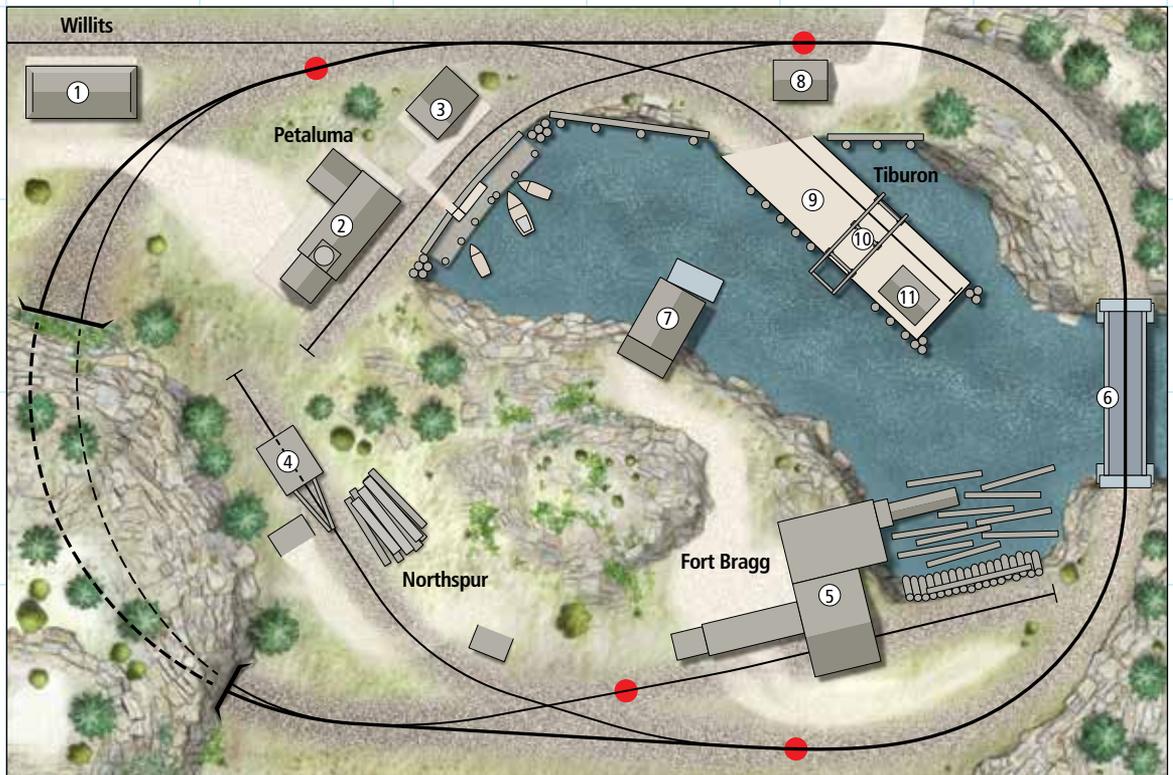


Contents

Foreword	4
Chapter 1 The Northspur & Tiburon RR	6
Chapter 2 Benchwork and track	20
Chapter 3 Beginning scenery: making a mountain	30
Chapter 4 Scenery and structures: Part 1	38
Chapter 5 Scenery and structures: Part 2	54
Chapter 6 Scenery and structures: Part 3	70
Chapter 7 Finishing and operating	82

Brett's brewery and King's boathouse are the highlights of Petaluma.

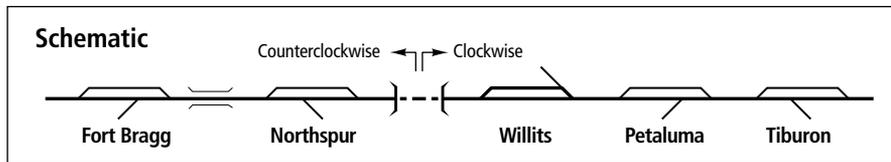




● Magnetic uncoupler

Northspur & Tiburon Railroad

HO scale (1:87.1)
 Layout size: 6 x 4 feet
 Scale of plan: 1" = 1'-0", 12" grid
 Illustration by Rick Johnson



Left: This schematic view of the layout shows the order of the towns as operators arrive at the given switch. Trains start in Willits, then head either westbound (counterclockwise) a few laps to Northspur and Fort Bragg, or south (clockwise) taking a few laps to Petaluma and Tiburon. To extend operations, I take a lap or two between switching moves. The passing siding is then convenient for all of the towns. *Illustration by Rick Johnson*

Structure list		
Number	Structure	Model
1	Station	AMB Northern Pacific Class C Depot
2	Brewery	Campbell Bret's Brewery
3	Boathouse	AMB Grand Ave. Yard Office with a scratchbuilt deck and dock
4	Log loader	Rio Grande Models McGiffert Loader
5	Sawmill-Lumberyard	Campbell Saez Sash & Door with a scratchbuilt sawmill, jack-slip and log dump
6	Bridge	Central Valley 72-foot plate girder bridge No. 1903
7	Oyster house	Fos Scale Hooper's Oysters
8	Office tower	AMB Railroad Yard Office, No. 709
9	Pier	Scratchbuilt
10	Crane	Campbell Quincy Traveling Crane
11	Shed	Campbell Quincy Shed
Campbell Scale Models: campbellscalemodels.com		
American Model Builders (AMB): laserkit.com		
Rio Grande Models: riograndemodels.com		
Central Valley Model Works: cvmw.com		
Fos Scale Models: fosscalemodels.com		





2

I used a razor saw to add grain to basswood, then I added a weathering wash.



3

I made this selection of weathering chalks by scraping a hobby knife across art store pastel chalks.



4

I used this photo of a local barn as an example for color and texture I wanted to model.

area to build in; I built models on TV dinner stands and stored them under the layout or I built models in the kitchen, standing up at the counter. I also couldn't find my metal ruler and built all the models without one, but even I wouldn't recommend you do that!

I used a few basic weathering methods during construction, including a wash of India ink and alcohol. Many modelers are familiar

with this: you simply add a few drops of India ink to a bottle of isopropyl alcohol—the more ink you add, the darker the wash will be. This wash works wonders when weathering wood (there's a tongue twister!), and I used it regularly.

I also used A-West Weather-It (another old product I had in my closet, but now out of production), which works in a similar way. When you stain the wood with these washes,

they darken the wood and highlight the grain. After it dries, the wood looks old and gray. From now on when I refer to "weathering wash," I'm referring to the India ink and alcohol stain. Military modelers use a lot of weathering products. You can find them from paint manufacturers such as Acrylicos Vallejo, AK Interactive, and Ammo by Mig Jimenez.

I used basswood and balsa for a variety of models. You can get this

This is the detailing and finishing sequence I used for wood walls.



Top left: I started by distressing the wood boards using hobby knife.

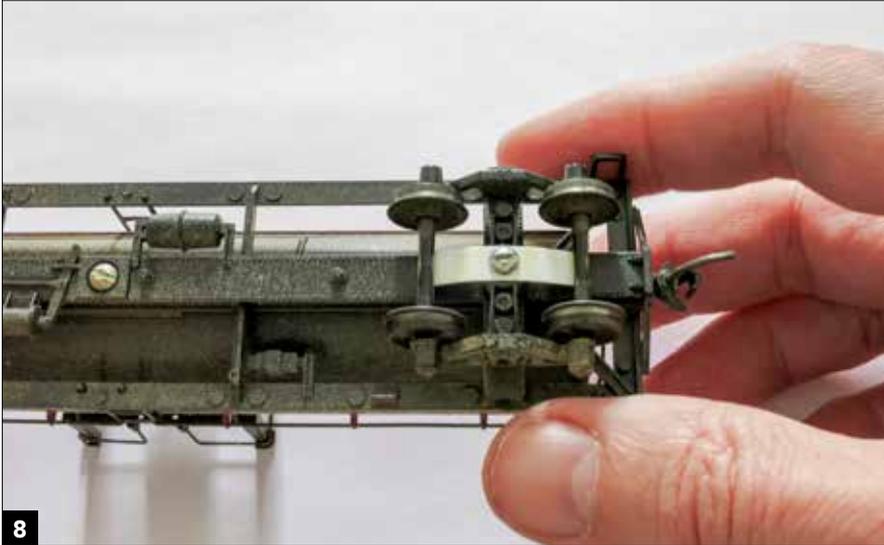
Center left: I darkened the wood with an India-ink/alcohol wash.

Below: I painted individual boards using red acrylics.

Bottom left: I scribed the board joints with the back of a hobby knife for better definition.

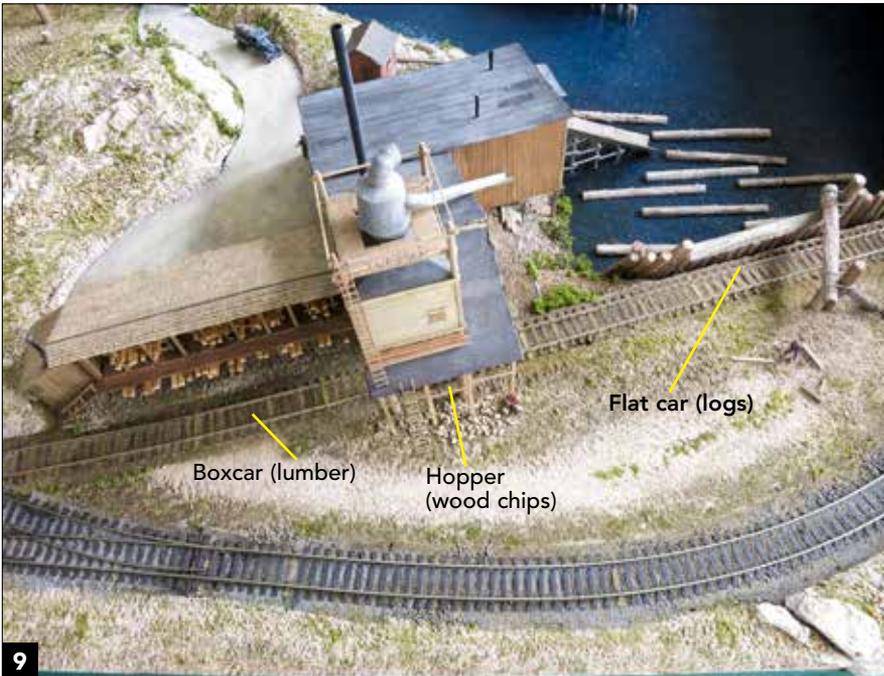
Bottom right: Finally, I painted the trim. Now the wall is ready for windows and doors.





8

To improve coupler performance over magnetic uncouplers, I added small plastic strips to the trucks to increase rolling resistance. This keeps the train stretched out and the couplers engaged.



9

This overhead view of the sawmill spur shows the different car spots. From left, boxcars are loaded at the lumber shed, hoppers receive wood chips under the cyclone, and flats are unloaded at the poke.

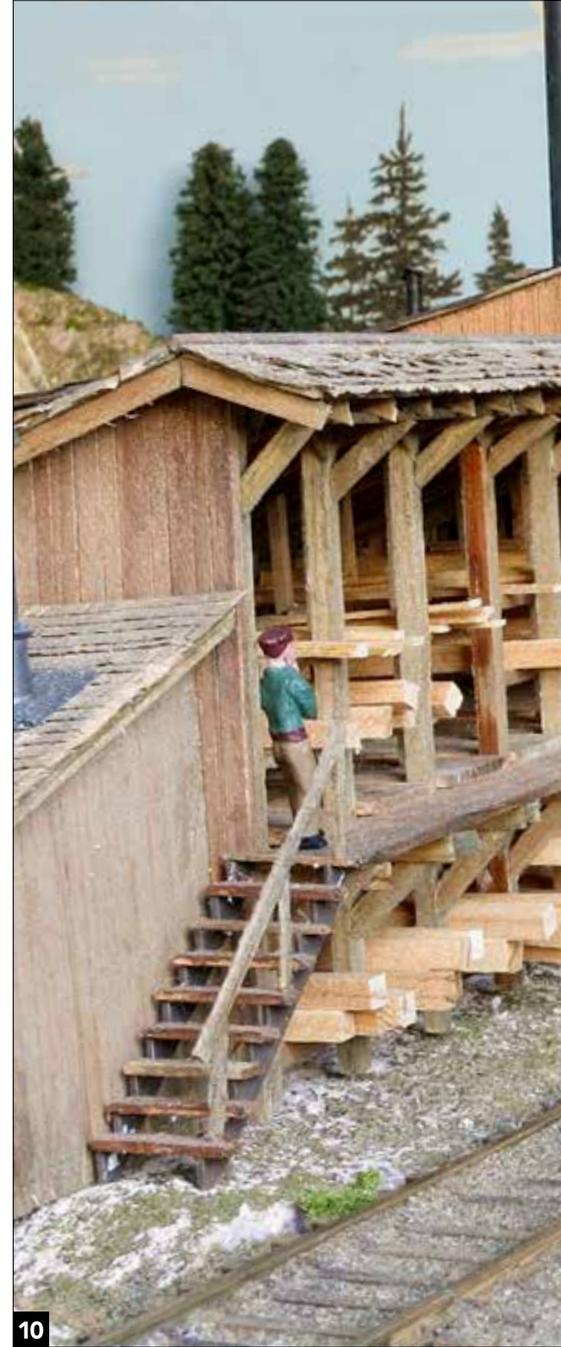
unloaded at the small dock up front. The Petaluma brewery accepts boxcars, reefers and tank cars; the tank cars are spotted at the rear of the spur where the unloading piping is “maintained.”

The specific car spots add to operations, as the operators must decide how to best switch cars into the train as well as at the spurs. One last tidbit: engines are not allowed on the pier, so

an idler car is necessary to spot a car under the unloading crane. Flat cars are especially good for this purpose, 11.

Flat cars are also used to carry logs between Northspur and Fort Bragg, from loading zone to sawmill and back. I manually position log “loads” onto the cars at Northspur and remove them at Fort Bragg, 12.

More precisely, due to the nature of



10

Engine 2476 has positioned the empty hopper to receive wood chips and is collecting empty flat cars for the return trip east at the Fort Bragg mill.

the spurs—both the McGiffert loader and poke unloader have very tight clearances—I push one empty car of a pair of flat cars under the McGiffert loader, then place the load on the second car upstream of the loader. This arrangement indicates the cars being loaded. To remove the loaded cars, I pull the cars and place the second load on the empty car before leaving the spur.



This procedure is reversed at the Fort Bragg poke; I remove the load on the first car before it is pushed under the poke and leave the second car loaded until later when it is time to pull the empty cars.

I have other removable loads as well: a wood chip pile that can be placed into the hopper car and piping or equipment that can be placed into the gondola.

Operating with a crew

Operating the layout by myself is fun—operating with others is even

more so. The three available operating positions are engineer, conductor and dispatcher. With two operators, one would run the train as engineer, and the other would keep track of train location (dispatcher) and issue switching orders (conductor). With three operators, all three positions are assigned individually.

The three operators position themselves around the layout. I attached small shelves made of tempered hardboard to the sides of the layout to provide supports for the

MRC controller, **13**; this is where the engineer stands. The conductor stands on the opposite side, directing the engineer and attending to turnouts and uncoupling. I also added a small dispatcher's panel at the end of the layout, near the mountain, **14**. This panel contains a simple schematic of the railroad and allows the dispatcher to keep track of the train location.

Each circuit of the loop counts as one increment on the dispatcher panel. There are two increments between each town on the panel; therefore, the