Log R-420A

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: September 15, 1982

Forwarded to:

Honorable Robert Blanchette
Administrator
Federal Railroad Administration
400 Seventh Street, S. W.
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

R-82-101 and -102

About 9:30 a.m. on December 28, 1981, Louisville and Nashville Railroad Company (L&N) northbound train No. 586 struck the rear of standing L&N train Extra 8072 North at New Johnsonville, Tennessee. Extra 8072 North had stopped on the main track just south of New Johnsonville on instructions from the train dispatcher at Bruceton, Tennessee. The locomotive had been detached, and the train's head-end crew had moved the locomotive into New Johnsonville to pick up three freight cars. Train No. 586 passed two consecutive wayside automatic block signals displaying an approach aspect (yellow) and a restricted proceed aspect (red), respectively, before it struck the rear of Extra 8072 North. The caboose and six cars of Extra 8072 North and five locomotive units and one car of No. 586 were derailed. The conductor of Extra 8072 North was killed, and the engineer and head brakeman of No. 586 were slightly injured. Damage was estimated at $998,313. 1/

When the locomotive of Extra 8072 North was stopped, the caboose was standing 2,585 feet north of automatic block signal No. 75.6, which should have displayed a restricted proceed (red) aspect because Extra 8072 North was stopped in the block. L&N operating rules, which are in conformance with Federal regulations, did not require the crew of Extra 8072 North to use flags, fusees, or rail torpedoes to mark and protect the rear of the standing train in automatic signal territory. The head-end crew said that they did not hear any radio broadcasts from northbound L&N train No. 586 which they knew would be following them on the single main track.

The Safety Board believes that since it is a common practice for a northbound train to stop in the accident area and for it to stand there for varying periods of time, precautions should be taken to protect the rear of the train beyond the protection afforded by the automatic wayside signals. Even though flag protection is not required, it would seem that it would be prudent to require the rear-end crew to either drop fusees at appropriate intervals or affix warning torpedoes to a rail. In this case, lighted fusees may not have been noticed by the head-end crew of No. 586; however, the explosion of torpedoes, if they had been placed on the rail, may have alerted the inattentive engineer and would have afforded him an opportunity to use emergency braking before the collision. In addition, the explosion of torpedoes could alert occupants of a caboose to the

1/ For more detailed information read Railroad Accident Report--"Rear-End Collision of Louisville and Nashville Railroad Company Trains No. 586 and Extra 8072 North, New Johnsonville, Tennessee, December 28, 1981" (NTSB-RAR-82-4).

proximity of an approaching train and give them sufficient time to leave the caboose, to evaluate the situation, and to leave the area if necessary. Additionally, an engineer could be required to blow the locomotive whistle pericdically or radio broadcast a "to whom it may concern" message or both after the locomotive of a train has passed an automatic signal displaying a stop and proceed or a restricting proceed aspect. If the enginecrew is alert, such a procedure would call the attention of a person on a standing caboose, if a standing train is the cause of the restrictive signal, to the approaching train and provide one more safety advantage.

The Safety Board has issued reports in the past in which the issue of flagging was discussed, and recommendations have been made concerning flagging protection. In general, the response from the railroad industry to suggestions to provide flag protection or some other procedure to complement protection afforded by automatic signals has not been supportive. The viewpoint seems to be that if employees would obey the rules, the accidents would not happen. The Safety Board recognizes that this viewpoint has some merit, but the fact is that the employees are not obeying the rules and accidents are happening. The Safety Board continues to believe that some complementary flagging action is needed, in addition to better training and monitoring of employees, for the protection of crewmembers of standing trains that will provide safety backup when operating rules are violated.

Therefore, the National Transportation Safety Board recommends that the Federal Railroad Administration:

> Provide complementary flag protection in signal territory when a train stops, such as affixing a torpedo to the rail and placing a fusee if appropriate. (Class II, Priority Action) (R-82-101)
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> In addition to the requirement of current operating rules, require engineers to blow the locomotive whistle periodically and broadcast a one-time unaddressed and undirected radio message when the locomotive of a train has passed a restricted proceed or stop and proceed signal aspect until the cause of the restrictive signal is determined. (Class II, Priority Action) (R-82-102)

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

By: Jim Burnett
Chairman