



HOTBOX DETECTORS ARE LOCATED in approaches to N&W yards to inspect journals of coal trains. Car inspectors check only above-normal journals.

N&W Hotbox Detection Pays Off

For the first six months of 1959, the Norfolk & Western operated 1,250,909 car-miles per hotbox compared with a national average of slightly over 200,000.

Credit for this record goes to a vigorous program of journal box servicing and the use of hotbox detectors. Also of importance is the fact that N&W has 55,185, or 89.3%, of its revenue freight cars equipped with journal pads. In addition, the major portion of train consists is of N&W ownership, so that servicing can be closely controlled.

While most railroads are installing hotbox detectors in areas of high hotbox incidences, the N&W has concentrated on installing detectors at approaches to yards. In these areas, motive power supervisory employees check the pen graph recording tapes on incoming trains. Only those cars that are detected to have above normal journal temperatures are inspected by yard forces. This reduces delays to cars in yards, as well as operating expenses.

The N&W has three detectors in service, plans to install three more at entrances to yards, and operates another on a test basis. The three detectors now in service were made by Servo Corp. of America.

One detector installation is on the eastbound track near the entrance to Roanoke, Va., yard and checks coal trains as they enter the yard. The recorder is in the car inspector's office in the receiving yard, about three miles from the detector location. Cars are shopped for complete servicing if the detector indicates journals running at temperatures appreciably above normal.

A second hotbox detector checks

eastbound trains just before they enter the Crewe, Va., yard. Those cars with above normal journals are examined and moved to shop tracks for further attention.

The third hotbox detector is located on a belt line at Poe, Va. (Petersburg). The detector is about four miles from the recorder, which is in the yardmaster's office.

N&W plans to install three more hotbox detectors at entrances to yards to check inbound trains. A detector will check trains as they enter the west yard at Bluefield, W. Va., the east yard at Portsmouth, Ohio, and the east yard at Williamson, W. Va. At these installations, the recorders will be in car inspectors' offices.

The N&W has a General Electric Co. hotbox detector on test at the entrance to Roanoke yard. The detector checks eastbound trains entering the yard. The pen graph recorder is in the car inspector's office about three miles distant. The detector signals are sent via FM carrier over existing line wires.