# National Transportation Safety Board

Office of Aviation Safety Washington, DC 20594



WPR24FA002

# **ACCIDENT SITE SURVEY**

April 3, 2024

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### A. ACCIDENT

Location: Moab, Utah Date: October 1, 2023 Time: 2022 MDT Airplane: Piper PA28-140 / N7153R

#### B. ACCIDENT SITE SURVEY

IIC	Fabian Salazar National Transportation Safety Board Federal Way, WA
Party Member	Stephen A. Grover Federal Aviation Administration Salt Lake City, UT
Party Member	Kathryn Whittaker Piper Aircraft Vero Beach, FL
Party Member	Troy Helgeson Lycoming Engines Williams Port, PA

#### C. SUMMARY

On October 1, 2023, about 2024 mountain daylight time, a Piper Cherokee, PA28-140 airplane, N7153R, was substantially damaged when it was involved in an accident near Moab, Utah. The pilot and three passengers were fatally injured. The airplane was operated as a Titel 14 *Code of Federal Regulations* Part 91 personal flight.

## D. DETAILS OF THE INVESTIGATION

## 1.0 Accident Site

The airplane came to rest on a heading of about 200° magnetic, at an elevation of about 4649 ft mean sea level (msl), about 0.5 statute mile northwest the departure end of runway 21. The accident site was in an area of open rolling hills consisting of soft soil and no vegetation.

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Canyonlands Regional Airport (CNY) Moab, Utah (figure 1). The elevation at CNY was 4,579 ft msl.



Figure 1. Google Earth view of the accident site and the departure end of runway 21 CNY.

CNY was located about 16 miles northwest of the nearest city of Moab, Utah. Interstate 70 (I-70) was located about 13 statute miles north of CNY. Highway 191 ran from Interstate 70 through Moab. Highway 191 ran past CNY's east boundary. The area surrounding CNY was unpopulated terrain that extended from the Moab city boundary, past CNY and to I-70. There were very few houses or buildings from I-70 to the Moab city limit. (figure 2 and 3).



Figure 2. Google Earth view showing the unpopulated area surrounding CNY, shown in a white dashed square. The distance from CNY to Moab is indicated by the yellow line.



Figure 3. Image showing the unpopulated area surrounding CNY.

The accident scene consisted of a first point of probable impact (FPPI) where the nose wheel was deposited, a second point of probable impact (SPPI) and the location of the airplane. The left main landing gear separated from the fuselage and was deposited at N38° 45′ 04.6″ W109° 46′ 12.9″. The right main landing gear separated from the fuselage and was deposited at N38° 45′ 06.0″ W109°46′ 12.2.″ Figure 4 is a Google Earth closeup of the location of the landing gear. A line drawn from the FPPI to the center of the wreckage resulted in a heading of about 020° magnetic.



Figure 4. Google Earth of the accident scene.

The first point of probable impact (FPPI) was located at N38° 45′ 01.3″ W 109° 46′ 14.3″. The FPPI consisted of a line of three gouges rising uphill into the soft dirt of a hill. An initial gouge of about 12′ X 24 "of disturbed soil, consistent with the nose wheel making contact, a small gouge, consistent with the nose wheel bouncing into the dirt, then about 50 ft northeast and uphill, a third gouge consistent with the left and right main landing gear (figure 5). The nose wheel was deposited in this location.

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Figure 5 The first point of probable impact, showing the location of the nose wheel and the left and right MLG gouges.

A second point of probable impact (SPPI) was located about 500 ft northeast of the FPPI on a heading of 020° magnetic. A section of a seat track was removed from this impact point. The airplane came to rest on a second hill, about 540 ft northeast of the FPPI, at N38° 45′ 06.2″ W109° 46′ 11.8″. The airplane rotated about the vertical axis 180° before coming to rest on a 200° magnetic heading. The engine was partially attached to the damaged engine mounts and was oriented downward.

A view of the accident scene looking southwest is shown in figure 6.



Figure 6. Accident site, looking southwest, showing the three points of probable impact.

Submitted by:

Fabian Salazar IIC