#### NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division Washington, DC 20594

June 20, 2011

# **On-Board Image Factual Report**

#### Specialist's Factual Report By Christopher Babcock

### 1. EVENT

Location:Red Oak, IowaDate:April 17, 2011, 0700 Central Daylight Time (CDT)Operator:Burlington Northern-Santa Fe RailroadNTSB Number:DCA11FR002

### 2. GROUP

A group was not convened.

### 3. SUMMARY

At approximately 0700 CDT on April 17, 2011, an eastbound BNSF coal train with 3 locomotives and 130 loaded hopper cars struck the rear of an eastbound BNSF track maintenance work train that had stopped for a red signal. As a result of the collision, the 2 crewmembers of the striking train were fatally injured.

Approximately 0621 CDT on the day of the accident, an Amtrak train passed by the BNSF maintenance work train. The Amtrak locomotive was equipped with a fixedmount, forward facing video camera. Amtrak provided a DVD to Safety Board investigators containing footage of the BNSF maintenance work train as the Amtrak locomotive passed.

## 4. DETAILS OF INVESTIGATION

On April 20, 2011, the NTSB Vehicle Recorder Laboratory received a DVD containing video from the following recording device:

Recorder Manufacturer/Model:Wabtec Traintrax Video RecorderRecorder Serial Number:KB0924A162-LDVR

#### 4.1. Recording Contents

The DVD contained 20 seconds of video and audio information. The video footage captures forward facing imagery. External audio is also recorded. No video or audio is captured from inside the locomotive control compartment.

The video was recorded at a resolution of 704x480 pixels and 30 frames per second (fps). The video was examined to determine the configuration of the equipment loaded on the maintenance work train. Figures 1 through 11 document the loading of the last 7 cars in the maintenance work train. Full resolution screen captures are available as an attachment to this report. The full video is available in the public docket for this accident.

Christopher Babcock Aerospace Engineer Vehicle Recorder Division



Figure 1. End of train device.



Figure 2. HGZX150 equipment.



Figure 3. Scorpion equipment.



Figure 4. Line 32 payload.



Figure 5. Line 31 payload.



Figure 6. Line 30 payload.



Figure 7. Line 29 payload.



Figure 8. Line 28 payload.



Figure 9. Line 27 payload.



Figure 10. Line 26 payload.



Figure 11. Line 25 payload.