

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 31, 1981

Forwarded to:

Mr. W. L. Smith
President and Chief Executive Officer
Chicago, Milwaukee, St. Paul and
Pacific Railroad Company
P.O. Box 781
Milwaukee, Wisconsin 53201

SAFETY RECOMMENDATION(S)

R-81-84 and -85

During the past 5 years, the National Transportation Safety Board has investigated nine accidents in which hot box detectors have identified an overheated journal bearing in a train, but appropriate or correct action was not taken to prevent the subsequent derailment of the trains. These accidents resulted in one injury to an employee and an estimated total of \$4,800,000 in property damage. Although the injury/fatality rate for these particular accidents was low, the accidents were preventable, and the Safety Board believes that the potential for serious or even catastrophic derailments is significant. 1/

One of the accidents occurred on the trackage of the Chicago, Milwaukee, St. Paul and Pacific Railroad Company at Franksville, Wisconsin, on March 15, 1979. The hot box detector identified an overheated journal bearing on a car in the train. However, the information forwarded to the traincrew identified the wrong side of the train on which the overheated bearing was located. The traincrew inspected the wrong side of the train and found no overheated bearing; the train therefore proceeded. The journal bearing subsequently failed, causing the derailment. There were no personal injuries as a result of the accident, but the estimated cost of the property damage was \$190,000.

This accident occurred because of improper handling of the hot box detector data due to the absence of a clearly defined procedure for locating overheated journal bearings. Therefore, the National Transportation Safety Board recommends that the Chicago, Milwaukee, St. Paul and Pacific Railroad Company:

Review and evaluate training and procedures for handling hot box detector data to ensure that correct action is taken to accurately determine the location of the bearing in the train and that the train is properly inspected when an overheated journal bearing is identified. (Class II, Priority Action) (R-81-84)

1/ For more detailed information, read Special Investigation Report--"Recent Accident History of Hot Box Detector Data Management" (NTSB-SIR-81-1).