

MODELING A LEGEND

# The Union Pacific Wyoming Division in H0 scale

**T**he beginnings of this layout go back about ten years to when I started collecting brass models of Union Pacific equipment with a vengeance. Overland, Key, Coach Yard, and Wasatch were putting out detailed, high-quality UP passenger cars, freight cars, and steam, diesel, and gas turbine locomotives in all versions. These were

BY JOHN GRAY  
Photos by Lou Sassi

It's busy on the servicing tracks at the Cheyenne coal dock as Big Boys, Challengers, A-Bs, and 2-10-2s await their turn for fuel, water, and lubrication before entering the roundhouse.



**2** Above: A turbine and a fleet of first-generation diesels line up at the diesel house located at the east end of Cheyenne Yard. The shop was kitbashed from Design Preservation modular components. The diesels are all Overland brass imports and were painted by George Micklus.

**3** Left: Cheyenne's roundhouses and backshops are full of modern UP steam power as Big Boy no. 4019 is being turned on the 128-foot turntable. The city of Cheyenne is in the distance. Here we see two roundhouses facing one another, the far one for passenger power, and the near one for freight.

limited runs, so the time was now or never. I started collecting as many as I could afford.

What to do with these models? I built cases in my office and displayed many of them for a while, but that wasn't good enough. What I needed was a model railroad, my first one since the HO 4 x 8-footer my brother and I had built when I was a teenager.

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The concept was simple: This would be an "industrial-grade" layout featuring the wide open spaces and clear skies of Wyoming. On it I could display my collection of models in operation rather than stuffed and mounted on the walls. The idea seemed easy at the time. Little did I know it would turn into a five-year project and counting. Before it was over I'd have had two layouts built and shipped one clear across the country.

#### PICKING THE PROTOTYPE

Wyoming was a natural choice. During the mid-1960s I traveled back and forth to school between Boise, Idaho, and South Bend, Ind., on the Union Pacific's *Portland Rose* and *City of Portland*, stopping at various division points to catch the action. These were great times with Big Blow turbines and all kinds of first- and second-generation diesels, including the double-engined giants. Well-maintained passenger and express trains passed by frequently.

There was even a Big Boy (no. 4005) as well as a 2-10-2 (5511) mysteriously stored in the Green River roundhouse. Big Boy 4024, Challenger 3985, and Northern 844 sat in the Cheyenne roundhouse. Sitting on house steam in the North Platte roundhouse was 3710, a Challenger with

cylinders rigged for melting snow in the yard. These were great times for a railfan!

I chose to model from the late 1930s to the mid 1960s as if none of the equipment was ever retired. The inspiration for modeling the Cheyenne shop complex came from Bob Darwin's book *Union Pacific in Cheyenne*, which provided excellent source material. Bill Kratville and Don Snoddy at the Union Pacific Museum in Omaha were also a great help.

#### A FALSE START

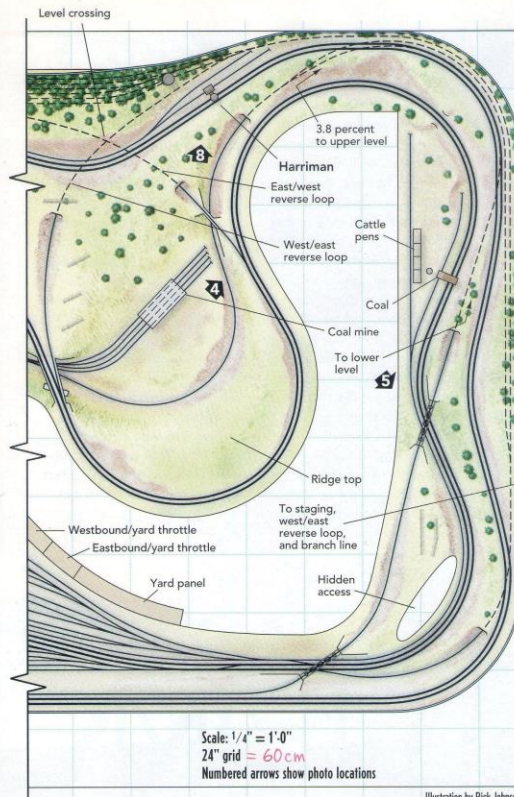
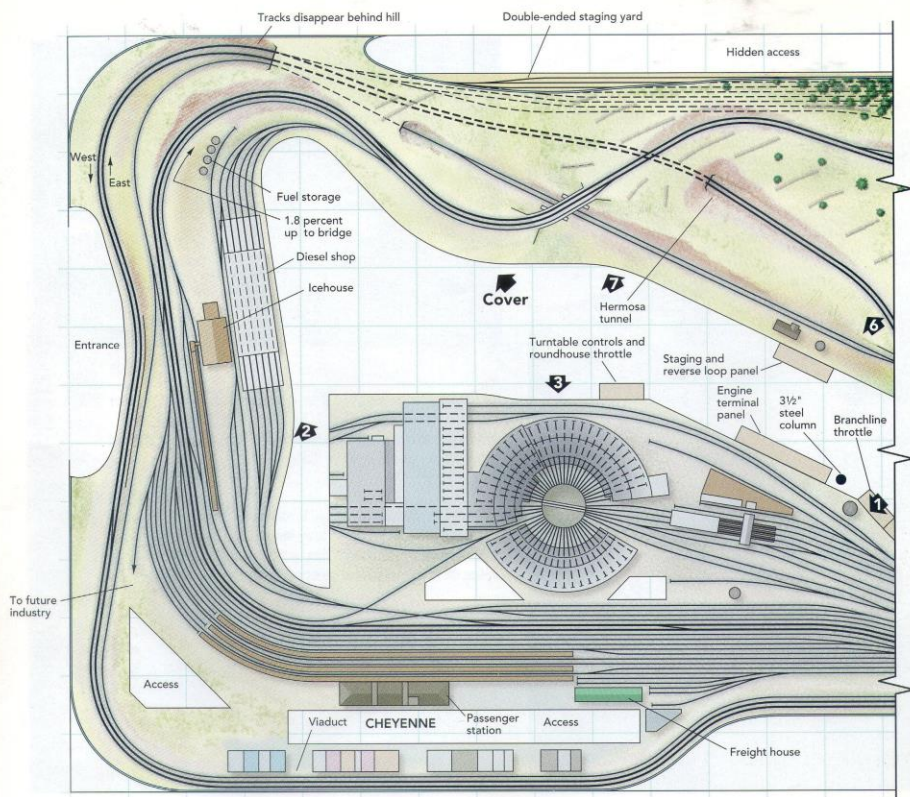
The first version of this layout was built by a contractor in Connecticut. Unfortunately, after the layout was shipped and reinstalled here in California it proved to be an operational disaster. Because of my desire to run long trains of finicky

brass models, the trackwork must be flawless to avoid derailments. The change in climate and the type of construction made the first layout a nightmare.

Reluctantly I scrapped the railroad and started over, saving only the very nice model of the UP depot in Cheyenne. With the help of a lot of people, especially Morgan Denegree and Phil Gazzano, the new layout has worked out a lot better. Drawing on our bad experience with the first layout, we designed a new track plan that promotes wide vistas with a minimum of mainline switches for smooth, trouble-free operation.

The key to good, stable trackwork turned out to be a spline roadbed made of 1/4" marine plywood laminated vertically to roadbed width and bolted to a reinforced L-girder frame. Cork roadbed provided good noise insulation.

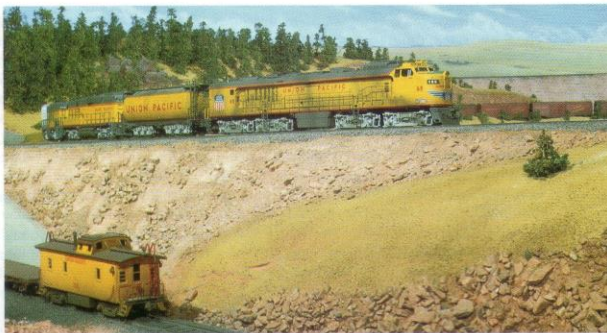
The track is *Shinohara* code 83 nailed and glued to the roadbed with all joints soldered and filed. Sufficient gaps



### THE LAYOUT AT A GLANCE

- Name: Wyoming Division of the Union Pacific
- Scale: HO (1:87)
- Prototype: Union Pacific
- Locale: Cheyenne, Wyo., and Sherman Mountains west of Cheyenne
- Era: 1938 to 1960
- Layout style: Around the walls with duckunder
- Size: 26 x 45 1/2 feet
- Height: 48"
- Benchwork: open grid
- Roadbed: 2" deep spline subroadbed made of 1/4" plywood, cork roadbed
- Track: Shinohara code 83
- Turnout minimum: no. 8
- Minimum curve radii: main line 48", branch line 36"
- Maximum grades: main line 1.8 percent, branch line 3.8 percent
- Scenery construction: Hydrocal plaster hardshell over cardboard strips, rockwork made from coal lumps, soil and small rock imported from Sherman Hill
- Backdrop construction: 1/8" Masonite over 1/2" plywood, airbrushed and hand-painted
- Control: three PFM sound throttles

**4** Number 65, a 4,500-hp turbine locomotive, is assisted by two GP9Bs as it slides around the big curve below Harriman. Because of the recessed sides, turbines of this type were called "verandas."



for expansion and contraction are provided by the many electrical gaps. All 115 turnouts are Shinohara no. 8s.

The layout fills a 26 x 45 1/2-foot room. There are no windows and the climate is controlled to minimize layout expansion and contraction. Unfortunately, you have to duck under to enter the train room. I don't like that any better than most modelers do, but it's a concession to wanting a minimum 48" mainline radius. Big Boys and passenger cars don't look very realistic on anything less.

The layout has been a complete success. Now I can operate without derailments, running 20-car brass passenger trains and 50-car brass freight trains with multiple heavily weighted brass locomotives.

### HIGHLIGHTS OF THE LAYOUT

The centerpiece of the layout is a detailed replica of the Cheyenne shop facilities including the backshops and facing freight and passenger roundhouses as they existed in the late 1950s. We tried to include as much of Cheyenne's trackwork as we could. Morgan Denegree spent about eight months constructing the buildings. Fabricating the many different types of windows took the most time since none are commercially available.

The turntable is a heavily modified Diamond Scale kit. It's connected under the layout to a 6-foot diameter wooden wheel mounted on rollers. The sensors on the wheel's edge ensure absolute accuracy for lining up the turntable track with the roundhouse leads. Derailments in the middle of that huge roundhouse would be a real mess!

The Cheyenne coal dock is an Overland model of that 650-ton facility. Phil Gazzano fabricated the 150,000- and



W. H. N. Rossler

A veranda-style turbine exits the east portal of Hermosa Tunnel on July 11, 1955. Turbines were loud, on-off machines not much good for urban stop-and-go service, but well suited for sustained high-speed runs. The UP enjoyed considerable success with them out on the open plains.

## ON CHOOSING A PROTOTYPE

For those who choose to model a prototype, the decision usually comes from the heart. John Gray chose the Union Pacific because he'd known it growing up. Fortunately the UP is a popular line, as well as the personal favorite of Tom Marsh who runs Overland Models, so plenty of UP models were available.

John's choice was emotional, but as with other affairs of the heart it's a good idea to step back and verify the choice from a more calculating perspective. Just how interesting, really, is the railroad if looked at strictly from a modeling perspective? Do you have enough information or know where to get it? Was there a variety of motive power? How about trains – were there lots of them, and lots of different kinds?

If you enjoy building mountain scenery, forget the Florida East Coast. If you like assembling lots of structures, John Gray's wide-open Wyoming isn't going to work for you.

Can you get the models you need? This is particularly important for the steam era. The Pennsylvania RR, for example, is a great line to model in HO because Bowser makes so many engines available. The PRR's arch rival New York Central is considerably more difficult and thus the less logical choice – a fact that will scarcely slow down the true NYC fan. When love battles with reason, logic usually loses. – *Jim Kelly*



**5** Above: An eastbound perishable train roars out of Hermosa tunnel as a westbound enters. With two Big Boys leading the way, those California oranges ought to reach Eastern markets in plenty of time. The snowflences minimize drifting in the cuts.

**6** Left: Two fast-stepping 4-8-4s, nos. 838 and 835, wheel mail and express train no. 5 through the curves west of Cheyenne. In strong contrast no. 6225, a 2-8-0, creeps overhead on the branch.

350,000-gallon water tanks. The diesel and turbine repair facility was kitbashed from Design Preservation components and vaguely resembles a portion of the UP's former Omaha Shop building.

The backdrops are the most visually arresting feature of the layout to my mind. Steve Luddy, the artist, spent a number of years in Casper, Wyo., hence he has a good understanding of what those endless skies should look like. He used a vanishing point technique with both airbrushes and hand-painting to create these scenes.

Even when you're in the room, it's hard to tell where the layout ends and the backdrops begin. I regularly go through Cheyenne on my travels, so I am able to furnish appropriate photos of the city and the surrounding area.

*I regularly go through Cheyenne on my travels, so I am able to furnish appropriate photos of the city and the surrounding area. Present day Cheyenne has hardly changed from steam days.*