

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA23FA235

WRECKAGE EXAM FACTUAL REPORT

May 18, 2023

A. ACCIDENT

Location: Summerville, South Carolina
Date: May 18, 2023
Time: 0014 EDT
Airplane: HondaJet HA-420, N255HJ

B. WRECKAGE EXAM FACTUAL REPORT

NTSB IIC Leah Read, Sr. ASI

C. DETAILS OF THE EXAM

On May 18, 2023, about 0014 eastern daylight time, a Honda Aircraft Company HA-420, N225HJ, was substantially damaged when it was involved in an accident at the Summerville Airport (DYB), Summerville, South Carolina. The commercial pilot, and the five passengers were not injured.

The airplane went off the end of the 5,000 ft runway and slid down an embankment before coming to a hard stop. The right wing caught on fire, but all six occupants were able to safely exit the airplane through the main cabin door. A post-impact fire consumed the cockpit, center fuselage, and the right wing.

An on-scene examination of the runway environment and the airplane was conducted by the NTSB, FAA, and representatives of Honda Aircraft Company. The airplane came to rest on a heading of about 240 degrees. All major components of the airplane were accounted for at the accident site.

Examination of Runway 24 (5,000 ft long and 75 ft wide) revealed runway witness marks from the accident airplane landing gear. The marks observed from the airplane tires were chalky in appearance and appeared similar to other normal airplane tire marks on the runway. The runway condition was described as excellent. The runway was crowned, and the asphalt was not grooved.

The investigative team was able to trace these marks from the departure end of Runway 24, where the airplane exited the paved surface, backwards approximately 1,550 ft towards the approach end. This roughly corresponded to the area near the Taxiway Charlie intersection. The tire marks began to make an "S" shape along the runway after the Taxiway intersection. Approximately 275 ft from the departure end, the tracks enter the grass to the left of the runway and subsequently return to the paved surface. At one point, the nose landing gear and right main landing gear tracks

converge, indicating a large sideslip motion of the airplane along the ground.

The airplane struck a departure end runway light, damaging it. The light had been replaced by the time the investigative team had arrived, but witness marks were still visible at the base of the light. After departing the paved surface, the airplane traveled approximately 273 ft along a grassy overrun area before falling 10 ft onto a rocky berm and sliding down a further 6 ft before coming to rest. The total elevation loss between the grassy overrun area and the bottom of the berm was about 16 ft. The airplane came to rest approximately 360 ft from the departure end of Runway 24.

During impact with the rocky berm, the airplane's right-wing structure was compromised, with the outboard 1/3 of the wing split from the remaining wing structure. This damage allowed fuel to spill from the right-wing integral fuel tank. An unknown ignition source ignited the spilled fuel which ended up consuming the majority of the passenger cabin and most of the cockpit area. The No. 2 engine pylon had weakened during the fire and caused the engine to fall towards the airplane. The majority of the right-wing structure was consumed by fire, and flap setting on the right wing could not be determined. The left wing and No. 1 engine were largely undamaged, except for impact marks along the leading edge from the rocky berm. The left-wing flaps were observed in the extended landing position. The aft-empennage mounted speed brake was observed in the fully retracted position, and minimal thermal or impact damage was observed to the elevator, rudder, horizontal and vertical stabilizers.

The nose landing gear was found near the right-side empennage of the airplane was largely intact with limited thermal damage. The right main landing gear and associated tire was heavily damaged by fire and molten metal. The left main landing gear was still attached to the left wing and was not thermally damaged.

The passenger entry door was found in the open position. The right-side emergency escape hatch was not located and presumably consumed by fire. The remains of the four passenger seat frames were identified.

The left cockpit seat, control column, and left Primary Flight Display (PFD) were substantially burned but were recognizable. The right cockpit seat, control column and right Primary Flight Display was consumed by fire, and barely recognizable.

The center Multifunction Display (MFD) was badly damaged and removed by investigators. The MFD contains two secure digital (SD) memory card slots. The upper slot (logging) was observed to be empty, and the lower slot (update) was observed to have the remnants of a melted SD card.

The center pedestal was substantially burned, but both thrust levers were identified at the full aft "CUTOFF" stops, the flap handle in the "LDG" position, and the speed

brake switch in the "RETRACTED" position.

A hand-held fire extinguisher was located near the left wing and was found discharged. The ELT was activated during the accident sequence and was removed and deactivated by the investigative team.

The airplane wreckage was recovered and taken to a secured storage facility.

Submitted by:

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