



Aviation Investigation Final Report

Location:	Moab, Utah	Accident Number:	WPR15LA185
Date & Time:	June 13, 2015, 19:00 Local	Registration:	N5143D
Aircraft:	Cessna 182A	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

The commercial pilot reported that he maneuvered back toward the airport to land after dropping skydivers. During the approach for landing, about 1,000 ft above the airport, the engine experienced a total loss of power. The pilot was unable to restart the engine and subsequently initiated a forced landing to the desert floor.

The airplane departed with about 14 gallons of fuel on board, and the flight was about 30 to 35 minutes in duration. Postaccident examination of the wreckage revealed that the right wing fuel tank contained about 5 gallons of fuel, and the left wing fuel tank contained about 3 gallons. According to the airplane's operating limitations, 10 gallons of fuel is unusable in all flight attitudes (5 gallons per tank). Given a fuel consumption rate of about 12 gallons per hour and the fuel found in the wing tanks after the accident, it is likely that the loss of engine power was the result of fuel exhaustion.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's inadequate preflight fuel planning and inflight fuel management, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot
Environmental issues	Rough terrain - Not specified

Factual Information

History of Flight

Maneuvering	Fuel exhaustion (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

On June 13, 2015, about 1900 mountain daylight time, a Cessna 182A airplane, N5143D, experienced a loss of engine power while on final approach to the Canyonlands Field Airport (CNY), Moab, Utah. The pilot subsequently made an off airport forced landing. The commercial pilot was not injured. The airplane sustained structural damage to the tail section of the airplane. The airplane was operated by Skydive Canyonlands under the provisions of 14 *Code of Federal Regulations* Part 91 as a skydiving operation. Night visual meteorological conditions prevailed for the local area flight, and a company flight plan had been filed.

The pilot reported that there was a total of 14 gallons of fuel on board when he took the airplane and that no other fuel was added. The flight departed from runway 21, and he made several left turns to align the airplane with the intended drop zone. Once the jumpers exited the airplane, he flew on a northwestern heading for a few miles before he initiated a left turn for a return to the airport. About 3 miles from the airport, the engine lost power. The pilot tried unsuccessfully to restart the engine before initiating a forced landing on rough desert terrain.

A postaccident examination of the wreckage revealed that the fuel level in the right-side fuel tank was about 5 gallons, and the left-side fuel tank had about 3 gallons. According to the airplane's operating limitations, there is 10 gallons of unusable fuel, of which 7 gallons may be available, but only in level flight operations

The company reported that this airplane burns about 12 gallons of fuel per hour; the accident flight was estimated to be 30-35 minutes.

Neither the pilot nor the operator completed the National Transportation Safety Board Pilot/Operator Aircraft Accident/Incident Report Form 6120.1.

Pilot Information

Certificate:	Commercial	Age:	22, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	March 1, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	0 hours (Total, all aircraft), 0 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5143D
Model/Series:	182A	Aircraft Category:	Airplane
Year of Manufacture:	1958	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	51243
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2348 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:		Engine Model/Series:	O-470 SERIES
Registered Owner:	GRAY ROBERT PAUL	Rated Power:	225 Horsepower
Operator:	Skydive Canyonlands	Operating Certificate(s) Held:	None
Operator Does Business As:	Skydive Canyonlands	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	CNY,4557 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	01:06 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	19 knots / None	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	29°C / 7°C
Precipitation and Obscuration:	Moderate - Thunderstorm -		
Departure Point:	Moab, UT (CNY)	Type of Flight Plan Filed:	Company VFR
Destination:	Moab, UT (CNY)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	CANYONLANDS FIELD CNY	Runway Surface Type:	
Airport Elevation:	4557 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.755001,-109.754722(est)

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	Mathew Green; Federal Aviation Administration; Salt Lake City, UT
Original Publish Date:	July 16, 2018
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91361

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](#).