Transportation Safety Board investigator that the mishap occurred after taking off with full fuel tanks. While cruising about 9,500 feet mean sea level (msl), the engine developed 2,300 rpm at 22 inches of manifold pressure. The sky was clear of clouds. The pilot reported she felt a "slight shudder and noticed that the sound of the engine went to idle." She then applied full carburetor heat, enrichened the mixture, and repositioned the fuel selector to the "both tanks" position. Engine power was not restored, and the propeller continued rotating at idle speed throughout the subsequent forced landing.

The pilot additionally indicated that during the landing she observed a road beneath the airplane, but misjudged her approach and touched down 100 feet from the road in the soft desert terrain, elevation about 6,000 feet msl. The pilot did not extend the airplane's manually activated wing flaps for the landing.

The airplane was recovered from the accident site and was examined. At the request of the Safety Board investigator, a Federal Aviation Administration inspector oversaw the examination. According to the FAA, the engine's top spark plugs appeared to have no abnormal wear signatures, and the leads tested okay. Fuel was evident in the gasolator. The exhaust system appeared intact, with no signs of leakage. The engine was started and run up to full power without any abnormalities noted.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	61,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):	Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 30, 2001
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	March 19, 2001
Flight Time:	1451 hours (Total, all aircraft), 30 hours (Total, this make and model), 1347 hours (Pilot In Command, all aircraft), 47 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N5029D
Model/Series:	182A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	51129
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	December 17, 2002 100 hour	**Certified Max Gross Wt.:**	2650 lbs
Time Since Last Inspection:	25 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3803 Hrs at time of accident	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	O-470
Registered Owner:	Mike Bishop	**Rated Power:**	230 Horsepower
Operator:	Lottie K. Theut	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	GCN,6606 ft msl	**Distance from Accident Site:**	45 Nautical Miles
Observation Time:	13:53 Local	**Direction from Accident Site:**	225°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.18 inches Hg	**Temperature/Dew Point:**	8°C / -16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bullhead City, AZ (A09)	**Type of Flight Plan Filed:**	None
Destination:	GRAND JUNCTION, CO (GJT)	**Type of Clearance:**	None
Departure Time:	12:40 Local	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	36.325553,-111.483055

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	Carlos Flores; Federal Aviation Administration; Las Vegas, NV
Original Publish Date:	October 28, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56496