R->3-19-21

Extra 2043 East resulted from the fire which followed the collision.

- 17. Radio communication by means of which the train order could have been transmitted to the crew of Extra 1577 West was available.
- 18. The relief crew on Extra 1577 West was permitted to take over the operation of a train at an intermediate point and to proceed without notifying the train dispatcher.

V. PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of this accident was the failure of the responsible employees to deliver to the crew of Extra 1577 West at Yates City, Ill., a restricting train order which established a meet between Extra 1577 West and Extra 2043 East at Yates City. Two factors contributed to this failure.

Extra 1577 West did not stop at the Ya. City station to obtain a copy of the train order, in disregard of the stop aspect displayed by the westbound train-order signal of the station. The reason the engineer failed to stop his train could not be determined. The Board, however, considers that because of the effects of alcohol and a misleading phantom clear aspect of the westbound train-order signal, the engineer may have failed to interpret the signal correctly.

Second, the employees involved with the transmission and handling of the restricting train order did not comply with the requirements of the operating rules to take special precautions for the safety of Extra 1577 West, the train which was being restricted by the order.

VI RECOMMENDATIONS

The National Transportation Safety Board recommends that:

1. The Burlington Northern change the design of their train-order signals so that there is no possibility that a phantom aspect will be displayed.⁴ (Recommendation No. R-73-19)

- 2. The Burlington Northern review its operating rules and its interpretation of these rules to assure that train movements are adequately protected. The management and employees of Burlington Northern should take any action necessary to insure that the operating rules are complied with (Recommendation No. R-73-20).
- 3. The Burlington Northern adopt a system of safety analysis of their operating rules and practices to disclose conditions of inadequate protection of train operations. (Recommendation No. R-73-21)

The Safety Board reiterates and emphasizes a recommendation made in the Board's report on the collision of two Penn Central freight trains at Herndon, Pa., on March 12, 1972. The Board recommended that:

"The Federal Railroad Administration, in the promulgation of regulations covering the use of radio, require that where radio is part of an operating system, it be maintained in effective condition unless all personnel involved are notified by appropriate railroad procedure such as a train order or general order." BY TH

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⁴The train-order signal at Yates City has already been corrected

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JOHN H. REED /s/

Chairman

FRANCIS H. McADAMS /s/ Member

LOUIS M. THAYER Member

ISABEL A. BURGESS Member

WILLIAM R. HALEY Member

April 11, 1973