

Log R-441

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

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Forwarded to:

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SAFETY RECOMMENDATION(S)

R-83-35 and -36

The National Transportation Safety Board has long been concerned about the safety of railroad operations involving railroad employees who may be under the influence of alcohol, or whose judgment may be impaired by alcohol. This concern was heightened by two recent railroad accidents: the first at Livingston, Louisiana, on September 28, 1982, which involved hazardous materials, and the second near Newport, Arkansas, on October 3, 1982, in which two railroad employees were killed. The investigations are not yet completed, but in both accidents, train crewmembers were found to have consumed alcohol just before going or while on duty. As a result of these investigations, as well as other major railroad accidents investigated by the Board, the Safety Board issued on March 7, 1983, Safety Recommendations R-83-28 through -34 concerning alcohol/drug abuse by railroad operating employees to the Federal Railroad Administration (FRA), the Association of American Railroads, and the Railway Labor Executives Association.

A recent incident at Union Station in Washington, District of Columbia (D.C.) involving an intoxicated Baltimore and Ohio Railroad Company (B&O) engineer who was about to operate a Maryland Department of Transportation (DOT) commuter train on a regular run further highlights the Board's concern that this sensitive safety problem requires immediate and constructive action by the FRA, the railroad industry, rail labor unions, and government entities that provide commuter railroad service.

In the Washington incident, which occurred about 5:23 p.m. on February 14, 1983, the locomotive engineer was escorted by a Washington Terminal Company (WTC) trainmaster and car superintendent from the locomotive of Maryland DOT commuter train No. 61, operated under contract by the B&O, about 2 minutes before it was scheduled to depart with approximately 300 passengers for Brunswick, Maryland. Subsequently, the engineer submitted to a blood alcohol test at Capitol Hill Hospital, and the laboratory report of the test indicated that the engineer had a blood alcohol level (BAL) of 0.222 percent. A BAL of 0.10 percent is established by the National Highway Traffic Safety Administration, the Congress, and most States including the District of Columbia, as the level at which highway drivers are considered to be driving while intoxicated.

The four-man crew of train No. 61 consisted of a conductor, an engineer, a fireman, and a flagman. The crew normally reports for duty Monday through Friday, at 5:45 a.m., at Brunswick and goes off duty after the arrival of train No. 60 at Washington, scheduled for 7:56 a.m. The crew returns to duty at 4:25 p.m. for the 5:25 p.m. departure of train No. 61. The crew is provided rooms at a hotel near Union Station during the layover. The crew worked this schedule on February 14, 1983.

On the day of the incident, train No. 61 was located on track No. 10 in the Union Station, as is customary, a short distance from the crew dispatcher's office where the outbound crews report for duty. In the afternoon, there are several clerk-callers in the office, but they are separated from the reporting location by a partition. Crewmembers are required to sign the appropriate register before proceeding to their trains. There is no supervisor stationed at the reporting location; the offices of the WTC supervisors are located inside Union Station proper. About 45 minutes before departure, the conductor and flagman open the train doors and station themselves on the platform to assist passengers boarding the train. A hostler brings the locomotive from the roundhouse and leaves it 15 to 20 feet in front of the passenger cars on track No. 10. It is necessary for the engineer to walk the length of the platform, past the flagman and conductor, to board the locomotive.

On the day of the incident, a railroad official (not a B&O employee) who regularly rides train No. 61 happened to walk alongside the engineer as they both made their way toward the head end of the train. The official noticed that the engineer apparently was having difficulty in walking and that he had a generally disheveled appearance. According to the railroad official, he stopped to talk with the conductor and asked him if there was anything wrong with the engineer. The conductor said nothing, but simply shrugged his shoulders and gave the official an exasperated look. The official immediately returned to the station, contacted the WTC president, and suggested that he have the condition of the engineer of train No. 61 checked. A trainmaster and car superintendent were sent to investigate, and they arrived at the head end of the train in time to observe the engineer make four start and stop reverse movements before the locomotive was successfully coupled to the passenger cars. Generally, one such movement is adequate to couple the locomotive to the cars. They then boarded the locomotive.

The WTC superintendent testified at a B&O/WTC railroad hearing that both he and the trainmaster detected what they believed to be the odor of alcohol on the engineer's breath. Since he did not consider himself impaired, the engineer consented to take a BAL test. According to the engineer, he had drunk "not more than four screwdrivers," a mixture of vodka and orange juice, prior to 1 p.m. He insisted that he had had nothing to drink thereafter and thought there was enough time for the drinks to "wear off" before he had to go back to work.

Train No. 61 is scheduled to depart Union Station 25 minutes behind commuter train No. 39. However, since train No. 39 is scheduled to make almost twice as many stops as train No. 61, it arrives at Point of Rocks, Maryland, 42 miles from Union Station, only 8 minutes ahead of train No. 61. As a result, train No. 61 often encounters approach signal indications because train No. 39 occupies the signal block ahead. Train operation over this route is double-track with automatic block signals. There is no provision for cab signals or automatic train control. Maximum authorized passenger train speed is 70 mph and the B&O locomotives have overspeed control with a nominal setting of about 74 mph.

This incident highlights several problems. First, none of the members of the traincrew took exception to the engineer's condition, although there is an indication that his condition was known to at least some of them. It was by mere happenstance that the

railroad official observed the engineer's condition and took action. When this official questioned the conductor about the engineer's condition, the conductor shrugged off the question. Had the railroad official not acted, the train would have been under the control of an engineer with a 0.222 percent BAL, a condition in which he would have experienced loss of critical judgment, impaired comprehension, increased reaction time, and degraded perception of color, form, motion, and dimension. Therefore, he was unfit for duty and, in operating the train, would have placed the passengers, his fellow employees, and himself at peril.

Second, the engineer was not observed by a supervisor when he came on duty. The Safety Board believes that the B&O should ensure that all B&O operating traincrews, particularly those operating passenger trains, are subject to a supervisory check where the crews report to duty. This would reduce the possibility that an engineer who is impaired by alcohol before reporting on duty would be allowed to operate a passenger train.

Third, according to the B&O general road foreman of engines, there is no record of a road foreman or other supervisor having ridden with the engineer of train No. 61 after he entered passenger service. At the time of the incident, the engineer had worked about 2 1/2 months on trains No. 60 and 61 between Brunswick and Washington. The Safety Board believes that the B&O should increase its use of periodic supervisory road checks on trips between Brunswick and Washington.

Fourth, the engineer did not relate the effects of alcohol to his ability to perform his duties; however, the effects of alcohol were obvious to the railroad officials. The Safety Board believes that the B&O should include in its training program for railroad operating employees information on the effects of alcohol on a person's performance of duties.

Finally, the split shift necessary for the commuter operation left the crew with more than 8 hours of off-duty time between trains. The Safety Board believes that the B&O should review the need for recreational facilities at Union Station for its traincrews. In the past, some railroads have provided such facilities for traincrews to relax and congregate at a location other than a hotel room. The establishment of such a facility could assist in reducing alcohol abuse.

It should be noted that the Safety Board has investigated two major accidents on the B&O's Maryland Division which involved head-end collisions. These accidents occurred at Orleans Road, West Virginia, on February 12, 1980, and near Germantown, Maryland, on February 9, 1981. ^{1/} As a result of these accidents, the Board recommended that the B&O establish supervisory checks at crew change terminals. The B&O responded to the Board's recommendation on January 8, 1982, stating that:

Conductors and engineers are responsible under railroad rules for assessing the fitness for duty of employees under their charge, as are yardmasters and other field level supervisors. This responsibility has been stressed in employee contacts and rules classes. Beyond this, planned and intensive checks and interviews of employees at on-duty points are being conducted as a normal management function.

^{1/} Railroad Accident Reports—"Head-on Collision of Baltimore & Ohio Freight Trains Extra 6474 East and Extra 4367 West, Orleans Road, West Virginia, February 12, 1980" (NTSB-RAR-80-9), and "Head-on Collision Between Baltimore & Ohio Railroad Company Train No. 88 and the Brunswick Helper Near Germantown, Maryland, February 9, 1981" (NTSB-RAR-81-6).

Despite the B&O's stated efforts, it appears that the problem of employees reporting for duty in an unfit condition remains. The railroad should initiate an aggressive supervisory program to insure that employees understand the importance of complying with the alcohol rule, and otherwise to enforce strict compliance with operating rules.

Therefore, the National Transportation Safety Board reiterates Safety Recommendation R-80-40 issued to the Baltimore and Ohio Railroad Company of the Chessie System on September 24, 1980:


Establish supervisory procedures at crew change terminals to insure that all operating department employees coming on duty at any hour of the day are physically fit and capable of complying with all pertinent operating rules. (R-80-40)

Additionally, as a result of the Washington incident, the National Transportation Safety Board recommends that the Baltimore and Ohio Railroad Company:

Increase the level of periodic supervisory road checks on the commuter passenger route between Brunswick, Maryland, and Washington, D.C. (Class II, Priority Action) (R-83-35)

Expand its educational program for operating traincrews to instruct them about the effects of alcohol on performance of duties. (Class II, Priority Action) (R-83-36)

BURNETT, Chairman, GOLDMAN, Vice Chairman, McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations.


By: Jim Burnett
Chairman