

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Log
R-437

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Forwarded to:

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SAFETY RECOMMENDATION(S)

R-83-28 and -29

The National Transportation Safety Board has long been concerned about the role of alcohol and drugs in railroad accidents. Recent railroad accidents involving alcohol/drug abuse have heightened its concern. In 18 cases investigated or under investigation by the Safety Board in which alcohol and drug use was involved, 25 railroad employees were killed, 13 employees were injured, and property damage was reportedly in excess of \$25 million. Of paramount concern to the Safety Board is the protection of the public and railroad employees who are placed in life-threatening situations by railroad employees who may be under the influence of alcohol and/or drugs.

About 5:10 a.m., on September 28, 1982, an Illinois Central Gulf Railroad Company (ICG) freight train, No. Extra 9629 East, derailed near Livingston, Louisiana. Involved in the derailment were 43 cars, of which 14 were tank cars containing various hazardous materials. The hazardous materials included vinyl chloride, methyl chloride, motor fuel "antiknock" compound (tetraethyl lead), hydrofluosilic acid, metallic sodium, styrene monomer, phosphoric acid, and toluene diisocyanate. In the fire following the accident, two of the tank cars violently rocketed, and smoke and toxic gases were released into the atmosphere. As a result of the accident, approximately 3,000 people who lived within 5 miles of the accident site were evacuated for periods as long as 2 weeks. Several homes were burned and destroyed. Property damage and losses have been estimated at \$10 million.

Less than a week later, at 4:40 a.m., on October 3, 1982, a Missouri Pacific Railroad Company (MP) freight train, No. MP Extra 2437 South, collided with the side of train No. MP Extra 2948 North, which was moving through a switch at Glaise Junction near Newport, Arkansas. The engineer and head brakeman of No. MP Extra 2437 South were both killed in the side collision. Property damage was estimated at \$1 million.

During the Safety Board's investigations of these two accidents, the Safety Board found evidence that crewmembers had consumed alcoholic beverages before reporting for duty and/or while on duty. Two crewmembers, the engineer and brakeman of ICG train No. Extra 9629 East, were seen in a drinking establishment and were observed to have consumed alcoholic beverages before and after reporting for work.

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The fatally injured engineer of train No. MP Extra 2437 South had a tested blood alcohol level (BAL) of 0.04 percent and other evidence of alcohol in his system. Although both investigations are still in process, the Safety Board believes that the preliminary findings of alcohol involvement in both accidents are further indications of the need for prompt action by the railroad industry, labor unions, and government to curb alcohol/drug abuse by railroad operating employees.

As a result of its investigation of an accident at Indio, California, 1/ the Safety Board recommended on March 20, 1974, that: "The Federal Railroad Administration [FRA] include in [its] proposed Standards for Rules Governing the Operation of Trains, regulations that will in effect prohibit the use of narcotics and intoxicants by employees for a specified period prior to their reporting for duty and while they are on duty, (Recommendation R-74-9)." As a result of this recommendation, the FRA revised its accident causal codes and added a specific code to obtain data on the alcohol and drug abuse problem. Additionally, the FRA supported the cooperative labor-management Railroad Employees Assistance Programs (REAP), directed at helping the problem drinker. The Safety Board has commended the FRA for these efforts. However, the Safety Board believes that these efforts have only indirectly addressed the primary safety issue -- the need for a strong deterrent to the use of alcohol and drugs by railroad operating employees.

A 1979 report prepared for the FRA 2/ examined the drinking practices of 234,000 railroad workers on seven railroads during 1978. Some of the findings of this study were:

- o There were an estimated 175,000 drinking rule violations in 1978.
- o Twelve percent or 28,000 of the workers in the study drank alcoholic beverages on an average of 3 days while on duty in 1978.
- o Five percent or 11,000 workers were "very drunk" at least once upon reporting for duty or while on duty. Fifteen percent or 35,000 workers were a "little drunk" at least once upon reporting for duty or while on duty.
- o The highest percentage of problem drinkers is found among the operating craft employees. (Twenty-three percent or about 16,000 of the 72,000 operating personnel studied are problem drinkers.)
- o 7,000 of the 234,000 workers reported seeing an alcohol-related train accident.

One of the most significant conclusions of this study states, "There is evidence that employee drinking is an important contributing factor to railway accidents, but the connection between drinking and safety is not being adequately investigated."

1/ National Transportation Safety Board Railroad Accident Report--"Rear-end Collision of Two Southern Pacific Transportation Company Freight Trains, Indio, California, June 25, 1972" (NTSB-RAR-74-1).

2/ T.A. Manello and F.J. Seaman, "Prevalence, Costs and Handling of Drinking Problems on Seven Railroads," December 1979 (DOT-TSC-1375).

Even though the FRA has added a specific accident reporting code to collect data on the alcohol/drug abuse problem, one of the major difficulties in addressing the alcohol/drug abuse problem continues to be inadequate statistics. As stated by the administrator of the FRA on June 24, 1982, "... if you look at the FRA safety reporting code, the document which requires one to indicate whether an accident was drug or alcohol related, you find the most sober industry on the face of the earth."^{3/} The administrator referred to 1975-1981 FRA accident statistics which show that of 63,900 accidents reported, only 11 accidents were reported to have been related to alcohol/drug abuse. During the same period, there were 741 reported fatalities, of which only 3 fatalities were the result of alcohol/drug abuse, according to FRA statistics. The administrator in that same speech acknowledged that "... the records are wrong."

Investigation of accidents is hampered because toxicological tests for alcohol/drug use are not made after serious railroad accidents when the employees responsible for the operation of the train are not fatally injured. Only when crewmembers are killed are such tests generally performed. For example, in the Glaise Junction accident near Newport, Arkansas, which involved fatalities among the crewmembers, toxicological tests were immediately taken, and the facts were clearly documented. However, in the Livingston, Louisiana, accident, toxicological tests were not taken since there was no fatality. The Safety Board believes that railroad safety would be greatly improved if employees knew that toxicological tests would be taken of the surviving employees as well as of those fatally injured in the event of a railroad accident that is required to be reported to the FRA or the Safety Board involving: (1) a fatality, (2) a passenger train, (3) a significant release of hazardous materials, (4) an injury, or (5) substantial property damage.

Currently, there are no Federal or uniform State requirements for toxicological tests in the event of a railroad accident. Several States do have statutory or regulatory requirements for toxicological tests in the event of an industrial and/or motor vehicle accident in which there is a fatality. Some States require such tests as a matter of policy established by their State medical examiner's office. The FRA does not require any toxicological tests for alcohol or drugs in the event of an accident involving an injury or a fatality. In contrast, the Federal Aviation Administration (FAA), a sister organization of the FRA in the Department of Transportation, obtains toxicological results in approximately 85 percent of the aviation accidents involving fatalities. As a matter of fact, the FAA has its own toxicological laboratory and has developed a toxicological kit which includes instructions and shipping procedures. Further, as a matter of practice, the FAA requires toxicological tests of every occupant fatality of a general aviation airplane crash and a full autopsy on each person seated at the aircraft's controls. This practice has allowed the FAA to develop a fairly complete picture of the alcohol/drug problem in the aviation industry.

In 14 CFR 91.11, the FAA specifically prohibits the use of alcohol and drugs as follows:

- (a) No person may act as a crewmember of a civil aircraft —
 - (1) within 8 hours after the consumption of any alcohol beverage;
 - (2) while under the influence of alcohol; or
 - (3) while using any drug that affects his faculties in any way contrary to safety.

^{3/} Honorable Robert W. Blanchette, Administrator, Federal Railroad Administration, Remarks before the 1982 Conference on Innovative Approaches for Dealing with Alcohol and Drug Abuse Problems in the Railroad, June 24, 1982, New Orleans, Louisiana.

The Safety Board believes that the Association of American Railroads (AAR) and the Railway Labor Executives Association (RLEA) should assist the FRA in the development of requirements for the use of toxicological tests after railroad accidents. Railroad operating employees involved in an accident involving any death or injury, and/or the significant release of hazardous materials and evacuation of the public should be required to undergo toxicological tests to ascertain whether or not alcohol and/or drugs were used. Additionally, the AAR should play a lead role in ensuring that its membership correctly reports all alcohol/drug related accidents/incidents to the FRA.

Therefore, the National Transportation Safety Board recommends that the Association of American Railroads:

In conjunction with the Railway Labor Executives Association, assist the Federal Railroad Administration in developing a requirement that timely toxicological tests are performed on all operating employees involved in a railroad accident which involves a fatality, a passenger train, releases of hazardous materials, an injury, or substantial property damage. (Class II, Priority Action) (R-83-28)

In conjunction with the Railway Labor Executives Association, assist the Federal Railroad Administration in developing regulations and procedures to require that alcohol/drug involvement related accidents/incidents be fully reported to the FRA so that a data base can be developed for devising and implementing effective safety countermeasures to eliminate or minimize accidents involving alcohol/drug abuse. (Class II, Priority Action) (R-83-29)

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


By: Jim Burnett
Chairman