

Federal Track Safety Standards permit trains to operate at speeds up to 10 m.p.h. over rail with defects such as the one found in this track. Section 213.113 only requires that a qualified person determine whether the track is safe for use. Therefore, it is possible that this accident could have happened even if an inspection had indicated the presence of a vertical split in the rail head. This is not to suggest that an inspector or supervisor necessarily would have determined the track safe for use had he known that the defect existed. However, the standards would have permitted a qualified person to make that determination.

#### IV. CONCLUSIONS

1. The Penn Central Rules for Conducting Transportation and the Potomac Yard Special Rules specifically state what actions are required when a train is stopped suddenly by an emergency brake application.
2. B-4 crewmembers were not well versed on the Potomac Yard Special Rules and Penn Central rules.
3. Potomac Yard procedures do not ensure compliance with the requirement that tenant-line crews be qualified on the yard's special rules.
4. Penn Central freight train B-4 was operated in compliance with applicable rules at the time of derailment.
5. After the derailment, the engineer on B-4 did not comply with Penn Central Rules 102, 106, and 400N-3 or with Potomac Yard Special Rule 52; the head brakeman did not comply with Penn Central Rule 102 and Potomac Yard Special Rule 52; and the conductor did not comply with Penn Central Rule 106 in that he failed to make use of the telephone at the Solite switch to notify the RF&P dispatcher of

the emergency brake application after the caboose stopped.

6. Had the conductor telephoned him, the dispatcher could have set the home signal at the North Alexandria Interlocking at stop and prevented the collision.
7. Southern Railway Passenger train No. 6 was operated in compliance with applicable rules.
8. Potomac Yard track inspection procedures are not designed to detect internal rail defects.
9. Federal Track Safety Standards do not prohibit the use of rail with internal defects in yard tracks adjacent to main tracks, despite the fact that applicable standards became effective on October 16, 1972, almost 6 months after this accident.
10. The operation of freight and passenger trains on adjacent tracks without adequate safeguards to prevent collisions between the two types of trains creates hazards which should be analyzed and controlled.

#### V. PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of the derailment of the freight cars was a defective rail, which broke while the train was passing over it. The probable cause of the collision between the passenger train on the adjacent main track and the derailed B-4 freight car was that the crewmembers of B-4 did not flag the passenger train as they were required to do by the operating rules.

R-73-5-7

#### VI. RECOMMENDATIONS

The National Transportation Safety Board recommends that:

1. The Federal Railroad Administration modify Federal Track Safety Standards to insure that yard tracks adjacent to main tracks are maintained and inspected in such a way as to eliminate the probability of track-related derailments (Recommendation No. R-73-5). In this connection the Safety Board reiterates and emphasizes one of the Board's recommendations in its report on the derailment of a Penn Central freight train and the collision of one of its derailed cars containing hazardous material with a passenger train at Sound View, Conn., on October 8, 1970. The recommendation urged that the:

"Federal Railroad Administration initiate studies to identify the hazards involved in the joint use of tracks by passenger and freight trains as a means  
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of understanding the risks assumed. This study should be done jointly with the Urban Mass Transportation Administration and should include, but not be limited to, clearance, means of keeping derailed cars in line, danger of shifted lading, and systems for detecting when track space has been violated."

2. The Penn Central Transportation Company revise its training, testing, and enforcement program to ensure that employees are, in fact, qualified on all aspects of the jobs to which they are assigned (Recommendation No. R-73-6).
3. The Potomac Yard develop procedures for insuring that tenant-line employees are qualified on and comply with Potomac Yard Special Rules (Recommendation No. R-73-7).

BY THE NATIONAL TRANSPORTATION SAFETY BOARD

/s/ JOHN H. REED  
Chairman

/s/ FRANCIS H. McADAMS  
Member

/s/ LOUIS M. THAYER  
Member

/s/ ISABEL A. BURGESS  
Member

/s/ WILLIAM R. HALEY  
Member

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