

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division

May 10, 2022

Onboard Image Recorder

Specialist's Factual Report By Kyle Garner

1. EVENT

Location:	Los Angeles, California
Date:	January 09, 2022
Time:	About 1400 Pacific standard time (PST)
Train Operator:	Southern California Regional Rail Authority (SCRRA)
Aircraft Operator:	Private
Aircraft Tail Number:	N8056L
NTSB Number:	WPR22LA076

For a summary of this event, refer to the docket for this investigation.

2. GROUP

An onboard image recorder group was not convened.

3. DETAILS OF INVESTIGATION

On January 14, 2022, the National Transportation Safety Board (NTSB) Vehicle Recorder Division received four executable (.exe) video files from the operator of the train involved in the event. The video files were downloaded by non-NTSB personnel and forwarded via a file share service to the NTSB.

Each file was a self-contained executable that contained the digital video recorder (DVR) manufacturer's video playback software and the desired video file. The video playback software supported simultaneous playback of multiple camera views.

Each file had color video from three camera sources: an exterior forward-facing camera, an in-cab side-facing camera, and an in-cab control stand-facing camera. Recorded audio was also available when viewing one video at a time.

3.1. Timing and Correlation

Each video file included a date, in MM-DD-YYYY format, and timestamp, in hh:mm:ss format, overlaid on the recording. It was not determined if the time overlaid on the recording reflected accurate local time, Pacific standard time (PST). For the remainder of this report, all time is referenced as Onboard Image Recorder (OIR) time.

3.2. Summary of Recording Contents

In agreement with the Investigator-In-Charge, an onboard image recorder group did not convene, and a summary report was prepared.

The four files included video data captured on the day of the event from 14:07:59 to 14:28:00 OIR time. Metadata in the file indicated that the video was recorded at a resolution of 672 x 224 pixels. Figure 1 is a Google Earth¹ overlay of the track location (in red), the location of the impact of the train and plane, the location of Whiteman Airport (from where the aircraft departed), and the final stopping point of the train as shown in the video.

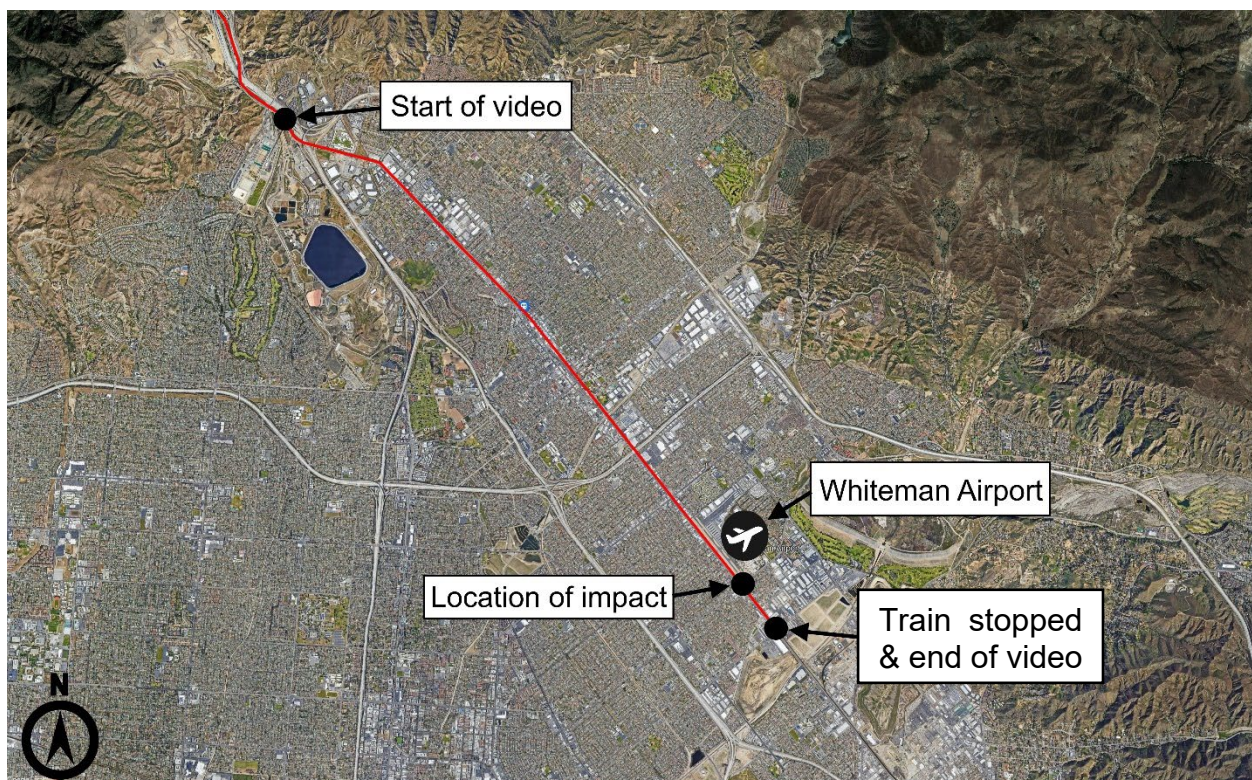


Figure 1. Google Earth overview of the location of the track, airport, impact, and the stop/end of the video.

¹ Weather and lighting conditions shown in the Google Earth overlay are not necessarily representative of the weather and lighting conditions at the time of the event.

The recording began at 14:07:59 at the location shown in Figure 1. The first frame of the exterior forward-facing video is shown in Figure 2



Figure 2. The first frame of the exterior forward-facing video.

For the duration of the recording, the engineer was seated upright facing forward and wore eyeglasses. The engineer sounded the train's horn at all grade crossings.

Video from the beginning of the recording to 14:13:17 was reviewed and deemed not pertinent to the investigation. A summary of the remainder of the recording follows:

At 14:13:17, the train stopped at the Sylmar/San Fernando Metrolink rail station.

At 14:14:26, the train departed the Sylmar/San Fernando Metrolink rail station.

At 14:17:22, the train was located adjacent to the northwest corner of Whiteman Airport, near the intersection of San Fernando Road and Pierce Street.

At 14:17:24, the engineer moved the throttle lever forward².

At 14:17:37, the train was located adjacent to the air traffic control tower at Whiteman Airport.

At 14:17:40, an obstruction on the track was visible ahead. The engineer moved the throttle lever forward.

At 14:17:42, the engineer moved the throttle lever rearwards. The engineer then moved his left hand to the automatic brake valve handle. The engineer's right hand remained on the horn button.

At 14:17:49, the engineer moved the automatic brake valve handle slightly forward, and a sound similar to rushing air was audible. The engineer continued to sound the horn.

At 14:17:50, a person on the west side of the upcoming grade crossing with the obstruction was visible flashing a light toward the train, as shown in Figure 3.



Figure 3. Forward-facing camera - 14:17:50.

At 14:17:57, the engineer moved the automatic brake valve handle forward.

² Data from the locomotive event recorder were not available, thus, the resultant throttle command corresponding to the lever movement could not be determined.

A view of the aircraft prior to impact, at 14:17:58, on the forward-facing camera is shown in Figure 4.



Figure 4. Forward-facing camera – prior to impact – 14:17:58.

At 14:18:00, the engineer moved the automatic brake valve handle to its forwardmost position.

At 14:18:01, the train impacted the aircraft.

At 14:18:04, the engineer picked up the radio handset and declared an emergency.

At 18:18:54, the train stopped in the middle of the grade crossing at the intersection of San Fernando Road and Branford Street and remained at this location for the remainder of the video.

At 14:19:45, the engineer picked up the radio handset and reported to the dispatcher that he had struck an aircraft obstructing the track and the front windshield of the train was shattered.

At 14:22:00, the video ended.