

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 Medicalw/ 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

Cessna	Registration:	N5029D
182A	Aircraft Category:	Airplane
	Amateur Built:	
Normal	Serial Number:	51129
Tricycle	Seats:	4
December 17, 2002 100 hour	Certified Max Gross Wt.:	2650 lbs
25 Hrs	Engines:	1 Reciprocating
3803 Hrs at time of accident	Engine Manufacturer:	Continental
Installed, not activated	Engine Model/Series:	0-470
Mike Bishop	Rated Power:	230 Horsepower
Lottie K. Theut	Operating Certificate(s) Held:	None
	182A Normal Tricycle December 17, 2002 100 hour 25 Hrs 3803 Hrs at time of accident Installed, not activated Mike Bishop	182AAircraft Category:182AAmateur Built:NormalSerial Number:NormalSeats:December 17, 2002 100 hourCertified Max Gross Wt.:25 HrsEngines:3803 Hrs at time of accidentEngine Manufacturer:Installed, not activatedEngine Model/Series:Mike BishopRated Power:Lottie K. TheutOperating Certificate(s)

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:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56496	

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 <u>here</u>.