

# National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



RRD23FR012

## **VIDEO FILES**

Specialist's Factual Report

May 15, 2024

## **A. ACCIDENT**

Location: Baltimore, Maryland  
Date: June 26, 2023  
Time: 2006 eastern daylight time (EDT)  
0006 June 27, 2023 coordinated universal time (UTC)  
Train: CSX Transportation, CSX-Y231

## **B. VIDEO FILES SPECIALIST**

Specialist Michael Portman  
Senior Aerospace Engineer - Recorder Specialist  
National Transportation Safety Board (NTSB)

## **C. DETAILS OF THE INVESTIGATION**

In agreement with the Investigator-In-Charge (IIC), a Video Files group was not convened, and a summary was prepared.

The NTSB Vehicle Recorder Division received a hard drive containing the forward-facing head-end onboard image recorder data from the lead locomotive. Additionally, the Division also received a security camera video file, "CSX Conductor Incident 2023-06-26.mp4," via electronic file transfer.

### **1.0 Recordings Descriptions**

The onboard image recorder files consisted of numerous .vam video files which could be played through the recorder manufacturer's software, GE LocoCAM Viewer. The resolution and framerate of the videos could not be determined due to the nature of the playback software. The video was recorded in color and was accompanied by an external audio track.

The security camera video file was 56 seconds in duration, and was recorded in color, at a resolution of 1920 x 1080 pixels and a frame rate of 20.98 frames per second.<sup>1</sup> The video was a screen capture of the security camera software. There was no accompanying audio track. The camera was mounted to a building near the tracks, and the field of view included a diagonal grade crossing on the left with several tracks approaching the crossing from the right.

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<sup>1</sup> Reported pixel dimension and frame rate are based on metadata embedded in the file. Files that have been modified from their original version may have incorrect metadata.

## **2.0 Timing and Correlation**

The times used in this report are expressed as the approximate local eastern daylight time (EDT) of the accident. Timing of the onboard image recorder was established by correlating video events to common events on the locomotive event data recorder.<sup>2</sup> Specifically, the locomotive's final stopping time was used to establish a time correlation. The security camera footage was recorded in approximately local time. No external correlative sources were available for the security camera footage, so the times presented are approximate.

## **3.0 Summary of Onboard Image Recorder**

At 20:04:30, the locomotive was stationary. At 20:04:50, an air whooshing sound was noted, and the locomotive began to travel backwards. Various pneumatic whooshing noises were continually noted until 20:05:22. At 20:05:50, the locomotive reversed past a grade crossing. At 20:06:07, whooshing noises were again noted, and the locomotive slowed to a stop. The locomotive stopped at 20:06:22, and remained stopped for the remainder of the evaluated portion of the video.

## **4.0 Summary of Security Camera Video**

The security camera video began at 20:06:05, with the empty rear-most intermodal car of the consist visible on the right side of the field of view, moving left toward the grade crossing. Two individuals were noted standing on the car. The individual closest to the camera was noted as the trainee, and the individual farthest from the camera was noted as the conductor. The camera zoomed in to focus on the incident. At 20:06:13, the car visibly lurched in a slack action motion, and both individuals were noted leaning forward in reaction. The conductor regained their balance and remained on the car. The trainee fell forward onto the track below, face down, with their legs and feet outside the track, facing the camera, and their head and torso inside the track. At 20:06:14, the car's leading near side wheel struck the trainee's midsection, pinned them between the wheel and the track, and began dragging them. The conductor disembarked the car at 20:06:19 and began following along the track. The car came to a complete stop at 20:06:26, and remained stopped for the rest of the recording. The conductor physically assessed the scene, as a third individual came into view from the right, walking towards the scene. The recording ended at 20:06:59.

Submitted by:

Michael Portman  
Senior Aerospace Engineer - Recorder Specialist

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<sup>2</sup> For more information, see the Locomotive Event Recorder - Specialist's Factual Report in the docket.