more rocky. Blairsden, 11 miles below Portola in Mohawk Valley, is the starting point for trips to Johnsville, which lies in the shadow of Mount Eureka, where the famous Plumas-Eureka mine was discovered in 1851.

Just when the train is really getting into a deep valley, it dives into the 7343-foot-long Spring Garden Tunnel, in the construction of which engineers were compelled to fight for months against obstacles such as boulders and sands of an ancient river-bed and the waters of an underground stream. When the line emerges into the North Fork watershed it is in a beautiful high mountain meadow surrounded by forest trees, and but a short distance farther swings about this meadow in the famous Williams Loop.

Quincy Junction at milepost 288 (reading from San Francisco) is the junction point for the Quincy Railroad, which leads off in a southwest direction to the little city of Quincy, in the American Valley, protected by pineclad mountain slopes and snow-capped peaks. Although it is five miles distant, it can readily be seen from the Western Pacific. Quincy is headquarters of the Plumas National Forest.

Below Quincy Junction the train plunges through a long tunnel and then the railwise traveler starts to keep his weather eye pealed for Keddie. Here the railroad jumps from the north to the south side of the valley over one leg of a high steel wye bridge. The other leg of this wye bridge carries the track for the Northern California extension by which the Western Pacific connects with the Great Northern. For a mile or so the tracks of the Northern California extension can be seen climbing along the opposite side of the canyon.

By comparison with the early days, Rich Bar, which once was a trading post and principal town in the Feather River Canyon of the gold rush era, is now a ghost town. However, a number of persons still dwell at Rich Bar, which has a little hotel-resort; and the old diggin's are still being worked.

Fishing abounds and, in fact, Tobin, at milepost 253, is one of the many points in the Feather River country which has caused it to be known as the paradise of trout fishermen.

The truly rocky character of the canyon becomes more and more evident in its lower regions. It is practically a rock gorge at points, and the train snakes along on a shelf blasted into the edge. Up high on the slope are the remains of one-time prospectors' cabins. Below, at the bottom of the crevice, the river foams and boils over rocks with a feathery spray rising in the sun. At Las Plumas is a power plant of the Pacific Gas & Electric Company which is across the canyon from the Western Pacific Line. The water comes through a three-mile tunnel from a dam 11 miles farther up the river.

More suddenly than it began, the deep rocky gorge flattens out into a tranquil wooded ravine and the train pulls into Oroville. This is at an elevation of 203 feet above sea level, and the descent from the Sierras is accomplished.

From here the Western Pacific track points nearly straight south across the smooth valley through Marysville, Sacramento, and Stockton—crossing, recrossing, and at times using tracks jointly with the electric Sacramento Northern. From Stockton the road turns west, crosses the summit of the Coast Range at Altamont (a great mountain pass in miniature), threads and twists through Niles Canyon, and swings north into Oakland, where it terminates on a mole or ferry landing. Passenger trains have used Southern Pacific ferries and passenger facilities since 1933.

Here is a railroad conceived in the era of expansion at the beginning of the century, well built to last, and playing an important part in the commerce of a still-growing part of our country.

WESTERN PACIFIC 40' PULLMAN PS-1's

Part III, Specially equipped.....

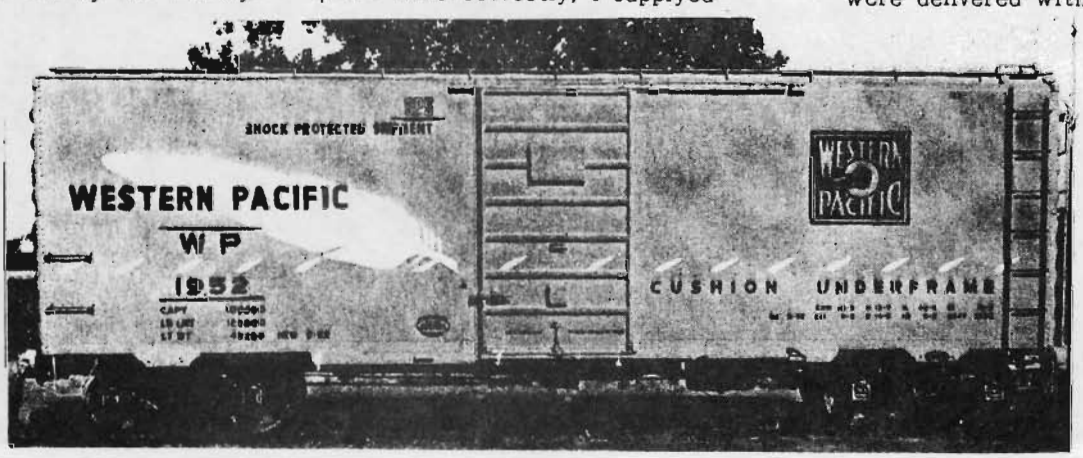
This is the last part on Western Pacific's 40' Model PS-1 type box cars built by Pullman-Standard. This part will cover the specially equipped and lettered cars ordered after the group of unequipped MX boxcars. WP ordered many more PS-1's but in 50' length and that will be another story.

WP 1952-1953 were experimental cars from Pullman used to test the then new cushion underframe. WP was the first railroad to put cushion underframe cars into service. The two test cars were owned by Pullman but sported a colorful paint scheme making it clear that they were special cars in use by the Wobbly. In 1960 WP bought the two cars from Pullman and they ended their service in 67 and 74. They were never repainted or renumbered.

WP 1952 and 1953 are the easiest models in this series. At the request of the Union Pacific Historical Society, McKean has come out with a PS-1 with a seven panel 6' wide Superior door. This is ready to paint right out of the box!. Use Microscale set 87-433 to decal after painting it completely reefer orange. Add a little yellow to fade the orange if painting it at the end of service. MDC has #1075 a AAR box car painted in this scheme. It's done correctly, I supplyed the info, but the ends and roof are not PS-1 plus the door is off a panel. But close.....

The success of the cushion draft gear in controlling cargo damage prompted the WP to order ten PS-1 cars equipped with 8' Superior panel doors and cushion draft gear in 1954. They were delivered in a solid orange with large silver feather paint scheme. In 1959 they were renumbered as 3401-3410, equipped with DF-2 loaders, and repainted into the box car red, orange feather, yellow lettering scheme. By 1980 only 3 were still running with 1 renumbered into the 23001 series XM class with loader removed.

In 1961 4 40' PS-1 type boxcars were bought by WP, series 3423-3426, the last new 40 footers delivered to the railroad. These cars were delivered with roller bearing



trucks, 8' Pullman doors and DF-2 loaders.

After building all models covered in this series of articles every style and class of PS-1 40 footers will grace your WP collection. The 40' PS-1's wore just about every paint scheme used by WP and will add color and history to your collection. Note. After many requests about the WP decals that Detail Assoc. has but not out. Peter Arnold of DA has said they will be out soon and the FRRS will have them for sale ASAP.

1952-1953
Purch. from Pullman 1960 @ $4500ea
1952...retired Jul 67 Associated Metals, Benicia
1953...Running Boards removed 1968. Failed in service on PC at Enola, Pa May, 1974

1961-1970
Purch. from Pullman 1953 @ $7500ea
Accepted at Michigan City, Indiana on Feb 26, 1954.
Special distinctive stencilling applied at Sacramento shops.
1961...3404
1962...3403
1963...3410 ret 75
1964...3407 ret 79
1965...3402 ret 68
1966...3405 ret 76
1967...3408
1968...3409 renumbered to 23001
1969...3406 ret 79
1970...3401 ret 71

3423-3426
Purch. from Pullman 1961
3423-3424, 16 Belts DF @$12,174
3425-3426, 19 Belts DF @$12,079

A well worn WP 1952 at Portola just shortly before retirement
Norman Holmes photo

WESTERN PACIFIC
Mileposts
MAY 1956

shippers learn how damage to freight can be

Substantially Reduced

Two cutaway working models of a Western Pacific cushion underframe car have been giving shippers and other interested persons an inside look at freight damage prevention.

The two models, with tops and sides removed for better vision, carry a miniature load to simulate in proportion a loaded box car. With the cushion underframe device disconnected, an operator sends one car coasting down an incline to crash into the other car at the far end of a 20-foot track, at a speed comparable to 10 miles an hour. The loads are tumbled around just as would a carload of freight subjected to rough handling.

When the one car is again sent down the incline with the cushion underframe device in operation, the loads remain in their original position even though the force from the contact of the two model cars is identical to the previous demonstration. The effect clearly demonstrates lading protection afforded by this feature.

A sliding sill running lengthwise through a car underframe is the secret to the cushioning effect of the cushion underframe car. When an impact is made against the car, contact by the striking car is first made on the coupler of the struck car. The coupler drives in, with closing action and impact absorption taking place in the conventional draft gear under mild, low speed impact. Under heavy impact the draft gear becomes overloaded and goes solid, leaving the bulk of dangerous shock energy to be handled by the cushion underframe. The impact forces the cushion underframe's sliding center sill through bolsters and crossbearers, which causes the lugs on the center sill to press against a rubber cushion in the heart of the cushion underframe. As the cushion is compressed, it is squeezed against an abutment welded to a shear plate which, in turn, is fastened to the car body. When sufficient compression of the rubber cushion is reached, the inertia of the car body is overcome. The car then moves in the same direction as the sliding sill. This cushioning lengthens the travel of the impact, allowing energies caused by the coupler impact to fan out and run off gradually through shear plate, car body and lading, without permanent deformation or fracture. Coupler forces are not transmitted to the car structure through the body bolsters as in conventional cars. The cushion underframe elements return to neutral position, ready to absorb and dissipate the coupler shock of the next impact. Cushion underframe action is equally effective either buff or pull, such as when train slack is being run out, and during road and switching operations.

In 1952, WP's research section and the Pullman-Standard Car Manufacturing Company sponsored a research program on two pilot models of CU cars. As a result of these tests, several other railroads have purchased CU-