



Aviation Investigation Final Report

Location:	Reno, Nevada	Accident Number:	GAA16CA259
Date & Time:	May 24, 2016, 13:25 Local	Registration:	N4793D
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the Federal Aviation Administration, Aviation Safety Inspector that arrived at the scene shortly after the accident, he located the uninjured pilot in command (PIC) and a passenger rated pilot who were the only occupants of the airplane. The inspector reported that the PIC told him that he had fueled the airplane prior to the flight. The PIC told the inspector that he had flown 2.5 hours on the right tank which indicated 3.9 gallons of fuel remained per the electronic fuel quantity indicator, at which time he switched to the left tank which indicated 15 gallons of fuel remained per the electronic fuel quantity indicator. The PIC reported to the inspector that after switching tanks the engine ran for an additional five minutes and ceased operation. The PIC told the inspector that he contacted air traffic control (ATC) stating that he had experienced an "engine failure", and that they would not make it to the nearest airport. The pilot landed the airplane on a highway five miles from the destination airport. During the landing the nose gear collapsed and the airplane sustained substantial damage to the firewall.

During a post-accident examination of the airplane by the FAA Inspector, there wasn't any usable fuel found in the left or right fuel tanks, and the paved surface where the airplane landed did not contain any evidence of fuel spillage.

The airplane landed 5 miles from the nearest airport. The pilot's destination airport was 17.5 nautical miles southwest of the accident site. The distance between the departure airport and the destination airport was about 415 nautical miles. According to the pilot operating handbook, the range of the accident airplane is 880 nautical miles.

The NTSB Investigator contacted the fixed base operator who reportedly fueled the airplane prior to the flight in order to acquire the fuel records. The operator did not have any fuel records for the accident airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate fuel planning, resulting in fuel exhaustion and substantial damage to the firewall during the forced landing.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot

Factual Information

History of Flight

Enroute-cruise	Loss of engine power (total) (Defining event)
Enroute-cruise	Fuel exhaustion
Enroute-cruise	Emergency descent initiated
Landing	Collision with terr/obj (non-CFIT)
Landing-flare/touchdown	Hard landing

Pilot Information

Certificate:	Commercial; Private	Age:	68, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 21, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 4101 hours (Total, all aircraft), 2500 hours (Total, this make and model)		

Passenger Information

Certificate:		Age:	43, Male
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4793D
Model/Series:	182 A	Aircraft Category:	Airplane
Year of Manufacture:	1958	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34893
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	IO-540-AB1A5
Registered Owner:	EXTREME SOURCE INC.	Rated Power:	230 Horsepower
Operator:	EXTREME SOURCE INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KRNO,4400 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	19:55 Local	Direction from Accident Site:	314°
Lowest Cloud Condition:	Few / 4500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	15°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PRESTON, ID (U10)	Type of Flight Plan Filed:	Unknown
Destination:	RENO, NV (RNO)	Type of Clearance:	Unknown
Departure Time:	10:15 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.29,-119.510002(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Gerald W Rose; Federal Aviation Administration; Reno, NV James D Richardson; Federal Aviation Administration; Reno, NV
Original Publish Date:	September 12, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93244

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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](#).