

R-80-5

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: March 5, 1980

Forwarded to:

Mr. S.M. Reed
President and Chief Operating Officer
Consolidated Rail Corporation
6 Penn Center Plaza
Philadelphia, Pennsylvania 19104

SAFETY RECOMMENDATION(S)

R-80-5

About 5:16 a.m., on October 1, 1979, ConRail freight train ALPG-2 collided with the rear end of ConRail freight train APJ-2 on the No. 2 main track near Royersford, Pennsylvania. The engineer and conductor of ALPG-2 were killed. Property damage was estimated at \$562,000. ^{1/}

The investigation disclosed that ALPG-2 left Colebrookdale Junction Yard at Pottstown, 10.6 miles west of the accident location, at 4:55 a.m. When the collision occurred, ALPG-2 was running in full throttle at about 45 mph, and no braking action had been initiated. Witness testimony revealed that ALPG-2 failed, successively, to (1) respond to an "approach" aspect displayed by signal 131-B, 1.9 miles from the collision point; (2) whistle as required for two grade crossings; (3) respond to a "stop and proceed" aspect displayed by signal 133, 3,600 feet from the collision point; and (4) respond to flagging protection provided by the rear brakeman of APJ-2. Postaccident simulation of the run of ALPG-2 indicated that the train was operated continuously in full throttle and traveled at the maximum attainable speed from Colebrookdale Junction to the accident location.

At the time of the accident, the crew of ALPG-2 had been on duty 4 hours 16 minutes, before which it had ample off-duty time for proper bed rest. However, the Safety Board investigation revealed that the engineer may have been too tired to operate the locomotive. The conductor was the only crewmember known to have operated the locomotive, although he was not qualified to do so, and

^{1/} For more detailed information about this accident, read "Railroad Accident Report - Rear-End Collision of Consolidated Rail Corporation Freight Trains, Near Royersford, Pennsylvania, October 1, 1979." (NTSB-RAR-80-2)

he may have been operating it after ALPG-2 left Colebrookdale Junction. Although the rules required the head brakeman to ride in the locomotive unit and there was no operational consideration which required otherwise, the conductor insisted that the head brakeman ride in the caboose.

While en route to the reporting point at Bethlehem, the conductor suggested to the engineer that they "get high." Postmortem screening for psychoactive agents revealed significant concentrations of the hallucinogen delta-9-THC in the conductor's blood and urine. According to the toxicologist who performed the tests, it is reasonable to assume that the conductor had smoked a marijuana cigarette while ALPG-2 was en route and that, as a result, his behavior was so modified that he was unable to react to danger warnings.

On their previous trip, also at night, the crew of ALPG-2 passed a stop signal at Burn Tower. It was necessary for the engineer to apply the brakes in emergency and the crew later noticed flat spots on the wheels of the locomotive units and caboose. Neither the incident nor the damage to the equipment were reported and division supervisors were ignorant of that incident.

There was no supervisor on duty at night where the crewmembers of ALPG-2 reported for duty. Surviving crewmember of the trains could not remember seeing a supervisor at the location at night. Similarly, it does not appear that ConRail supervisors ride with train crews or board trains en route with any regularity. The Safety Board believes that crewmembers will not be concerned about their fitness for duty if there is little probability that they will encounter a supervisor where they report for work or on the job. No matter how familiar they may be with the rules and instructions, crewmembers cannot be depended upon to unflinchingly perform as required if there is a little likelihood that supervisors are monitoring their performance.

Therefore, the National Transportation Safety Board recommends that the Consolidated Rail Corporation:

Provide adequate supervision of night train operations and include in supervisory efficiency checks, periodic checks of train crewmembers' fitness for duty at reporting points and on trains en route. (Class II, Priority Action)
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KING, Chairman, DRIVER, Vice Chairman, McADAMS and BURSLEY, Members, concurred in this recommendation. GOLDMAN, Member, did not participate.

By: 
Chairman