Centralized Traffic Control and Remote-Control

In its instructions to the railroads for collecting annual statistics as to signaling facilities in service, the Bureau of Safety, I.C.C., incorporated the following definitions for centralized traffic control and remote control.

Centralized Traffic Control—A term applied to a system of railroad operation by means of which the movement of trains over routes and through blocks on a designated section of track or tracks is directed by signals controlled from a designated point without requiring the use of train orders and without superiority of trains.

Remote Control—A term applied to a system of operating outlying signal appliances from a designated point to facilitate the operation of trains over a designated section of track or tracks by means of signal indication, time table and train orders.

In view of the wide diversity of opinion regarding proper definition for these two systems of signaling, some roads may be confused as to how to classify certain installations. As an aid, representatives of the Bureau of Safety, in a recent conference, offered some very definite suggestions which, in brief, follow:

In determining whether a given installation should be classed as C.T.C., there are two principal factors to consider: First, whether superiority of trains is dispensed with and, secondly, whether train orders are required to authorize or direct train movements in this territory. A train may carry orders through the territory in question and also covering additional adjacent mileage, but if such orders are not required for the movement in this C.T.C. territory, the fact that such orders are issued does not preclude the classification of the installation as centralized traffic control.

Some thought must also be given to the new definition of remote control. Previously, in requesting remote control data, the Bureau of Safety specified functions operated from separate banks of levers; or, if controlled from interlocking machines, outlying functions were not to be classed as remote control if there was any form of locking with other functions of the interlocking plant. Under the new definition, the distinction between remote control and interlocking lies in the operating rules. If the outlying installation is outside the limits of the interlocking from which it is controlled, it is properly classed as remote control.

Definitions for these terms have been under consideration by the Signal Section, A.R.A., for several years. These definitions as now issued by the Bureau of Safety have been considered by Committee V of the Signal Section, and will, no doubt, be presented for consideration at the next convention. In the meantime the use of the definitions by the railroads in classifying installations for Bureau of Safety statistics will provide a good test of their clarity and, no doubt, bring up certain points that may well be discussed before the Signal Section convention next May.

Call-On Signals

A REAR-END collision occurred on the Erie at Binghamton, N. Y., on September 5, and a close study of the Bureau of Safety’s report of this accident reveals that there were a number of contributing factors, such as short flagging, the failure of the engineman properly to control speed when operating under a calling-on signal indication, and the fact that the engineman, when he saw an automatic signal ahead standing at danger, jumped to the conclusion that he would not be required to stop until he arrived at that signal, whereas a train was standing in the intervening space. The use of the call-on signal was one of a train of circumstances which set the stage for the condition leading to the collision, and in seeking to benefit from a study of this accident the problem of call-on signals is once more brought to the front.

In the Bureau of Safety’s report of the Binghamton accident, the statement is made that “the calling-on signal was installed for the particular purpose for which it was used on this occasion . . . . and the present case constitutes no exception to the usual practice throughout the country.”

It is to be inferred from the report that the leverman, in using the call-on signal, did not violate the rules or depart from the usual practice on the Erie, and incidentally it is understood that these rules conform with the Standard Code. However, the accident did happen, and assuming that the call-on signal was a contributing factor, it seems that a few deductions are in order.

Granting that the leverman did not violate the rules of the Erie, nevertheless it is questioned whether the statement that this represents the “usual practice throughout the country” is entirely warranted. A number of roads have placed greater restrictions around the use of the calling-on signal than were in effect on the Erie and than are provided for by the Standard Code. It may be argued (by some authorities) that the primary function of a call-on signal is to make a movement within interlocking limits to get a train out of the way when some other train within interlocking limits prevents the operation of the track-circuit-controlled home signal. It was brought out in the hearing that there were no other impending train movements on the cross lines or within the interlocking. Therefore, it is to be assumed that the leverman had no incentive to use the call-on signal other than for the purpose of preventing a train stop. This leads to the thought that the call-on was in this case used not only to direct the train through the interlocking limi-