

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: July 5, 1979

Forwarded to:

Mr. J. C. Kenefick
President
Union Pacific Railroad
1416 Dodge Street
Omaha, Nebraska 68179

SAFETY RECOMMENDATION(S)

R-79-41

On March 29, 1979, westbound Union Pacific freight train Extra 3449 West struck the rear of westbound train Extra 3055 West as it was moving from a main track into a siding at Ramsey, Wyoming. Two train crewmembers were killed. Property damage was estimated to be \$1,121,000.

The Safety Board's continuing investigation of this accident has revealed that the main track involved was protected by wayside signals of a traffic control system with signal indications repeated by cab signals in the cab of the lead unit of Extra 3449 West. Beginning at a point about 8.3 miles from the accident location, Extra 3449 West passed three wayside signals that should have displayed progressively more restrictive indications, all of which would have been repeated by the cab signals. Failure of the engineer to acknowledge these more restrictive cab signal indications would have resulted in the continuous sounding of a whistle in the cab until the engineer acknowledged the signal by operating a lever. However, the whistle in the cab of Extra 3449 West had been muted by a rag tied around the orifice. This was effective enough to preclude hearing the whistle above the sound of the locomotive unit's engine working at full power. The cab signal apparatus on this and other Union Pacific locomotives is not designed to fail safe by automatically applying the brakes if the engineer fails to acknowledge as required.

The last signal passed by Extra 3449 West was located 6,300 feet east of the point of impact. This signal should have been displaying a red-over-red "stop and proceed" indication which could be seen more than a half mile away. The caboose of Extra 3055 West had a lighted red marker light facing to the rear. This marker light should have been visible well in excess of 2,000 feet to the rear. Nevertheless, the collision occurred before the brakes were applied on the train.

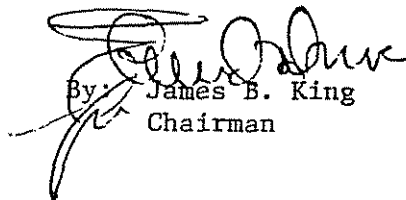
The Safety Board believes that if the cab signal apparatus had been so equipped to automatically apply the brakes if the engineer failed to acknowledge the more restrictive signal, Extra 3449 West would have been stopped after passing the first restrictive signal 8.3 miles from the accident location, and the accident would not have occurred.

Therefore, the National Transportation Safety Board recommends that the Union Pacific Railroad:

Modify its locomotive cab signal apparatus to provide for an automatic penalty application of the automatic airbrake system whenever the engineer fails to acknowledge a more restrictive signal indication within the specified time.

(Class II, Priority Action) (R-79-41)

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


By: James B. King
Chairman