

Train Talks

Informal discussions by the Pennsylvania Railroad with its patrons on matters of mutual interest and concern.

MARCH, 1935

Electric Operation Opens Between Great American Cities—Capital And Metropolis Linked

LIKE the flying shuttles of a giant loom, great engines harnessed to the magic force of electricity now flash between the nation's capital and its largest city over ribbons of shining steel.

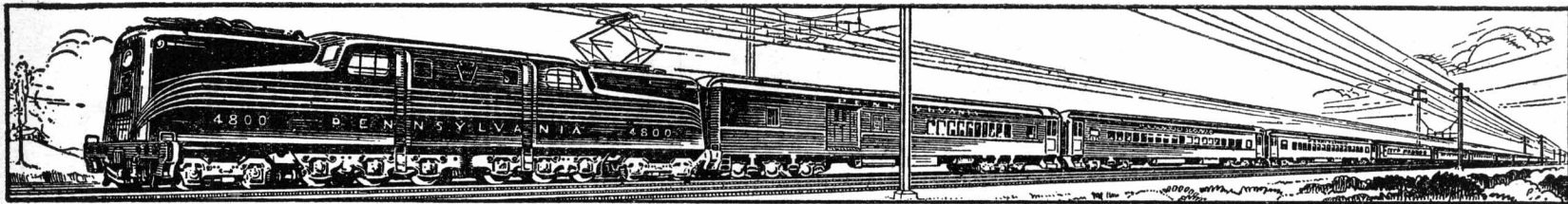
In the wake of these mighty machines, each powered with the strength of thousands of horses, the passenger trains of the Pennsylvania Railroad reel off the fleeting miles. Soon, the entire freight service, also, will operate electrically between New York, Philadelphia, Baltimore and Washington, and the greatest project of its kind in history will be finished.

The Pennsylvania Railroad System will then operate 1974 miles of electrified track, or more than one-third of the country's total.

New Electric Engines—Quicker Runs

For the high-speed passenger service between New York and Washington, a new electric locomotive has been designed





—the most powerful of its type and the first to be streamlined. It is built to haul trains of full size and weight at speeds of over 100 miles an hour.

Work is under way on 57 engines of this type; 28 others, also streamlined, but of a somewhat different type, are now being delivered. Initially a total of 191 electric locomotives will be used in the various branches of the passenger, freight and switching services.

Electrification will permit faster schedules, for both passenger and freight trains, than have ever before been operated over this route. Electric engines, with a reserve power supply to draw upon at the power house, possess the ability to take ordinary grades without loss of speed, and to gain speed, or "accelerate," very rapidly after stopping or slowing down. These factors alone will make possible material reductions in time between terminals.

In the case of both branches of the service the electric engines have been designed to permit the operation of trains of any desired length and at such speeds, within proper bounds, as the demands of traffic may require from time to time.

Careful Preliminary Studies Made

Before undertaking so extensive a program, several years were devoted to intensified studies which covered the entire transportation and industrial situation in the eastern United States. It was forecast that by 1950 New York's metropolitan district would thrust itself 30 miles or more into New Jersey

and an equal distance out on Long Island, and embrace a population of 30,000,000.

Other questions weighed were the growth of the Philadelphia and Baltimore areas and of the other communities served, the key position in the nation of the City of Washington, and the importance of the electrified route as the principal rail highway for passengers and freight between the South, the North Atlantic seaboard, New England and eastern Canada.

The work started in 1929. Its final stages were financed through the Public Works Administration by the sale of the Company's securities to the Government. This has given employment to about 25,000 otherwise idle men, and put into circulation many millions of dollars in purchasing the products of American industries.

Economic Advantages of Electrification

Electrification between New York and Washington affords the most desirable solution of operating problems peculiar to this territory, where the number of trains involved is very great. Under electric power substantial savings are possible in train operating costs. It is more efficient, where many train units are moved and the flow of traffic is continuously heavy, to generate power at a central source and distribute it in the form of electricity than to produce power separately on each train. Under such circumstances it becomes more economical to increase the capacity of the railroad for the future by electrifying than by building additional trackage

through congested areas, with enormous outlays for property and construction. Equally important are the great public benefits to be gained.

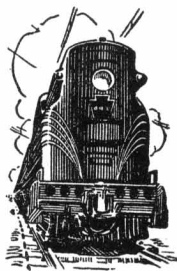
Some idea of the extent of traffic over these lines may be gained by the fact that the initial electric operation will embrace 686 daily passenger and freight trains, which will cover a total of more than 34,700 miles each twenty-four hours.

Demonstration Run—Service Opens

The first train ever operated out of Washington by electric power made a demonstration run to Philadelphia and return, on January 28, with a party of government officials and other distinguished guests. All train speed records between the two cities were broken and part of the run was easily covered at 102 miles per hour.

Regularly scheduled electrified passenger service between New York and Washington began on February 10, when "The Congressional," north and southbound, left both terminals drawn by brand new streamlined locomotives. The two "Congressional" were selected for this honor because they are the outstanding trains in the New York-Washington service and have carried more passengers of note and fame than any other trains in America.

Electric operation is being progressively extended to the other passenger trains on the road and will build up to a complete electrified schedule in the next several weeks. The running time will be shortened step by step.



COMPLETION of the New York-Washington electrification, in these trying times, is material evidence of this railroad's faith in the future of the country and in the progressive advance of the art of railroad transportation.