

R-284

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 23, 1980

Forwarded to:

Mr. W. J. Taylor
President
Illinois Central Gulf Railroad Co.
233 North Michigan Avenue
Chicago, Illinois 60601

SAFETY RECOMMENDATION(S)

R-80-22

On October 3, 1979, while performing switching duties at a GAF Industries plant at Mobile, Alabama, an Illinois Central Gulf (ICG) railroad switchman was killed and the yard foreman was injured seriously. The National Transportation Safety Board's investigation revealed that the foreman and switchman were attempting to couple four cars held by a locomotive to three cars that were standing on a track in the plant. The movements were being controlled by voice communication on radio between a switchman on the ground and the engineer in the locomotive. After two unsuccessful attempts to couple the cars, the switchman radioed the locomotive engineer to stop and said that he and the foreman were going between the cars to adjust the couplers so that they could complete the coupling.

While the switchman and foreman were adjusting the couplers, the other switchman, who was standing near the locomotive, made a hand movement that the engineer perceived as a hand signal to back up. The engineer backed the locomotive and four cars and unknowingly caught the switchman and foreman between the couplers. Then the engineer moved the locomotive and four cars forward and when he found that the coupling was not made, he waited for another signal from the switchman near the locomotive. In a few seconds, the switchman made another hand movement that the engineer interpreted and acted upon as a signal to back up. As the engineer backed up again to attempt the couple, the foreman was trying to pull the switchman away from the couplers. The couplers met and struck the switchman again. The engineer said that he was not aware that the switchman and foreman were still between the cars during these movements although he had understood the switchman's radio request to stop so that they could go between the cars to adjust the couplers. Neither the engineer nor the switchman had seen or communicated with them after they went between the cars to adjust the couplers.

The Safety Board's investigation shows that a gap exists between those ICG operating rules that govern the use of hand signals and those which govern the use of radio signals. ICG crews apparently use both hand signals and radio signals during switching operations without a clear procedure to insure that all crewmembers have the same understanding regarding which signal will prevail in a given situation.

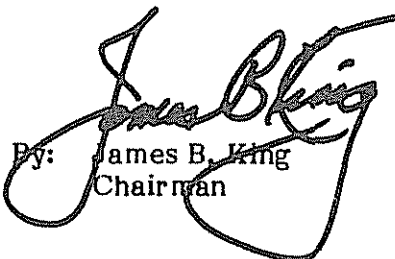
In this case, the engineer had been working with the ground crew for several years and was fully aware of their practices and abilities. The crew regularly used a mixture of hand and radio signals. The switchman near the locomotive, who was talking to another person, was not aware that the engineer was watching him for a signal. Gestures he made with his hands in the course of his conversation were interpreted and acted upon by the engineer as a signal to back up.

Potential hazards exist when hand and radio signals are combined. If there had been a procedure, understood and followed by all crewmembers, which assured that all crewmembers understood when a change was made from radio to hand signals, this accident could have been prevented.

Therefore, the National Transportation Safety Board recommends that the Illinois Central Gulf Railroad Company:

Establish and implement procedures, covered by appropriate operating rules, which will prevent the use of a mixture of hand and radio signals in train movements and will insure that all crewmembers involved understand when the signal mode is changed. (Class II, Priority Action) (R-80-22)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, and BURSLEY, Members, concurred in this recommendation.


By: James B. King
Chairman