



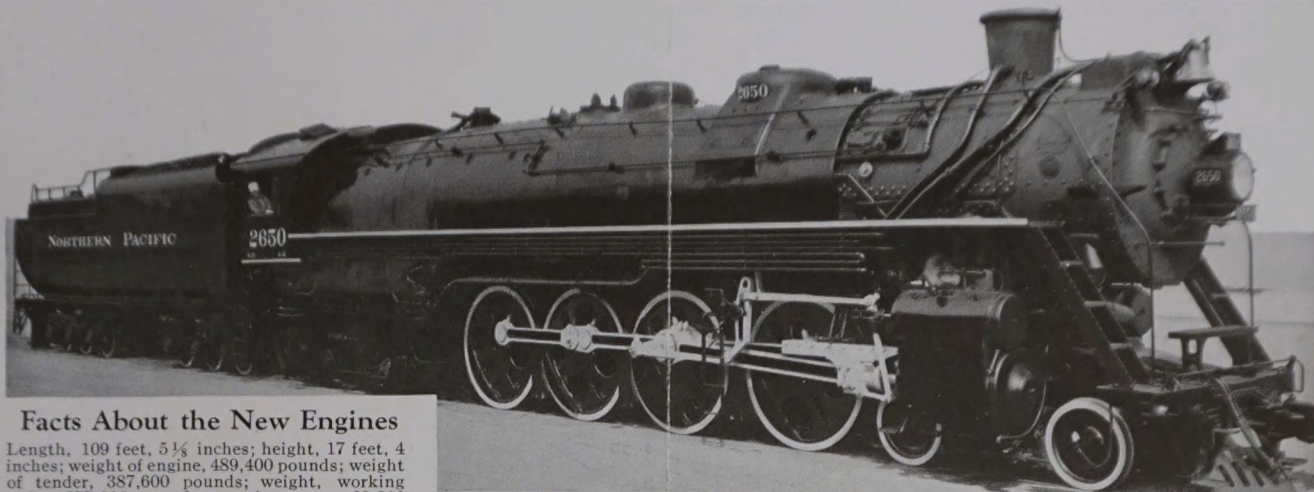
New

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For the
NORTH COAST
LIMITED





Facts About the New Engines

Length, 109 feet, $5\frac{1}{8}$ inches; height, 17 feet, 4 inches; weight of engine, 489,400 pounds; weight of tender, 387,600 pounds; weight, working order, 877,000 pounds; tractive power, 69,800 pounds; fuel capacity of tender, 27 tons; water capacity of tender, 20,000 gallons.



Complete
Air-Conditioning
for Summer on the
North Coast
Limited
Cool · Clean · Quiet



TEN giant locomotives, the first fleet of roller-bearing steam engines ever built, are being placed in service by the Northern Pacific Railway to power the North Coast Limited.

For each engine, in using roller-bearings on the 28 wheels, eight of them drivers, the roller-bearing principle has been for the first time extensively adopted for railway power traction because it increases the ease of operation and lessens running costs.

These locomotives, like the roller-bearing Pullmans, dining cars and observation-club cars on the North Coast Limited, start easier and run more smoothly. They are the largest locomotives in trans-continental passenger service in the Northwest, extending 109 feet, $5\frac{1}{8}$ inches along the rails, standing 17 feet, 4 inches high and weighing over 438 tons. Their drive wheels, 77 inches in diameter, make them capable of great speed.

Pleasing lines, streamline effect and tender of semi-cylinder shape are features of their design. The bed of each engine is cast in one piece. This huge steel casting weighs 38 tons. It consists of the frame, air reservoirs, back cylinder heads, smoke-box saddle and other parts. Heretofore Northern Pacific engine beds have been made of a large number of parts bolted together.

The throttle is power-operated, the energy being supplied by compressed air. Working steam pressure is 260 pounds—a pressure greater than in some other large locomotives.

E. E. NELSON, Passenger Traffic Manager, St. Paul, Minn.

NORTHERN PACIFIC RAILWAY

First of the Northern Transcontinentals

Form 6541—Printed in U. S. A.