

The Erie Installs

Either-Direction Signaling

on Seven Miles of Double Track

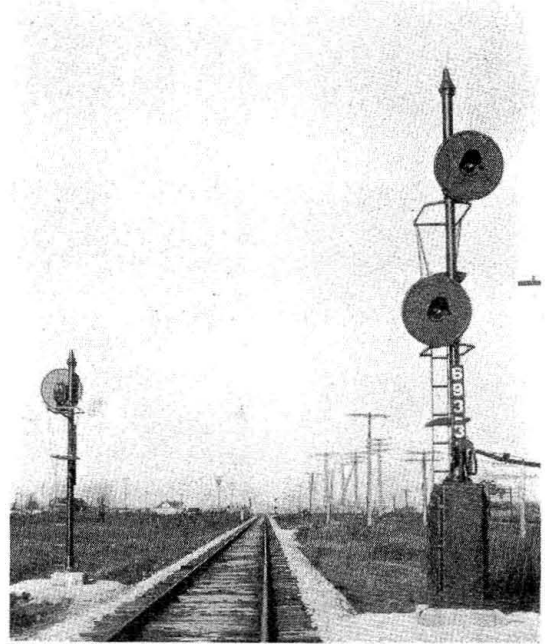
Traffic direction locking, improvements in interlockings and crossing signals at 10 highways included

AUTOMATIC block signaling arranged for either-direction operation on each of two tracks has recently been installed on seven miles of line between HY tower, Hammond, Ind., and Griffith. Between these points the Erie and the Chesapeake & Ohio have each a single-track line, the latter being south of and 80 ft. on centers from the Erie line. At the east end of this territory, Griffith, the C. & O. crosses the Erie, the switches, derails and signals being controlled by an electric interlocking which also includes protection for crossings with the Elgin, Joliet & Eastern, the Grand Trunk, and the Michigan Central. At HY Hammond yard, the west end of this territory, a mechanical interlocking had been in service for years, to operate the junction with the C. & O. track, as well as crossovers and switches leading to a large yard of the Erie lying to the north of the main line west of this tower.

For many years the Erie and the C. & O. have used these sections of single-track jointly, right-hand running being used, thus providing a double-track line between these points. As no signal protection was provided, train movements were made by manual block and train orders according to regular double-track operating practice.

In this territory at the present time, the Erie operates 6 passenger trains and about 13 freight trains daily in each direction, and the C. & O. operates 2 passenger trains and 10 freight trains each way—a total of approximately 62 train movements daily. In normal times the traffic is much heavier. Even at the present low level of traffic, it was quite a problem to get these trains over the joint track without delays.

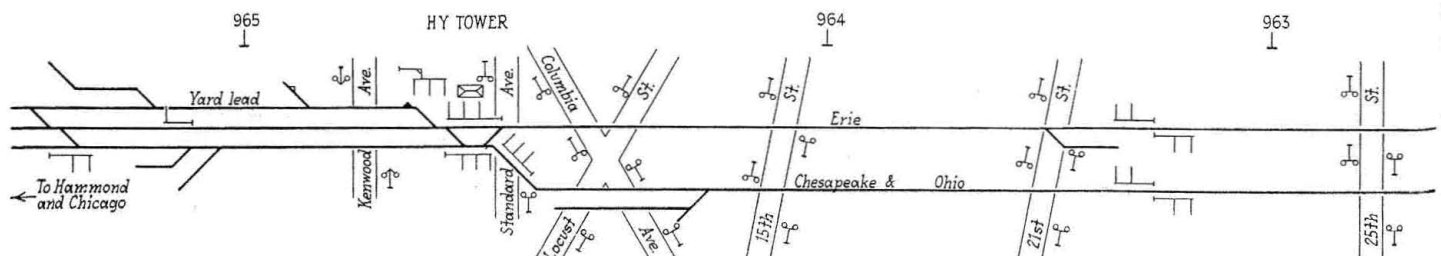
The most obvious plan for increasing track capacity was to run trains in either direction on both tracks, under a manual-block and train-order system. This method was tried to some extent, but, for several reasons, was not successful. In the first place, delays were occasioned by the handling of train-orders. Furthermore, no following moves could be made if a passenger train was in-



Searchlight signals are used

involved. As a third reason, the operation of freight trains through a No. 10 yard turnout and through two No. 10 crossovers in the HY layout was so hampered by speed restrictions that the consequent delays offset the time savings that were effected elsewhere, and thus the purpose of this method was defeated.

It was therefore decided that three things would have to be done to expedite train movements between HY and Griffith interlockings: First, to install regular single-track automatic block signaling on each track so as to increase the track capacity. Second, to provide signals and traffic direction locking for the operation of trains in either direction on either track without train orders. Third, to install No. 15 turnouts in the HY plant, so as to permit the prevalence of faster train speeds through the plant. A fourth consideration of major importance was the fact that the city of Hammond had ordered the Erie and the C. & O. to provide either gates or flashing-light signals at several street crossings. The installation of these signals involved the construction of about five



Track and signal plan of the

