

# NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

## Railroad Accident Brief Report

ATL 96 FR 026  
HEAD-ON COLLISION  
TRAINS Q317-19 AND Q316-18  
CSXT RAILROAD  
SMITHFIELD, WEST VIRGINIA  
AUGUST 20, 1996

About 5:22 a.m., eastern daylight time, on August 20, 1996, a CSX Transportation (CSXT) eastbound freight train Q316-18 collided head-on with westbound CSXT train Q317-19 (lead Engine No. 23) while operating on the CSXT's Short Line Subdivision, near Smithfield, West Virginia.

Train Q316-18 consisted of 3 locomotives and 27 cars, and was 1373 feet in length and had 2773 trailing tons. There were two crewmembers in the operating compartment of the lead locomotive: an engineer and a conductor.

Train Q317-19 consisted of 3 locomotives and 41 cars, and was 2274 feet in length and had 1888 trailing tons. The train was manned by an engineer, and a conductor, who were riding in the operating compartment of the lead locomotive.

As a result of the collision, a total of 4 locomotive units and 11 cars from both trains were derailed; three locomotives were destroyed. Two crewmembers received serious injuries and two crewmembers received fatal injuries. A tank car containing polyvinyl chloride was ruptured and an undetermined amount of product was spilled. Local police evacuated a ½ square mile area near the accident site as a precautionary measure. Total damages were estimated at \$3,848,914. At the time of the collision, weather conditions were reported to be foggy with an ambient temperature of 64° F.

Train Q316-18 departed Parkersburg, West Virginia, and traveled 76 miles to the Jacksonburg siding. Once in the Jacksonburg siding, train Q316-18 reported to the Jacksonville train dispatcher that the train was clear.

While train Q316-18 was in the Jacksonburg siding, the conductor received and copied the direct train control (DTC) written block authority to operate in the Hart Block. The DTC block authority gave permission to train

Q316-18 to proceed in an eastern direction on the Hart Block. However, the authority could only be acted on after train Q317-19 (Engine No. 23) passed train Q316-18.

The engineer of train Q316-18 stated in a Safety Board interview that he did not look at the DTC authority that was received and copied by the conductor. The engineer stated that when the conductor received the DTC authority the engineer was outside the cab of the locomotive. The engineer did not confer or verify with the conductor the DTC block authority and the “after arrival” portion of the permission that the train dispatcher provided. The crewmembers by carrier rule are required to review the DTC authority prior to taking action.

A westbound train, T-812 (Engine No. 2206) passed train Q316-18 which was in the Jacksonburg siding. Train T-812 released the Hart Block at 4:41 a.m.

Train Q317-19 received the DTC authority for the Short Block at 3:07 a.m., then the Dola Block at 3:36 a.m. and finally, the Hart Block at 4:43 a.m. The distance between the Short Line Junction and the west end of the Hart Block is 36.2 miles. About 4:57 a.m. train Q316-18 proceeded out of the Jacksonburg siding, onto the single main track, where it collided head-on with train Q317-19 at about 5:22 a.m.

The written authority provided to train Q316-18 was consistent with the CSXT operating rules. The review of the recorded radio tapes between the train dispatcher and the crew of train Q316-18 indicated that they were given DTC instruction to wait for train Q317-19 to pass before occupying the main track.

The Safety Board’s investigation determined that train Q316-18 proceeded eastbound on the main track without waiting as instructed in DTC authority for train Q317-19 to pass. According to CSXT operating rules, train Q316-18 did not have permission to occupy the main track until Train Q317-19 with Engine No. 23 had passed. The investigation revealed that train Q317-19 had permission to operate westbound in the Hart Block.

Safety Board investigators recovered the DTC Authority form from both the engineer and conductor of the eastbound train Q316-18. Examination of the conductor’s copy of the form revealed that the DTC Block Authority form had Engine No. 23 crossed out and Engine No. 2206 (train T-812) written over the No. 23. The written authority form that the conductor kept had the written instruction for the train to take the Jacksonburg siding and the “After Arrival of Engine No. 23” to operate in an east direction in the Hart Block. The radio voice tapes indicated that train Q316-18 received the “After arrival of Engine No. 23” authority from the train dispatcher to operate in an eastern direction in the Hart Block. The crew of train Q316-18 probably mistook the coal train T-812 (Engine No. 2206), which passed them while they were waiting in the siding for Engine No. 23.

## **PROBABLE CAUSE**

The National Transportation Safety Board determines that the probable cause of this accident was failure of the crew of eastbound train Q316-18 to comply with the DTC authorization despite receiving and confirming the information from the dispatcher .

Adopted: August 18, 1998