



Aviation Investigation Final Report

Location:	St. George, Utah	Accident Number:	WPR22LA127
Date & Time:	March 24, 2022, 13:49 Local	Registration:	N111NW
Aircraft:	Piper PA-32R-300	Aircraft Damage:	Substantial
Defining Event:	Unknown or undetermined	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, the airplane sustained a total loss of engine power during the approach to land. Unable to maintain altitude, the pilot initiated a forced landing to rough desert terrain. During the landing roll, the landing gear collapsed and separated, and the airplane slid about 100 ft before coming to rest upright.

Examination of the airframe and engine revealed no evidence of preimpact malfunctions or anomalies. Residual fuel was found in fuel lines and fuel components in the airframe and engine. The reason for the loss of engine power was undetermined.

Probable Cause and Findings

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

The total loss of engine power for undetermined reasons.

Findings

Aircraft	(general) - Unknown/Not determined
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Factual Information

History of Flight

Enroute	Unknown or undetermined (Defining event)
Emergency descent	Off-field or emergency landing

On March 24, 2022, about 1349 mountain daylight time, a Piper PA-32R-300, N111NW, was substantially damaged when it was involved in an accident near St. George, Utah. The pilot and passenger were seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that after refueling the airplane with 94 gallons of fuel they departed Casper/Natrona County International Airport (CPR), Casper, Wyoming, with a destination of St. George Regional Airport (SGU), St. George, Utah. During the approach to runway 19 at SGU, about 3,800 ft above ground level, the pilot reported to the SGU tower that he lost power. Despite several attempts, he was unsuccessful at restarting the engine. Concerned he did not have sufficient altitude to make the runway, he initiated a forced landing to rough desert terrain. During the landing roll, the landing gear collapsed and separated, and the airplane slid about 100 ft before coming to rest upright, resulting in substantial damage to both wings and fuselage.

First responder photos from the accident site showed dark colored and fuel saturated ground underneath the left inboard tank. During the wreckage recovery efforts, the left-wing tanks were empty. Twenty gallons of fuel was recovered from the right-wing tanks.



Figure 1-Accident site, view of the left wing and fuel spill.

Postaccident examination of the engine revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation. The fuel selector valve handle position was undetermined due to impact damage. The fuel selector valve was undamaged and found in the right tank position. The fuel lines between the wings, fuel selector valve, electric pump, and engine were tested with air and no blockages were noted. Residual fuel was found in fuel lines and fuel components during the examination.

Downloaded instrument flight data revealed that the fuel tanks were switched about every 20 minutes during the accident flight. Accurate fuel tank quantities were undetermined from the data. According to the data, shortly before the loss of engine power, the fuel pressure decreased to near zero, and about 5 seconds later, the fuel flow momentarily increased and

then dropped to zero. Three seconds later, the RPM decreased to zero followed by the manifold pressure increasing to near ambient levels.

Pilot Information

Certificate:	Private	Age:	56, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	April 21, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 7, 2022
Flight Time:	149 hours (Total, all aircraft), 106 hours (Total, this make and model)		

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N111NW
Model/Series:	PA-32R-300	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R7680499
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	July 31, 2021 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	14563 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-K1G5
Registered Owner:	KNELL LLC	Rated Power:	300 Horsepower
Operator:	Bruce Knell	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSGU,2936 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	13:56 Local	Direction from Accident Site:	296°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	Unknown / Unknown
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	Unknown / Unknown
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	21°C / -11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Casper, WY (CPR)	Type of Flight Plan Filed:	VFR
Destination:	St. George, UT (SGU)	Type of Clearance:	VFR;VFR flight following
Departure Time:	10:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	St George Municipal Airport SGU	Runway Surface Type:	Asphalt
Airport Elevation:	2883 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	9300 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	37.059517,-113.49787(est)

Administrative Information

Investigator In Charge (IIC):	Swick, Andrew
Additional Participating Persons:	James Hill; FAA-FSDO; Salt Lake City, UT Kathryn Whitaker; Piper Aircraft; Phoenix, AZ Mark Platt; Lycoming Engines; Phoenix, AZ
Original Publish Date:	March 20, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=104826

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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](#).