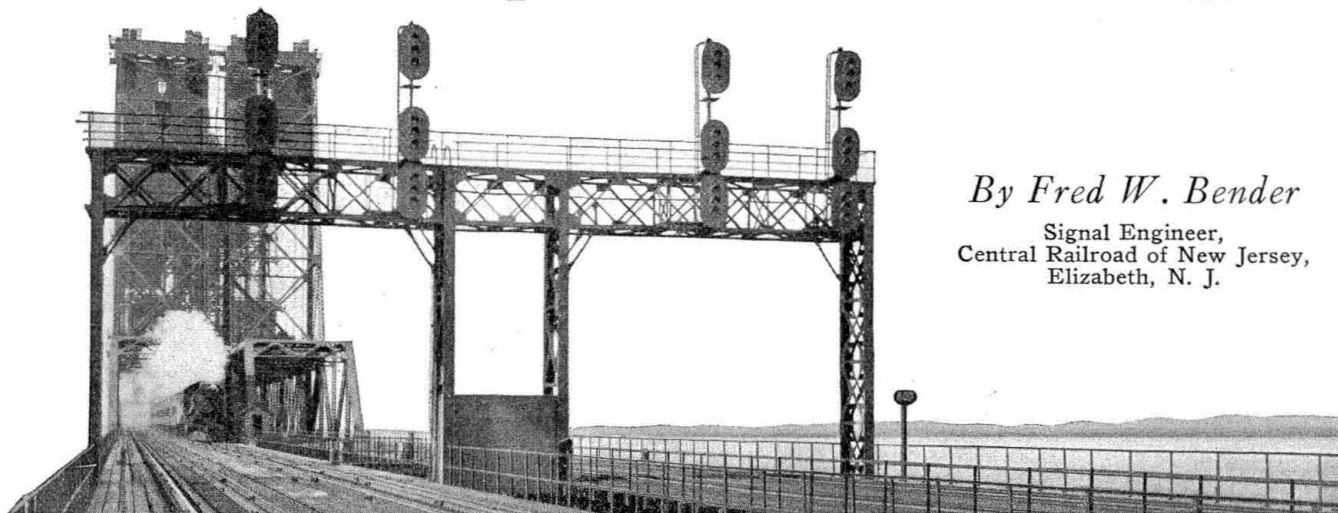


C. N. J. Completes Interlocking to



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Home signal bridge in foreground with train approaching

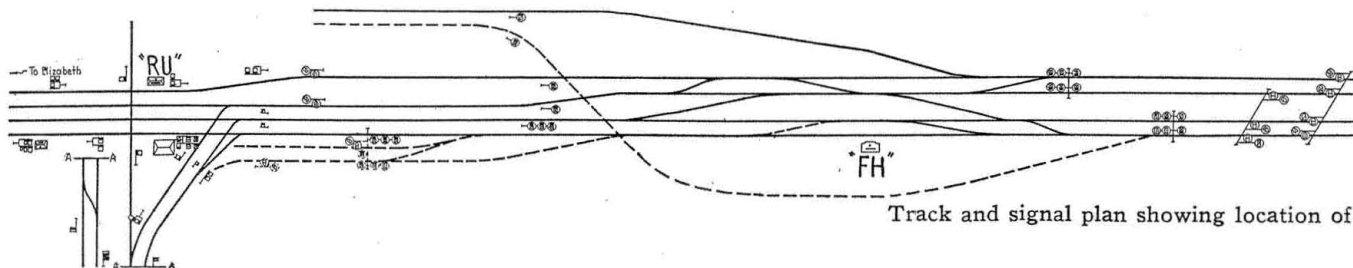
THE Central of New Jersey's new four-track bridge, with its four lift spans over Newark Bay, was formally opened to traffic on November 27, 1926. This bridge spans Newark Bay between Bayonne, N. J., on the east and Elizabethport on the west side of the bay, and replaces two rolling lift bridges, erected in 1904, which provided two 85 ft. channels. Its construction was necessary to meet the increasing boat traffic in the bay and the constantly growing suburban, through passenger and freight traffic on the railroad.

In order to provide the maximum of safety and flexibility to train operation and in keeping with the progressive policy of the Central to install modern appliances, an electro-pneumatic interlocking plant was installed. The interlocking for the bridge, constituted but a part of the extensive signal program for this territory. The east approach to the bridge is controlled by "BV" tower which has a 47-lever electro-pneumatic interlocking machine. This interlocking also handles traffic from West 8th street and Avenue A passenger yards at Bayonne. The west approach to the bridge is governed by "FH" tower with a 51-lever electro-pneumatic interlocking machine. This plant, in addition to controlling the west approach to the bridge, also governs traffic to

handling the suburban and through traffic three of the four tracks are signaled for train operation in either direction. Three tracks are used for eastward train movements in the morning and three for westward moves during the evening rush.

In addition to the Central of New Jersey trains, the Baltimore & Ohio and the Reading also operate trains over the present bridge. There are approximately 218 passenger trains a day consisting of through, local and suburban trains and about 80 freight trains each 24 hours. The average number of scheduled passenger trains passing over the bridge during the first trick are 58 eastbound and 57 westbound; on the second trick, 31 eastbound and 49 westbound; on the third trick, 12 eastbound and 11 westbound. In addition, about 28 freight trains each trick pass over the bridge. As the former draw consisted of only two tracks, it was necessary to suspend freight traffic during the morning and evening rush hours but this is no longer necessary.

Some idea of what the new bridge does in eliminating train delays may be gained by making a comparison between the number of times the old two-track bridge was opened and the operation of the new bridge for a similar period. For the month of December, 1925, the old



and from Elizabethport shop yard entrance. In addition to the interlockings in this territory, Style-R2 color-light automatic signals giving a 3-block indication have been installed between Bayonne, N. J. and Elizabethport as part of this development program.

Train Operation

Approximately 300 trains a day pass over the draw-bridge, and all train movements are controlled by signal indication. In order to provide maximum capacity for

bridge was opened 1,400 times while in December, 1926, the new bridge was operated about 700 times. During the first 15 days of January 1927, 342 lifts were made and 1,062 craft passed through the bridge. Of the 1,062 craft, 588 passed under the bridge while the draws were lifted for the passage of 474 boats. This indicates that from 50 to 60 per cent of the craft were able to pass under the 35-ft. head room clearance without the necessity of interrupting railway train traffic.

The fact that the new bridge had to have 35 ft. clear

