

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



WPR23FA083

ONSITE EXAMINATION

January 8, 2023

A. ACCIDENT

Location: New Harmony, Utah
Date: January 4, 2023
Airplane: Piper PA34-220T N814WT

B. ONSITE EXAMINATION

IIC	Elliott Simpson NTSB
Investigator	Starr Blum NTSB
Party Member	Kathryn Whitaker Piper
Party Member	Keith A Crockett FAA FSDO Salt Lake City, Utah

C. FACTUAL INFORMATION

1.0 Accident Site

The airplane was located at an elevation of about 6,575 ft, within the Harmony Mountain Range, about 35 miles northeast of St George, Utah.

The main wreckage was located within a ravine, about 200 ft below the surrounding ridgeline (see figure 1). Photos taken by law enforcement personnel indicated that the morning after the accident, the airplane was coated in about 2 inches of snow (see figure 2). On the day of the examination, the wreckage was further obscured by a covering of about 6 inches of snow, with only partial airframe and engine components visible (see figure 3).

The site was composed of rocky sandstone and granite, interspersed with pine, juniper and oak trees ranging in heights reaching up to 20 ft.

The first identified point of impact was about a 60-degree swath cut through a 20 ft tall juniper tree (see figure 4). The debris field continued on a heading of about 095 degrees true to the main wreckage 75 ft downrange (see figure 5). The first components located in the debris field were fiberglass and sheet metal shards associated with a wing. A propellor hub and three detached blades were 20 ft from

initial point of impact. All three blades exhibited leading edge gouging and chordwise scratches. One blade exhibited S bending with a serrated tip. Another blade had lost about 4" of its tip with serrated separation features. A second tree in the debris field exhibited similar 60-degree damage swath and contained remnants of a foot pedal. Further 20' east, an approximately 15' tall and 18" wide juniper tree had been uprooted and severed at its base (see figure 5,6). The nose landing gear assembly was located about 15' south of the stump.

The main wreckage came to rest inverted on a heading of 170 degrees. The left wing sustained leading edge crush damage along the entire length and remained partially attached to the fuselage. The inboard right wing remained partially attached to the fuselage. The outboard wing was comingled with the fuselage.

The fuselage sustained extensive crush damage from the nose cone to the vertical stabilizer. Within the fuselage, remnants of fractured and separated seats, flight instruments and cabin contents were identified. The stabilator and vertical stabilizer remained attached to the tail cone. The vertical stabilizer was crushed and had folded into the stabilator. An intermittent ELT tone could be heard coming from the tail cone.

Both engines remained partially attached to their engine mounts. Impact damage was observed to the cylinders of the right engine exposing valves and rocker assemblies. Damage to the left engine was obscured by the fuselage and wing components.

D. EXAMINATION PHOTOS



Figure 1 - Accident site, with wreckage obscured by snow.



Figure 2 - Accident site on January 5, photo courtesy of Washington County Sheriff Department.



Figure 3 - Main wreckage on January 8.



Figure 4 - 60 degrees cut tree swath; photo taken towards the west.



**Figure 5 - Debris field to main wreckage with uprooted tree trunk in center of image.
Photo taken on January 5, courtesy of the Washington County Sheriff Department.**



Figure 6 - Uprooted tree trunk.

Submitted by:

Elliott Simpson
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