

Editorial Comment

Train Signs or Indicators

INASMUCH as the Standard Code of Operating Rules of the American Railway Association does not permit a train to make a move on the authority of information conveyed by a switch indicator, without providing flagging protection, it has been agreed among the operating and signal officers of the majority of roads that the benefits to be derived by the installation of switch indicators at all switches in automatic signal territory are not justified.

Although this conclusion may be correct, as a general rule, there are certain places where some means of indicating the approach of trains will serve to save time and prevent train stops and delays. For example, at points where considerable switching must be done on the main line, an arrangement that will inform the switching crew of the exact time that an approaching train enters a certain block, will give them time to get in the clear to prevent stopping the through train, and at the same time will permit the switching to continue as long as practicable. At several places on its lines, the Atchison, Topeka & Santa Fe has met the requirements under such conditions by using a so-called "Train" sign. On this board the word "Train" is shown in letters one foot high, the board being turned face down normally, and held in this position by a top-post signal mechanism. When a train approaches, the device is released, permitting a weight to pull the sign down so as to be read, and at the same time an electric light illuminates the board. One of the train signs serves the purpose of several switch indicators in the vicinity of stations or yards. The Nashville, Chattanooga & St. Louis has secured the same result at certain junctions and other points where considerable switching is done, by using so called "pilot lights" consisting of two small light signal units, one showing yellow normally, and the other red when a through train is approaching.

These train signs, pilot lights, or whatever the local name may be, are in reality forms of switch indicators which are serving a very useful purpose. Although the use of switch indicators as a general rule may not be considered to be justified, it would seem that special applications of the idea at certain points will save time for switching crews and prevent stops for through trains.

Why Marker Lights for Automatic Signals?

IN THE earlier installations of automatic block signals using semaphore signals and oil lamps, marker lights were considered a necessary protection against a signal lamp becoming extinguished. These marker lights also served an additional purpose in distinguishing between permissive and absolute signals when the marker was placed on the side of the pole opposite that of the signal lamp for a permissive signal and mounted directly below the signal lamp for an absolute signal. Although the use of these marker lights has required considerable additional expense for their installation, maintenance and operation, many roads have continued their use as standard practice because they desire to leave no chance for an engineman to mistake an absolute signal for a permissive one.

On the other hand, several roads contend that the use of a square end blade for an absolute signal and a pointed end blade for a permissive signal, provides sufficient distinction between the two signals for both day and night with modern locomotive headlights. Some roads accentuate this distinction by the absence of a number plate on an absolute signal, thereby placing it in the same class with an interlocking signal. It is pointed out that the enginemen are sufficiently familiar with the road to know where the signals are, so that a rule covering the location of the absolute signals, together with the distinctive differences in appearance, results in satisfactory signal observance. The St. Louis-San Francisco, the Southern, and the Missouri-Kansas-Texas, for example, use no marker lights for single-track automatic semaphore signals.

With light signals, the problem of marker lights involves another consideration, in that there is no distinction between the signals comparable to the square and pointed blades used for the semaphores. The Seaboard Air Line and the Nashville, Chattanooga & St. Louis, which have both installed extensive mileages of color-light signals in the last few years, have, therefore, used marker lights on both the intermediate and head-block signals. On the other hand the Chicago, Milwaukee, St. Paul & Pacific installed marker lights on one of its earlier extensive installations of color-light signals on single track, but after several years discontinued their use as unnecessary.

The Great Northern, which has installed several hundred miles of color-light signals in the last few years, uses a marker light surrounded by a red disc, on head-block signals to distinguish them from intermediate signals, which have no marker. The Southern followed the same practice on an extensive mileage of color-light signals installed last year. The Texas & Pacific has gone somewhat further on its new color-light signaling, in that no markers are used, other than the omission of the number plate on the head-block signals. This question of marker lights is one of several confronting the signaling field in its modernization and simplification of equipment.

Getting What You Specify

THE signal officers who are responsible for the safety of train movements, as well as for the reliability and economy of operation of the equipment of which they are in charge, should in all cases have the right to specify the materials they use. This is not now the case, for some purchasing agents are prone to demand that the using department submit a large list of alternates for the kinds of equipment needed. The materials are then purchased too largely on a price basis without adequate regard to the service requirements. In case of a failure in service, the signal officer has no defense, because he did not fight for what he knew would be best.

A few years ago a large road decided to change the color of the signal aspects to "green for clear," "yellow for caution" and "red for stop" rather than "white for clear," "green for caution" and "red for stop." This change required a large number of new yellow roundels which were ordered by the signal department with the stipulation that the roundels should meet the specifications of the Signal Section, A. R. A. The purchasing