

Train Talks

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

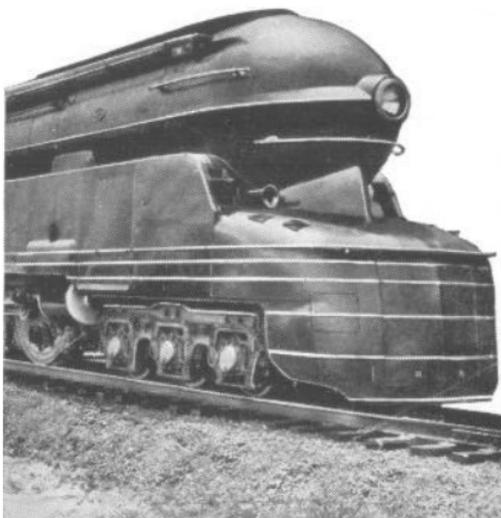
APRIL, 1945

New Locomotives for War and Peace

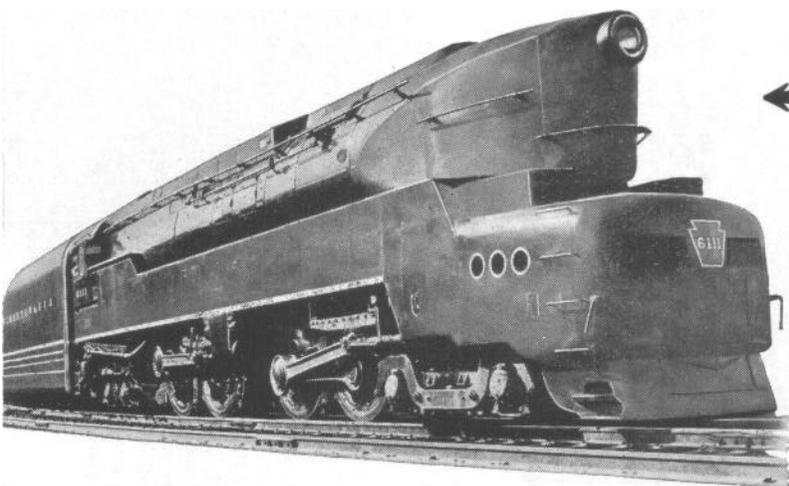
ALL the energies of this railroad are bent to the task of carrying the war load. Traffic dwarfing all records of the past has naturally meant more engines and cars, just as, to the Army, war needs have meant more tanks and guns.

It was important that the new engines should do the war work better than the old. That has meant research, experimentation and improved designs—all as contributions to war transportation. These new, big engines will help to win the war and to win the peace; for the railroad is planning to meet the nation's peacetime needs better than ever before.

Since 1939, the first war year, this railroad has added to its equipment 137 coal burning steam locomotives, 67 electrics, 17 Diesels, 14,998 freight train cars, and 153 passenger cars. On the inside pages are pictured, and briefly described, three fleet and powerful new types of locomotives, now hauling wartime traffic, and helping toward victory and the peace.



THREE NEW LOCOMOTIVES DESIGNED FOR PENNSYLVANIA SERVICE



Powered for Fleetness

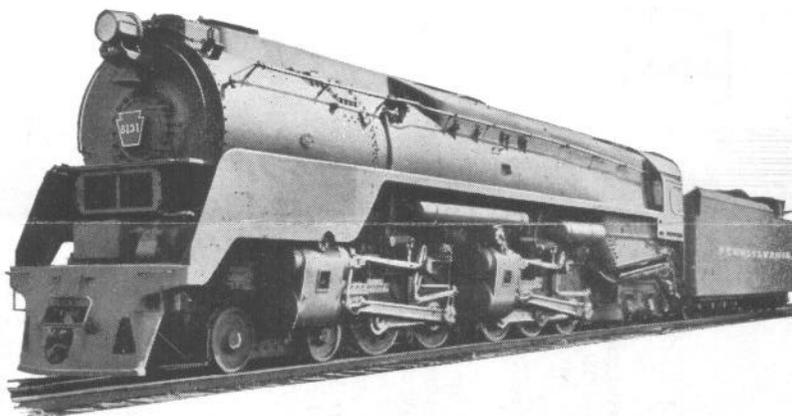
This new 100-mile an hour locomotive, which has been designated type T-1, is designed to haul full-length passenger trains on fast sustained schedules; also for swift runs in freight service. It has four cylinders, each pair operating two pairs of driving wheels.

Occupying, with tender, 107 feet of track, it weighs, in full working order, over 930,000 lbs. The tender carries 19,500 gallons of water and 41 tons of coal, so that stops for fuel need be made only at long intervals. The new streamlining symbolizes swiftness and power.

To Hasten the Wartime Freight

Specially produced to aid the war effort, by pulling heavy freight trains in swifter time, this four-cylinder engine, known as type Q-2, can haul 125 fully loaded cars faster than 50 miles an hour.

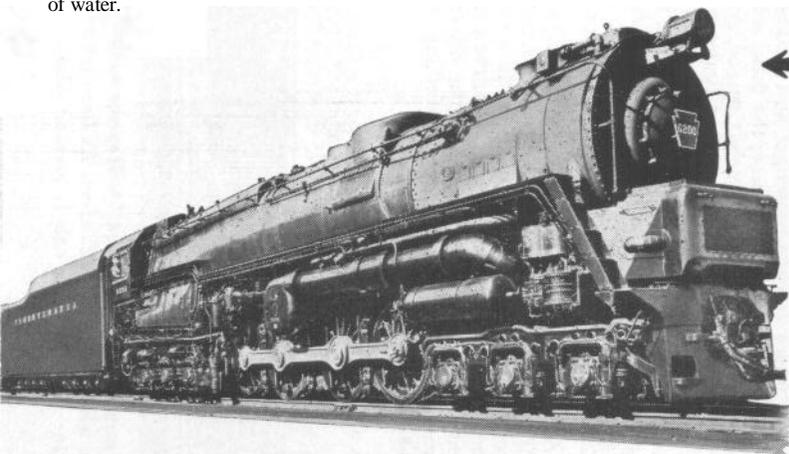
In its working range—that is, at speeds of more than 20 miles an hour—it develops greater power than any steam locomotive ever previously built. With tender, it is 124 feet, 7 inches long, and weighs more than 1,000,000 lbs. The tender has carrying capacity for 40 tons of coal and 19,000 gallons of water.



Turbine-Driven, Fast, All-Purpose

Fundamentally new, with steam turbine replacing the familiar cylinders, pistons and driving rods, the coal-burning S-2 is the first direct drive steam turbine locomotive to be built in the United States.

The turbine develops 6900 horse power at its shaft, providing coupler power for 100-mile an hour speeds with full-length passenger trains, and high speeds with freight. A single control lever makes this one of the simplest engines to operate ever designed. It is now under test to determine its adaptability to P.R.R. service.



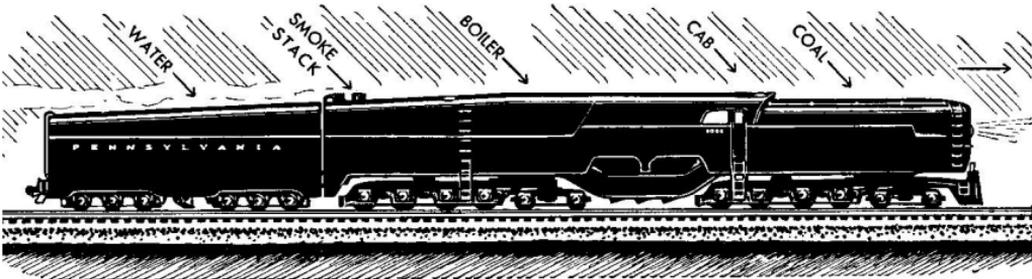
These advanced designs continue the series of new Pennsylvania Railroad engine types produced in the last few years. Included among them was the four-cylinder "Pennsylvania Type", the famous "Big Engine" which was the center of interest in the railroad exhibit at the New York World's Fair in 1939, and first of the Pennsylvania's multiple-cylinder locomotives.

. . . And Still More New Pennsylvania Engine Designs Are Under Way

On the drafting boards are plans for a new electric passenger and freight locomotive, to improve upon, and carry still further, the excellent qualities of the famous GG-1's, which have hauled the war load in this railroad's electrified territory. The advanced type will provide increased power, dependability and efficiency for handling extremely heavy traffic.

Actively being progressed is a radically new design for an ultra-powerful steam turbine passenger and freight locomotive, the "Triplex". As pictured below, the usual arrangement of the main sections will be completely changed. At the head will be a coal compartment, followed by a boiler with cab in front and smoke stack at the rear, the whole supported by a steel frame carried on swiveling trucks. Behind the boiler will be coupled a capacious water tender. Two direct-drive steam turbines, geared separately to the trucks under the coal compartment and the boiler, will produce 9,000 horsepower.

Under consideration, jointly with other railroad and equipment companies, is an experimental turbo-electric coal-burning steam locomotive of great power and speed. In such a design, the turbine would spin an electric generator, the current from which would operate a motor geared to the drivers. Anticipated advantages include simplicity of handling, with great flexibility and economy of operation.



The giant steam turbine "Triplex" will cover nearly 137½ feet of track, with a wheel base of 122½ feet. As here pictured, the front is to the right; note that the cab is located ahead of the boiler.