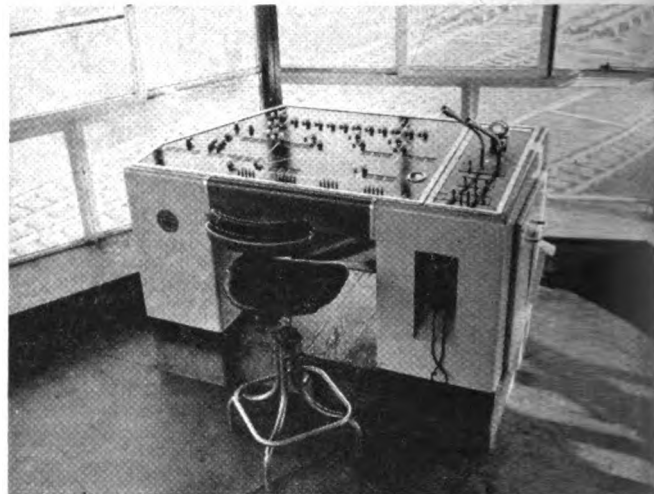


This British yard uses two primary retarders.



Panel controls one primary and four group retarders.

British Install Automatic Yard Near London

Courtesy of the British Information Services, New York.

● To speed the flow of Britain's dock trade, the British Railways have completed a \$7 million marshalling yard at Temple Mills in East London. Car movements through the yard are controlled by radar, electric computers, radio-telephones, electro-pneumatic retarders, and pushbutton routing. Virtually the only human touch left is the chalking of the destination mark by hand on each shunted truck and the actual setting of the route for each wagon.

The former marshalling yard grew up haphazardly and eventually included 10 yards at Temple Mills. The new yard was constructed in the heart of the old one, which continued to deal with 80% of its normal traffic during the construction period. There are 49 double ended sorting sidings arranged in eight groups, two of which have an outlet towards the

hump end of the yard. This reversing hump beyond the crown makes it possible for two humping engines to go to work with a minimum of delay.

Besides the hump is a cabin with a control desk carrying a diagrammatical representation of the track layout. The operator in the cabin sets the routes into the classification sidings and relays necessary information by teleprinter to the control tower. The 35-ft control tower has two control desks, each of which looks down on one of the 75-ft primary retarders and its four associated 49-ft secondary retarders.

Automatic Retarder Control

The pressure to be applied by the primary retarders is calculated electronically during the run down from the hump's summit. The weight of the car is assessed by an automatic weighing device installed in the permanent way, and the speed is measured by radar equipment. The computer in the control tower makes the neces-

sary calculations, whereupon the braking pressure is applied automatically. Maximum pressure is 120 psi and braking pressure is applied while the cars are passing through the retarders. For final speed correction the hand-operated secondary retarders can give such pressure as the operator finds necessary.

The signal system embodies the entrance-exit principle and electro-pneumatic switches. All signal boxes and offices have an automatic telephone. A two-way radio provides communication between the shunting engines, the hump cabin, and control tower. Operators in the control tower can speak to shunters and other staff through a loudspeaker system. Color corrected mercury vapor lamps provide night lighting.

The yard has a capacity of 4,500 cars a day. Presently, about 125 trains are passing through it daily. The staff of the yard has decreased from 235 to 142. Annual savings in operational costs is estimated to be \$700,000.