



RUNNING EXTRA

Apprentice with savvy modelers

Nick Muff models Kansas City's ...

Passenger Facilities

► **READ NOW**



Full
November
MRH
inside!



ALSO in this month's edition:

- Narrowing your layout plan scope
- Scratchbuild a backwoods lumber mill
- Build a Camas Prairie layout module
- Better paint brushes for detail work
- ... and much more inside!

ADAPTIVE EDITION
Landscape or portrait depending on screen size

[INDEX](#)

[TABLE OF CONTENTS](#)

This is the screen-adaptive PDF version of MRH magazine

This PDF will try to fill the screen. If the screen is wide enough, it displays two facing pages (emulating the old landscape format), otherwise it displays one page in portrait.

On mobile devices, if you change your device orientation, the PDF adapts to fill the screen with either a portrait or a landscape view as appropriate.

WORKS BEST WITH ...

- Windows: open with Acrobat or Firefox
- Mac: open with Preview, Acrobat, or Firefox
- Linux: open with Acrobat or Firefox
- Apple iPad or iPhone: open with SideBooks app (free)
- Android tablet or phone - open with SideBooks app (free)

If you're not seeing the PDF adapt, then your PDF viewer lacks the adaptive display feature. Please use one of the recommended free PDF viewing apps listed above to get the screen adaptive behavior. Or try the Wide Edition instead.

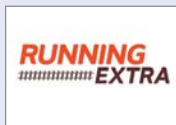
TABLE OF CONTENTS | RUNNING EXTRA

November 2021



RATE THIS ISSUE

Rate Running Extra issue ...



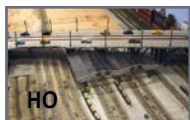
Publisher's Welcome: Locating tiny non-magnetic screws

JOE FUGATE



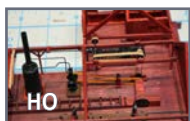
Limited Modeler: Narrowing your layout scope

JIM SIX



Getting Real: Modeling the Kansas City passenger facilities

NICK MUFF



Scratchbuild a backwoods lumber mill

PETER ELSEA



Camas Prairie First Subdivision modular layout

TIMOTHY DUDLEY



In praise of dabbling

DON VAIL



Ah-Hah Moment: Better paint brushes for detail work

JOE FUGATE



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)

TABLE OF CONTENTS | MRH

November 2021



Publisher's Musings: *Locomotives* book update, ...
JOE FUGATE



MRH Website this month: Modern farmer figures, ...
Compiled by JOE FUGATE



What's Neat: Raddison McGuire's military models
KEN PATTERSON



Automatic staging stopping blocks
GREG CIURPITA



Extreme weathering a Tangent hopper
NICK CAMPBELL



Modeling tar paper roofs
GREG BAKER



Savvy Modeler online: Fir/Pine tree modeling
Compiled by the MRH STAFF



November 2021 news and events
RICHARD BALE and JEFF SHULTZ

PUBLISHER'S WELCOME

introduction



MRH Running Extra | November 2021

JOE FUGATE LOCATES TINY NON-MAGNETIC
SCREWS FOR HIS ROLLING STOCK ...



RATE THIS ARTICLE

I'VE BECOME A FIRM BELIEVER IN SCREWING MY COUPLER BOX lids to my rolling stock, so I'm always on the lookout for small non-magnetic screws for the job.

I've also become a fan of 2-56 non-magnetic screws for fastening the trucks to my railcars. In general, I prefer non-magnetic screws when I use a screw as a fastener my rolling stock.

Why non-magnetic, you ask? True, I use skewers to uncouple anywhere I need like the prototype, rather than rely on non-prototypical track magnets.

Still, my gut told me to prefer non-magnetic screws because magnets may be useful for other things track-related. That's turned out to be true as I investigate using magnets to control turnouts and/or to improve loco traction (more on this in future articles).

Not having *any* steel parts on my rolling stock has turned out to be a wise choice – letting me explore these ideas freely.

Anyhow, I have found a number of tiny brass and nylon screws that work well for this purpose, so I always try to keep a stock of them on hand. I've found having both Imperial and Metric screw sizes to be quite handy. It also helps to get a set of metric taps so I can thread the holes for the metric screws.

The shopping list link has a selection of various tiny brass and nylon screws, as well as some steel ones too. However, it's difficult to



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

PUBLISHER'S WELCOME | 2

find brass screws smaller than M2 or 2-56 that are affordable. You can get them in bulk but I don't need \$300 worth (thousands)! ☑

To get a shopping list for this article, visit the *MRH* website at this link: mrhmag.com/magazine/running-extra/2021-11/publishers-welcome#shopping



1. As I describe in the text, I'm primarily interested in non-magnetic screws. A good non-magnetic metal screw is brass.

2. Nylon screws also can be helpful to keep on hand, although they can break easier than a brass screw if stressed.

3. This table shows the smaller screw sizes I'm interested in and their relative size. I've also included tap and clear drill sizes.

Size	Diameter		Tap drill	Clear drill
	In.	MM		
M1	0.039"	1.0mm	69	60
00-90/M1.2	0.047"	1.2mm	61	55
M1.4	0.055"	1.4mm	57	54
0-80	0.060"	1.5mm	55	52
M1.6	0.063"	1.6mm	54	51
M1.7	0.067"	1.7mm	54	50
1-72	0.073"	1.9mm	53	48
M2	0.079"	2.0mm	51	44
2-56	0.086"	2.2mm	50	43
M2.5	0.098"	2.5mm	45	36
4-40	0.112"	2.9mm	43	31
M3	0.118"	3.0mm	40	30



THE LIMITED MODELER

column



Images are from the author's collection, except as noted.

MRH Running Extra | November 2021

JIM SIX SHARES STRATEGIES TO
NARROW YOUR SCOPE TO FIT YOUR
LAYOUT AND BUDGET ...



IN THIS INSTALLMENT OF “LIMITED MODELER,” I discuss some lessons I’ve learned selecting and acquiring freight cars for my new layout.

My first lesson is, ***if you don’t need it, don’t buy it.*** For far too long I bought any freight car that I liked, but freight cars are expensive today.



DOING MORE WITH LESS



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

I see building my freight car roster as a three-step process of determining what I need, locating and buying the “needed” models, and preparing them for use on the layout. That’s all there is to it. Again, if you don’t need it, don’t buy it!

This means that you shouldn’t buy freight cars until you have designed your layout, including the industries you want to switch. It is tempting to buy freight cars because you might need them sometime, but that is a roll of the dice.

I used that method for too long and ended up with more than a thousand freight cars that did not meet the needs of my new layout. This cost time selling, trading, and giving away all those unneeded models, including more than a hundred completed models with added detail and weathering.

Finally coming to my senses, I started with my layout plan [2]. I adapted this one-town layout plan from a 1922 Sanborn insurance map of Clyde, Ohio. Through trains, including a passenger train and two or three freights from each direction, will be staged in small yards at each end of the layout, and run through Clyde to add complication to local switching operations.

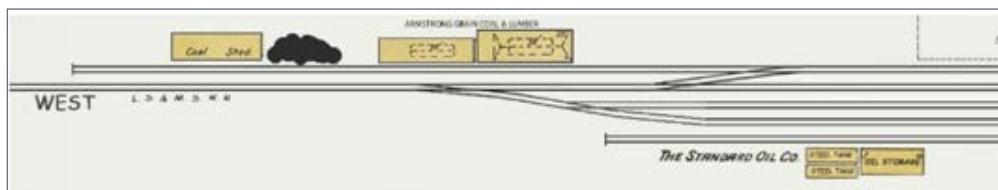
WORKING TOWARD A NUMBER

Once I finished the layout plan, I created a spreadsheet to figure out what kinds of freight cars and how many of each I would need to serve my layout’s industries [3]. While not the most scientific method, it gave me a list of the cars needed.

Looking at the spreadsheet, you can see I am considering only Monday through Friday. The left column is the list of rail-served industries in Clyde per the 1922 Sanborn map. Including the C.C.C.& St.L. interchange and the team track, there are 13 industries to be switched.

The local freight will bring a maximum of 12 cars. Through freights will drop off and pick up more cars for the local freight to position, so that the local will switch about 36 cars

THE LIMITED MODELER | 3



2. The latest plan for my new Clyde, Ohio layout. Each end will have three staging tracks (not shown) to allow through trains – including a passenger train and two or three freights in each direction – to complicate local train switching. Operating sessions should last up to three hours.

Clyde, Ohio		MON		TUE		WED		THR		FRI		CAR TYPE
	INDUSTRY	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	
1	C.C.C. & St.L interchange	0	1	2	2	2	1	2	2	3	2	any
2	L.S. & M.S freight dock at depot	0	0	1	0	1	1	1	1	0	1	box/reefer/gon
3	Clyde Cold Storage	2	0	0	1	2	1	1	1	0	2	reefer
4	Miller & Son Supply	0	1	0	0	1	1	0	0	0	1	box
5	Team track	2	0	1	1	2	2	1	1	1	1	any
6	Clyde Cutlery	2	1	2	2	2	1	2	2	1	2	box/gon
7	Clyde Kraut Co.	2	0	2	2	0	2	1	2	0	2	box/reefer
8	S.C.F.B. oil	1	1	0	0	1	1	0	0	1	1	tank car
9	S.C.F.B. coal	2	2	0	0	2	2	0	0	1	2	gon/hopper
10	S.C.F.B. feed mill	1	0	1	1	0	0	1	1	1	0	box
11	S.C.F.B. elevator	2	2	2	2	2	2	2	2	1	2	box
12	Clyde Canning Co.	2	0	2	2	1	1	2	2	1	1	box
13	Sandusky County Coal	2	2	0	0	2	0	1	0	2	1	gon/hopper
TOTALS		18	10	13	13	18	15	14	14	12	18	
DAY		MON		TUE		WED		THR		FRI		

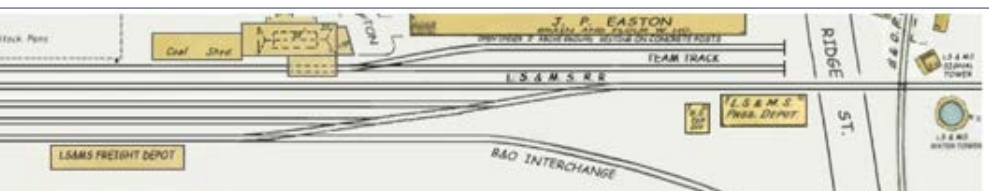
3. This spreadsheet helped me calculate the number of cars needed. I listed the number of cars to drop off and pick up each day, Monday through Friday, with totals for each at the bottom of the columns. At the right is the list of car types required for each industry. “S.C.F.B” is Sandusky County Farm Bureau.



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)



in a session. This arrangement adds interest to both the local and the through freights.

If I run two through freights, one westbound and one eastbound, this means another 35 to 40 freight cars, for a total of about 75 freight cars in an operating session. Half of those cars will simply run through town on the two through freights.

I will have about 25-30 additional freight cars in rotation to add variety between consecutive operating session. This brings the total number of freight cars I'll need to about 100. I currently have more than that, but I can assemble, weather, and sell extras for some hobby income.

FOCUS ON BOXCARS

When selecting freight cars, we need to know which ones are appropriate for the layout's era. Knowing the prototype history your layout represents will add confidence and a great deal of satisfaction to modeling. The more you know about what you are modeling, the more absorbed you become in it.

During the early 20th Century, boxcars were the primary freight car. Most of them were 36-foot boxcars, though 40-foot boxcars began coming on the scene in the mid-1910s. I decided to compose my fleet of about 75% 36-foot cars (shorties) and 25% 40-foot cars.

All my 36-foot boxcars and maybe 75% of my 40-foot boxcars are wood-sheathed. The other 25% of the 40-footers are steel. Photo [4] is typical of my boxcars – wood.

I also need ice-bunker refrigerator cars to serve Clyde Cold Storage and the interchange track with the Big Four. I also need a few to set out at the dock at the L.S.&M.S./C.C.C.&St.L. depot.



4. A typical selection of my wooden boxcars. These cars are from Accurail, except for the Nickel Plate boxcar, which is from Athearn Roundhouse.



RATE THIS ARTICLE



5. These wood-sheathed reefers from Accurail will serve the cold storage facilities.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



Accurail offers wood-sheathed reefers that represent cars that served from the 1920s to the early 1960s [5].

FINDING THE MODELS

I have heard many times that there are not enough freight cars to model before WWII in a realistic manner, but this is false. Many of these cars exist, but you must know where to look.

When considering freight car models, don't be trapped by the allure of ready-to-roll models. They can certainly make nice, well-detailed supplements for your freight car fleet, but there aren't enough of them available to capture any given era well.

Aside from that, ready-to-run cars can be expensive. At \$40 to \$50 each and rising, the cost can add up quickly.



While this hobby is important to me, it's not that important.

In some ways I regret the coming of ready-to-roll railroad models. No doubt the hobby has gained much with these freight cars, but we have lost much of the simple craftsmanship that used to be the norm. We may be losing what used to be the heart of model railroading – modeling!

Kits are a viable alternative to ready-to-run models. Kits need not be complicated or difficult to assemble.

THE LIMITED MODELER | 7

For example, Accurail and Bowser kits need only an hour for assembly, much less with experience. Accurail and Bowser kits are so simple that some call them “shake-the-box” kits – shake the box and out falls a finished model [6]!

Old Athearn blue-box kits fall into this category, but they were tooled in a time when prototype authenticity was not the concern it is today. Even so, some models like their two-bay hopper are very nice.

My freight car roster is mostly made up of Accurail and Bowser kits. These kits are available for under 20 dollars – often much less. All you need for assembly are a hobby knife, a small screwdriver, a good pair of tweezers, and liquid plastic cement.

For the price, they include everything you need to build the car: detail parts and spares on the sprues to match different prototypes, plus trucks and knuckle couplers. With assembly and weathering, you have a very nice model [7].



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



J. Regier

ACCURAIL KITS

Accurail kits include plastic wheelsets and plastic Accumate couplers. Intermountain offers compatible metal wheelset upgrades for better performance with less residue on the tracks than plastic.

While the Accumates are fully compatible with other knuckle couplers, you may prefer to upgrade to Kadees for the performance and durability of metal couplers.

As a New York Central Lines modeler, I cannot be happier with what Accurail has produced. Take its three-pack of New York Central Lines 36-foot boxcars for example [8]. These models should be on your list of freight cars if you want to model New York Central from the mid-teens to WWII.



6. Accurail kit for a 36-foot, wooden boxcar.



THE LIMITED MODELER | 9

The B&A and the N.Y.C.&H.R. are accurate back to 1914 and 1912 respectively. The NYC car is good back to only mid-1915. There were no N.Y.C. reporting marks before 1915, when the New York Central & Hudson River and the Lake Shore & Michigan Southern merged to become the New York Central.



7. The completed model, weathered and in service.



#8125 Limited Run
3-Car Set \$55.98 Retail
36' Double Sheath
Wood Boxcars

- New York Central
- Boston & Albany
- New York Central & Hudson River

Singles Available \$18.98 ea. Retail
#13011 New York Central
#13061 Boston & Albany
#17011 NYC&HR

8. Accurail's three-pack of New York Central boxcars. The N.Y.C. mark would not have been in use before 1915.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

While Accurail offers many steam-era freight cars, they also offer modern freight cars – see the full listing here: accurail.com/accurail. Accurail runs a very efficient operation that produces high-quality, low-cost models entirely in the United States.

Bowser is another good source of HO-scale freight cars. Long known for its Pennsylvania Railroad offerings, Bowser continues to produce Stewart kits and others. Bowser also offers their freight cars as ready-to-roll www.bowser-trains.com/history/freightindex.html.

Bowser also offers many good-quality freight cars, both ready-to-run and in kit form. A look at Bowser's index (link above) shows a variety of cars covering the early 1900s to modern times.

If you need hopper cars, Bowser has many great ones. The H30 covered hopper is a ready-to-roll model that rivals the best available [9]. While a 1931 Pennsy prototype, this car made it all over the country onto many railroads, so a couple of these models have found their way onto my roster.

The Athearn/Roundhouse model of the N.Y.C. & St.L. 36-foot "Old Time Boxcar" is one of my favorites [10]. The car came ready-to-roll and factory-painted with the large NICKEL PLATE ROAD slogan to the right of the door. I removed it to backdate the car to its 1905 appearance.

For some reason, these N.Y.C. & St.L. cars never received the large NYC oval herald when still part of the NYC Lines. The only other NYC Lines boxcars not getting the oval herald were the Boston & Albany cars [10].

40-foot steel boxcars emerged by the mid-1910s, and became prevalent by the late 1920s. InterMountain offers a nice model of the Pennsy X29 steel boxcar, continuing production of the old Red Caboose model [11].

Starting in 1915, the New York Central Lines began adding 40-foot steel boxcars built by the Standard Steel Car Company, eventually rostering thousands. Broadway Limited offers this prototype as ready-to-roll HO models, though they come with a newer lettering scheme that first appeared in mid-1936 [12]. I will have to re-letter them.

B&O “wagon-top” steel boxcars first appeared in 1934, and became quite common. I remember seeing some in service as late as the early-1960s in Lorain, Ohio.

Wright Trak offered a resin kit of the M53. Both ExactRail and Fox Valley offer very good plastic models of the B&O wagon-top boxcar ready-to-roll plastic [13].



9. Pennsylvania H30 covered hopper from Bowser.



10. The RoundHouse (Athearn) 36-foot “Old Time Boxcar.”



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



11. InterMountain's model of the Pennsy X-29 steel boxcars.



12. I weathered and re-lettered this BLI model of a Boston and Albany 40' steel boxcar from Standard Steel Car Company.

Many early freight cars are available as resin kits. Funaro & Camerlengo, Westerfield, and others produce these kits. They have evolved over the years to be much like plastic freight car kits from manufacturers such as Branchline. They are more work than an Accurail or Bowser kit, but they are doable for many modelers.

One boxcar I really want is the Pennsylvania X23 single-sheathed wood boxcar. It has never been available in plastic, but Westerfield offers a nice resin kit. After seeing Eric Hansmann's Westerfield model photo [14]. I ordered one for myself – to be built later.

THE LIMITED MODELER | 13

In a future column we will look at modeling gondolas and hopper cars in the steam era. There are quite a few models of them in HO scale for the steam era. As with boxcars, they are available as ready-to-run, shake-the-box kits, and resin kits. ☒



RATE THIS ARTICLE



13. This is a Fox Valley Models production of a B&O wagon top boxcar.



14. Eric Hansmann assembled this Westerfield kit of a Pennsylvania X23 single-sheathed wood boxcar.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

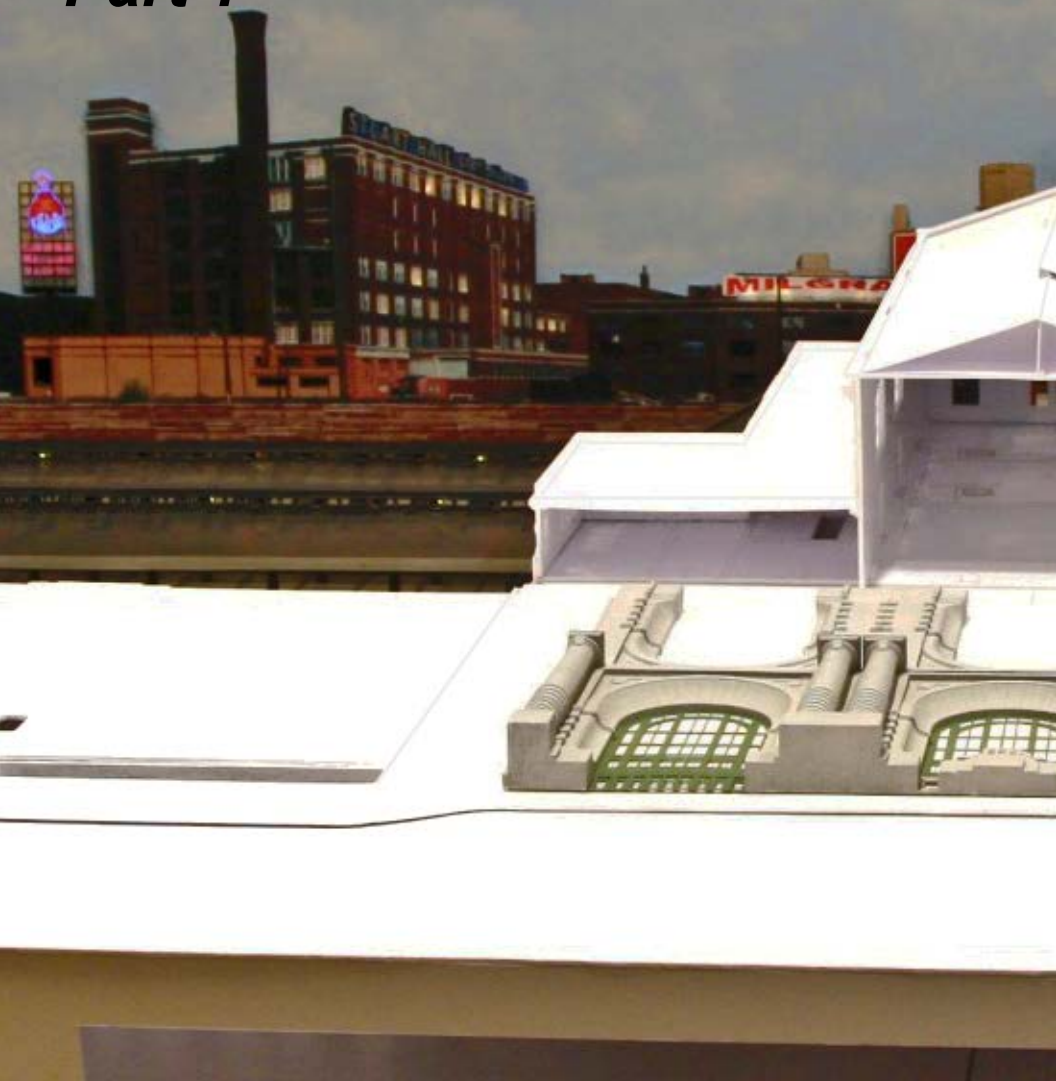
Tell your friends about Running Extra!

**We depend on word-of-mouth to
grow ... if you don't share us, we
don't grow**

**Did you know
there's an
MRH/RE index
available?**

Click to find out more

Modeling the Kansas City Union Station *Part 1*



NICK MUFF SHOWS HOW HE MODELED THE
KANSAS CITY UNION STATION IN HO SCALE ...



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



GETTING REAL



column

MRH Running Extra | November 2021

All photos by Nick Muff unless noted



GROWING UP, we would frequently travel by train from Los Angeles, California to Siloam Springs, Arkansas to visit my maternal grandparents. We took the Santa Fe's Hi-Level El Capitan to Kansas City Union Station, where we boarded Kansas City Southern's Southern Belle, which took us the rest of the way.

My grandparents lived on a farm, and Grandpa Ross would frequently go to town to meet up with buddies at Mom's Café. He let me explore the Decatur Depot and its surroundings and watch trains while he was there.

I could depend on the Southern Belle passing through southbound and then northbound each day. The train would be powered by the attractive slant-nosed E3 and E6 units or by E8s [1, 2].

Freight trains were pulled by long strings of F units and the menacing-looking Fairbanks Morse Erie Builts [3]. A Fairbanks Morse H16-44 in black paint with white lettering handled the local freight to Decatur, known as a "Dodger" on the KCS [4].

I found both the passenger and freight versions of the Kansas City Southern Southern Belle paint scheme attractive. They were the same, except the red and yellow color positions were reversed. I'm not aware of another railroad that adopted this practice.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

GETTING REAL | 4

For the return trips, we boarded the Southern Belle at Siloam Springs and arrived at Kansas City Union Station on time for



1. Northbound Southern Belle, Decatur, Arkansas.



2. Southbound Southern Belle, Siloam Springs, Arkansas.



3. Southbound freight, Decatur, Arkansas.



4. Southbound local “Dodger” Decatur, Arkansas.



[SUBSCRIBE](#)

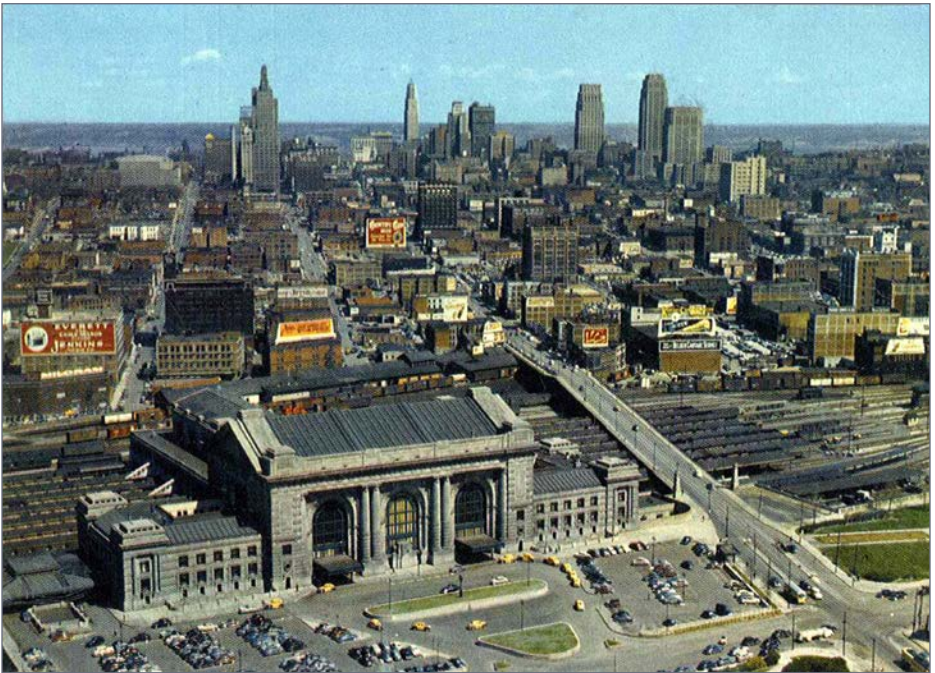
[INDEX](#)

[TABLE OF CONTENTS](#)

dinner at the Fred Harvey restaurant. We would walk over to the Grand Avenue bridge and watch the passenger and freight traffic of eight railroads coming and going in the warm evening before catching the westbound El Capitan about 1:00 am.

The sights, sounds and smells are memories never to be forgotten. With its classic Beaux Arts architecture, the Union Station was a veritable temple of railroading [5].

By the time I had graduated from medical school and moved to our current home in Washington state, I had decided to model Kansas City, Union Station, and the Kansas City Southern Lines.



5. 1950s postcard of Kansas City Union Station from my collection. This is the Union Station as I remember it.

PROTOTYPE HISTORY

The railroads built the original Kansas City Union Depot in the River Bottoms at the junction of the Kansas – Kaw – and Missouri Rivers [6]. The location was convenient, but it was also a floodplain. The disastrous flood of 1903 inundated the waiting room in six feet of water and created a 30-foot-deep sinkhole at the confluence that swallowed locomotives and passenger cars [7, 8].

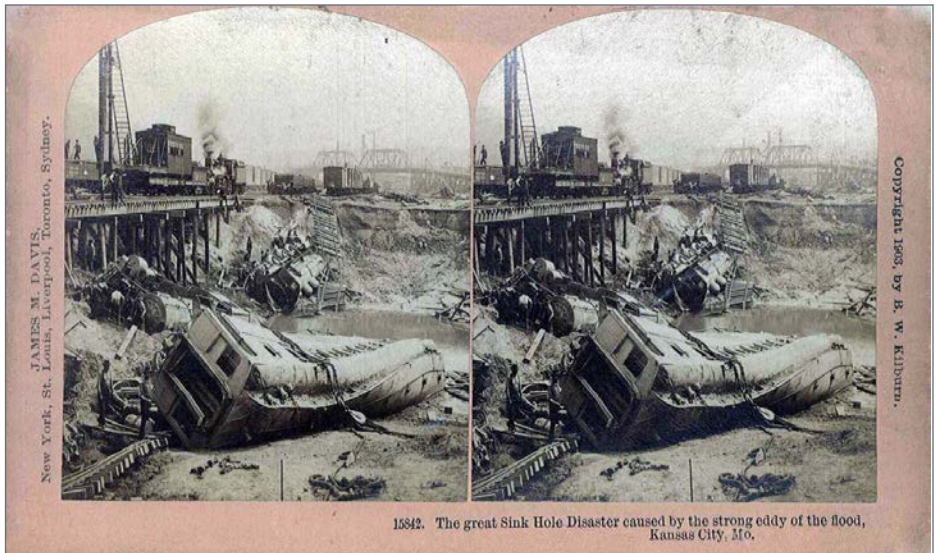
The railroads decided to build a new Union Station on higher ground, a location several miles to the east [9, 10]. This new location was out of town in those days, which created controversy, but the town grew soon enough.

The first order in preparing the site was to channel OK Creek, which ran through the construction site, into an underground culvert [11].



6. The original Union Depot, Located in the “River Bottoms” at the junction of the Kansas “Kaw” and Missouri Rivers postcard.





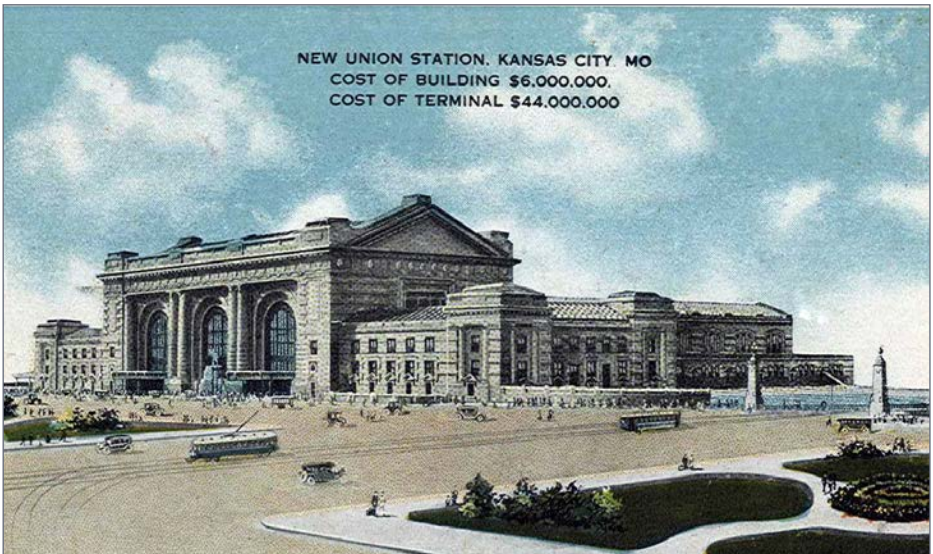
7. The 30'-deep sink hole. Stereopticon card.



8. Union Depot lobby after floodwaters had subsided. Stereopticon card.



9. This early concept drawing for Union Station was notably different from the final structure. Postcard.



10. Early postcard showing the station as built.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

The waiting room for the new T-shaped Union Station would extend out over OK Creek. Pilings to support the waiting room were driven down to bedrock except in the area over OK Creek. In that area, a large concrete foundation pad was constructed to cover the softer ground of the creek bed, and pilings in that section were placed on the concrete pad [12].

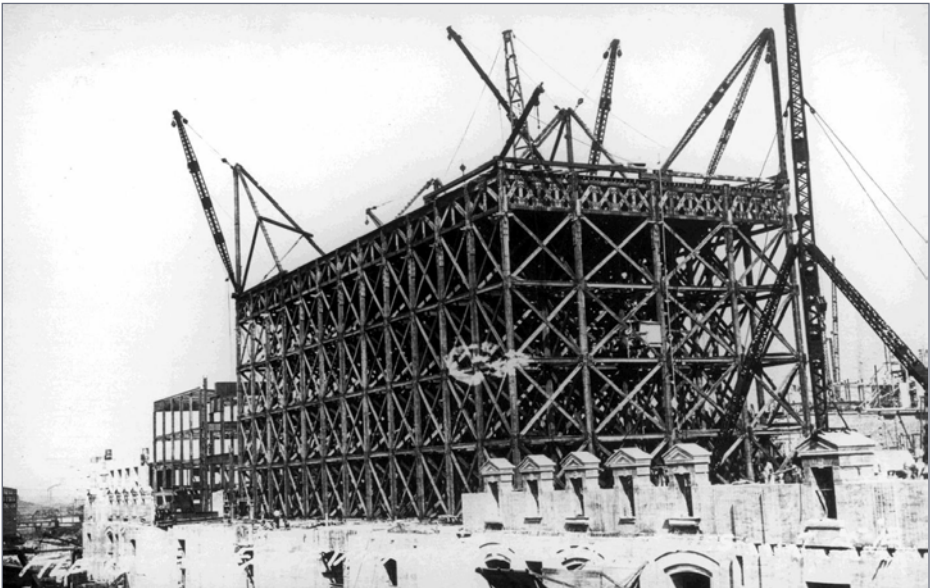
To construct the Grand Lobby with its 90-foot ceiling, a structural steel framework was created inside the lobby. Steam-operated stiff-leg derricks operated from the corners of this scaffolding, lifting the marble and limestone blocks into place [13]. Once the construction work was complete, the scaffolding was disassembled inside the building and taken out through the doors [14].



11. Early site preparation. OK Creek can be seen meandering from upper-left to lower-right.



12. Placing support columns for the waiting room.



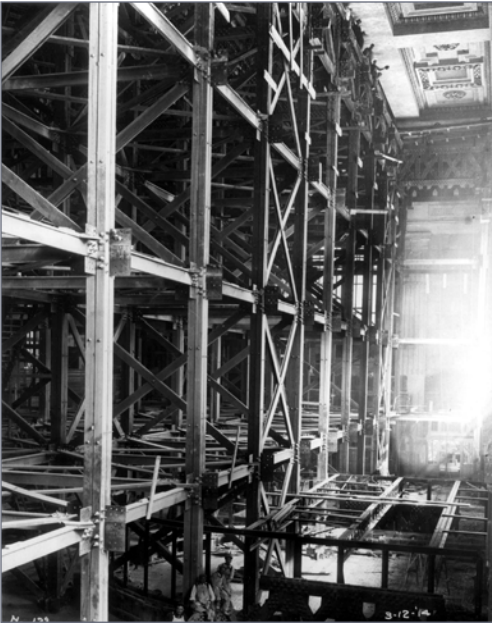
13. Scaffolding used to construct the Grand Lobby.



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)



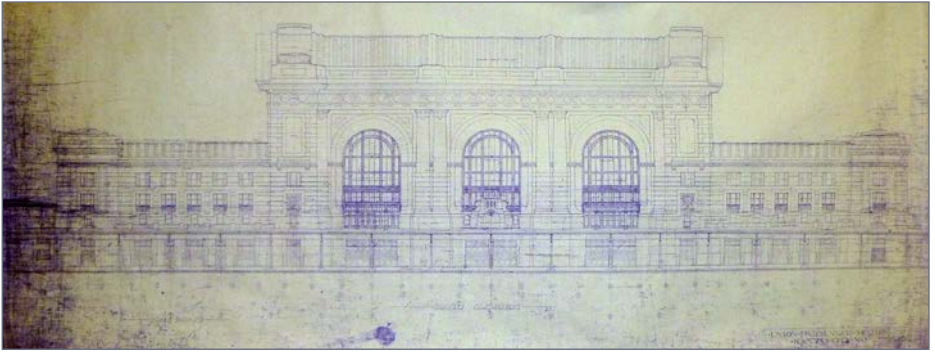
14. Scaffolding ready to be removed from inside the completed Grand Lobby.

DEVELOPING THE PLANS

The first challenge was to find plans for the station. I wrote the Kansas City terminal Railway with a request for plans. They were gracious enough to provide a beautiful full-size blueprint of the front, south face of the Union Station in 1/8-inch scale [15], a drawing of the side elevation of the waiting room only in 1/16-inch scale [16], and a track plan for the Union Station in the 1950s [17].

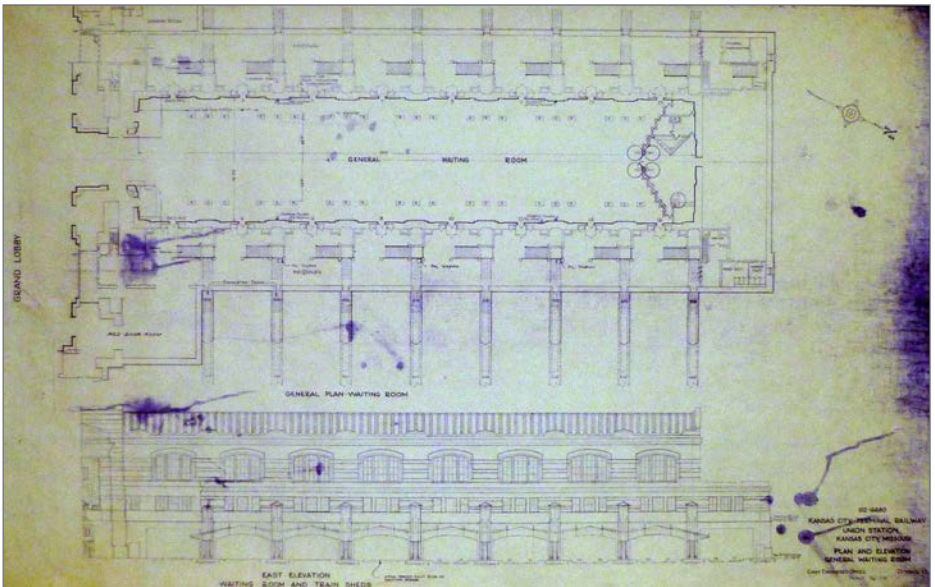
They also provided a piece of paper with the absolute elevations of the station from the peak of the roof down to the OK Creek sewer [18]. For the interior floor plan, I relied on an illustration taken from the book, *Passenger Terminal and Trains* by John Albert Droege which Kalmbach Publishing published as a reproduction [19].

With these materials in hand, I knew that I would have to generate the other exterior and interior drawings myself. The



15. The front/south elevation in 1/8" scale.

★★★★★
RATE THIS ARTICLE



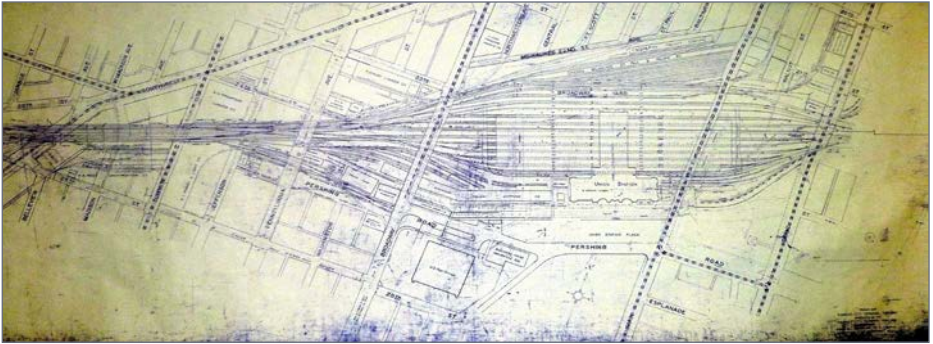
16. Side view of the waiting room, but in 1/16" scale.



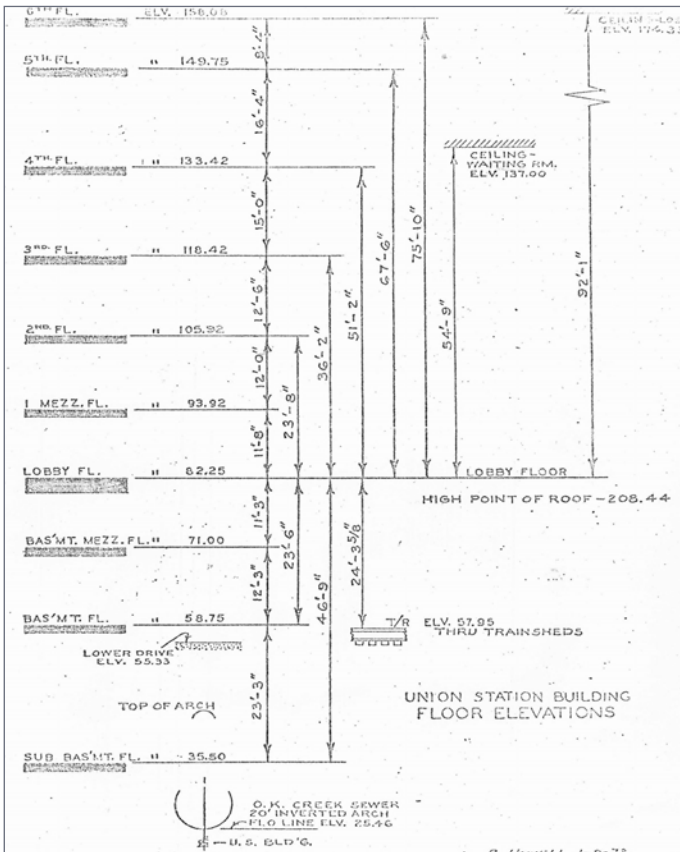
[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



17. Kansas City Terminal Railway track plan of the Union Station from the 1950s.

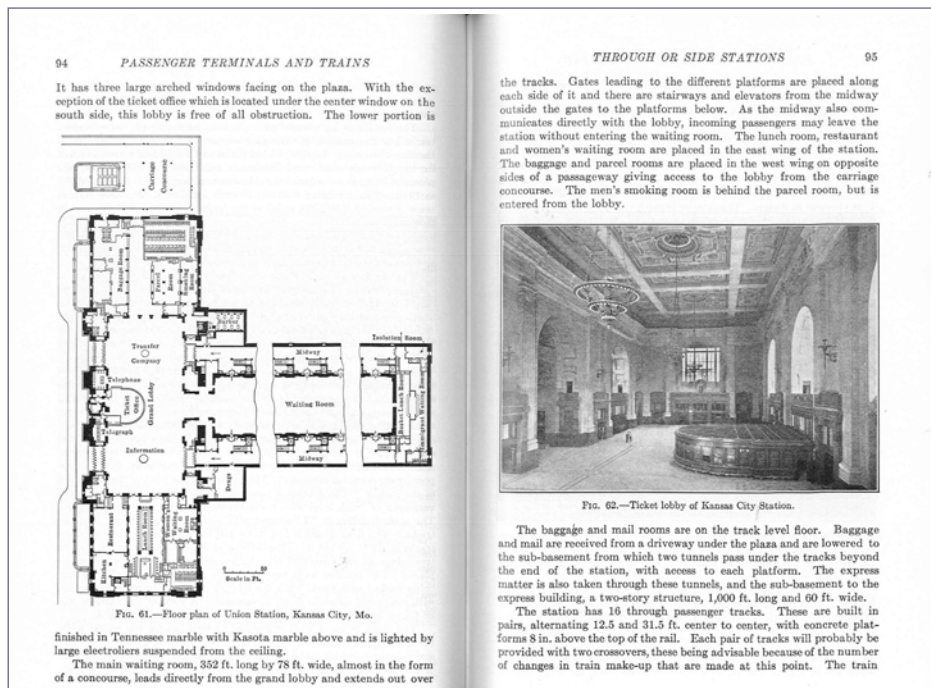


18. The all-important elevation page.

plans were in different scales, and none of them in the scale I would use to build the model.

With the encouragement of my good friend Dr. Warner Swarner MMR, I decided to learn CAD. I purchased Drafix software, a powerful, easy-to use, Windows-based tool that Autodesk has since purchased and made part of its portfolio as Autosketch 10. There has never been anything I've needed to do with this software that I couldn't accomplish!

The next step was to design a track plan to fit our newly constructed 30' x 40' basement. It would take all that room to create the Union Station. As it is, 40 feet is just enough space to create the station from throat-to-throat with curves at each end!



19. Floor plan from Droege's book. *Passenger Terminals and Trains.*



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)

As with John Allen, the “Wizard of Monterey,” everything was planned out in advance. I have stuck with that plan with rare exception. The CAD software was the perfect way to create this plan [20].

Prior to the construction of the basement and addition to our home, I anticipated this project by creating the eastern one half of Union Station and its benchwork as part of a layout in the garage [21, 22]. When the house addition was complete, I moved this benchwork to the basement and incorporated it into the new basement layout.

Combining the prototype plans I had available and hundreds of slides I had taken myself, I re-created the exterior and interior plans in CAD format [23]. That allowed me to print the plans and glue them to foam-core to build mockups.

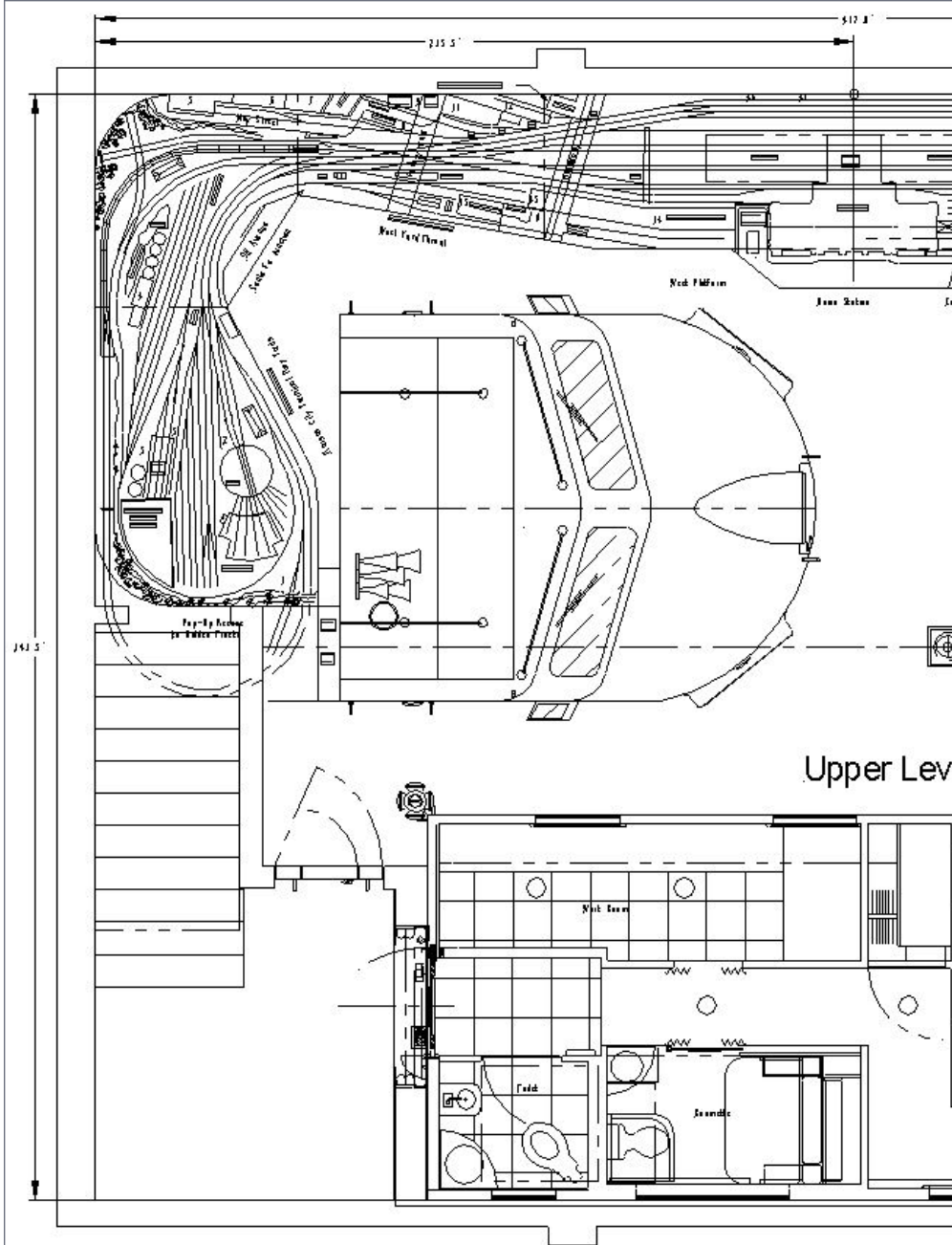
BUILDING A MOCKUP

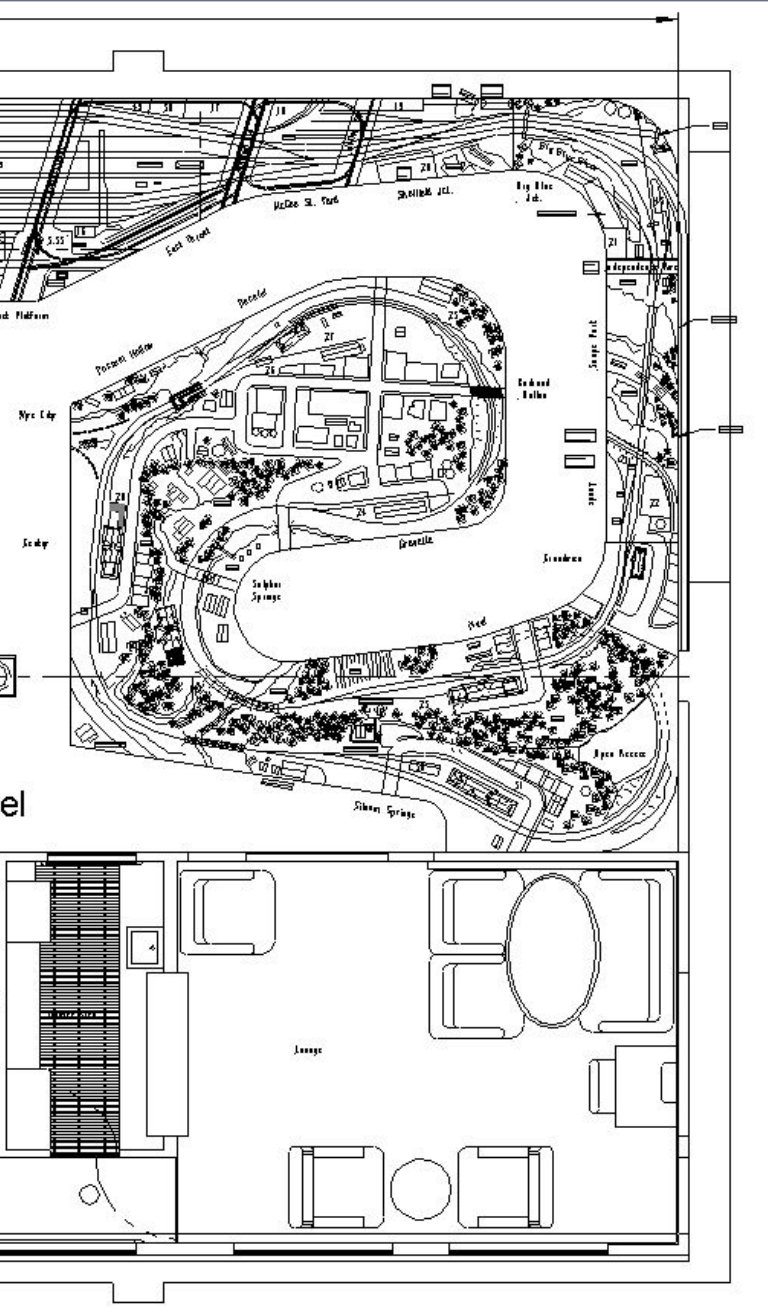
I realized from the start I could not model the station in full HO scale and still fit it in the basement. I tried reducing the scale to two-thirds of HO scale. When I took the mockup station down to the basement, it was too small, looking more like Tulsa Union Station than Kansas City.

I used CAD to convert the plans to 80% of HO scale. I printed these, created a second foam-core mockup, and tested it. It was just the right size for my basement without looking too small.

The only giveaway would be if you placed HO scale figures near the entrance doors, it would be apparent that they would have to duck. The solution to that is don't place any figures immediately adjacent to the doors. Otherwise by model standards the station is huge, and dwarfs cars, trucks, and trains.

The reduction in scale required other adjustments. I needed to stretch the waiting room between the windows to match





20. The master plan for the basement, and model railroad upper level.

prototype track spacing. Also, I needed to stretch the basement level of the station vertically to clear HO scale dome cars. This was no problem with the CAD software.

With the foam-core mockup complete in 80% scale and the East Union Station benchwork set up in the basement, I could put the two together and see what the completed model looked like [24].

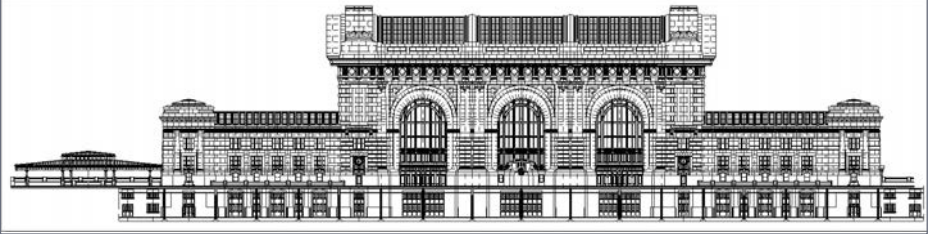


21. A bridge over Swope Park (Right) connected the benchwork for the Union Station to the layout in our garage.

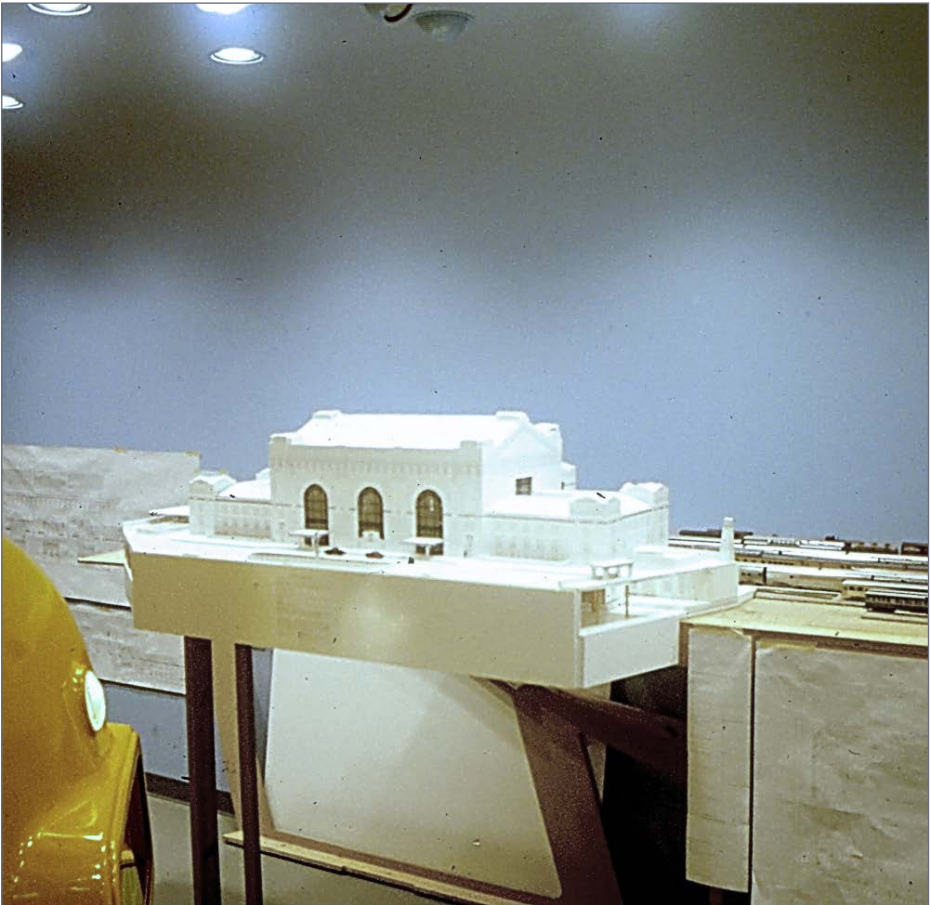


22. East Union Station benchwork in the garage. Note the mirror at the far end.





23. The final CAD drawing of the South Elevation



24. Mockup in place on the layout.

I created mockups of all the major buildings and finally all other buildings and downtown bridges. The foam-core mockups helped me visualize the complex downtown scene in advance and correct problems before constructing any actual models [25, 26].



25. East Union Station mocked-up in foam-core.



26. West Union Station mocked-up in foam-core.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

Foam-core buildings completely occupied downtown Kansas City. I gradually replaced them with actual models. Building the models the same size as the foam-core mockups guaranteed they would fit exactly on the sites prepared for them.

FROM MOCKUP TO MODEL

With the mockups figured out, I could begin building the model. I planned to build Union Station using rubber molds and resin. The 2004 NMRA convention in Seattle prompted me to get some of this completed.

One of the great things about the hobby is all the wonderful people you meet, and friends you make. I swapped favors with a gentleman in Louisiana who helped me machine the pattern for Union Station's large front columns. He turned a beautiful aluminum master column milled flat on the back for me [27].



27. From left: the front column master, the mold, and first of six castings.

I used RTV rubber molding material and two-part casting resins from Bragdon Enterprises (www.bragdonent.com) to complete the first molds and masters. Owner Joel Bragdon talked me through any problems I encountered. I used the one master column to create a mold and six castings.

To help prolong the life of the mold, before pouring the resin, I sprayed gray primer into it to serve as a release. The paint bonds to the resin parts and releases from the casting. This meant that the parts for my station came out gray, which looked more prototypical than the ivory color of the resin.

Next, I created masters for the three large arched windows in the south face. The architect Hunt was fond of this feature, and it can be found on other examples of his work in Joliet, Illinois and Oakland, California.

I planned to do this by stacking layers of sheet styrene. To create the pieces with the detail of the joints in the stonework, I printed the plans on Avery Full Sheet Label material and affixed the labels to the styrene sheet. I used a sharp hobby knife with a no.11 blade to score the joints in the stone and to scribe the styrene where it would be cut out.

WD-40 was useful for removing the labels without harming the plastic. I used methyl ethyl ketone to cement the styrene layers together. With this, the master for the first arch was complete, except for the fan-shaped area of coving that surrounded the arch.

The arch would be tough enough if it were a consistent radius, but the area of coving is wider at the top than down the sides. Joel suggested I use mold makers' putty, which would not interact with the mold material, to create the coving.

The next challenge was getting the putty perfectly smooth with the varying radii. The best tool for this turned out to be the C-shaped back of a micrometer.



Once the area was smooth, I used a knife to mark the joints between the stones of the coving. After that, I had to take care not to damage the soft party before creating the mold.

I had to create all the station's several hundred doors and windows. The three large arched windows on the front of the station were especially challenging. They are a distinctive feature of the station, and very visible with light shining through them.

Done right, they would contribute immensely to the realism. Done wrong, they would give away the whole illusion. As it is now, many times when I show pictures of the model, people have a hard time understanding that it's a model and not the actual station!

To cut the windows from styrene would be excruciating and tedious with all the sharp corners and parallel lines. The small sections would be very fragile. Wood or cardboard would be worse.

I decided to draw CAD artwork for the windows and doors and have Fotocut (no longer in business) etch them from brass. The result was perfect. Each was durable, the lines were parallel, the corners sharp and the edges crisp and clean [28].



28. Styrene master for the front arches. The mold makers' putty for the coving has yet to be added. The attached brass window is crisp and clean.

As time and finances allowed, I drew the plans for all windows and doors and had them etched in brass. I created a door and window schedule like architects in the real-world use.

How many types of windows and doors were there and how many of each? Gradually I accumulated all the windows and doors necessary in a file drawer where they would be ready when I needed them.

By the time of the NMRA convention, the central section of the south face with its six columns and three arches was complete. I placed the cut-out piece of foam-core from that area in front of the completed arches. When people asked how I was going to do it, I could simply take the piece of foam-core away and say, “like this” [29].

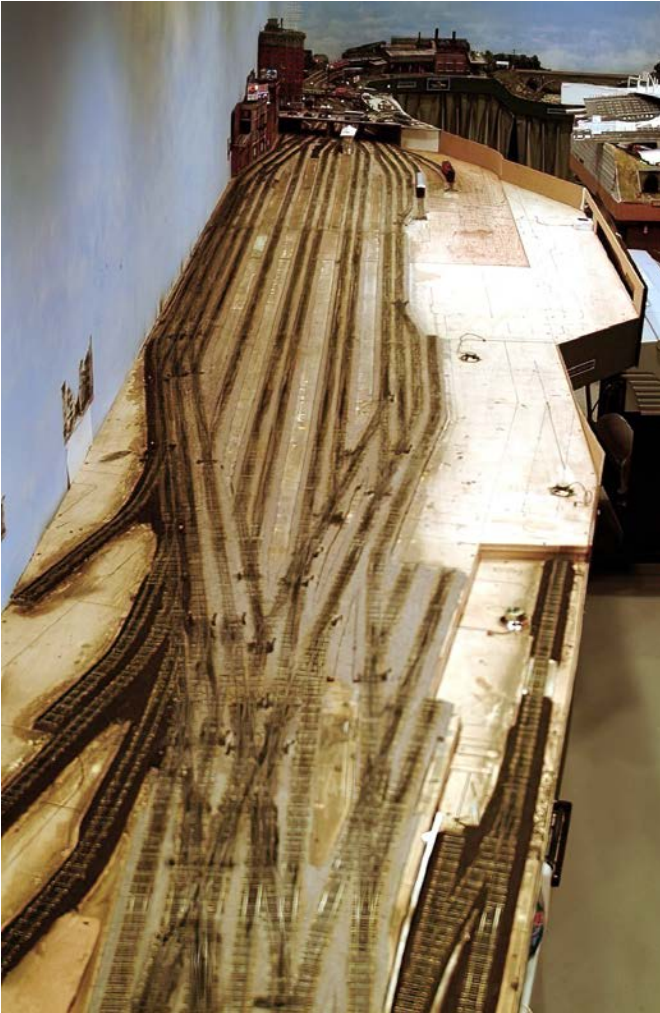


29. The central portion of the south face completed for the NMRA convention tours.



SITE PREPARATION

Now that things are getting serious about constructing the station, it was necessary to do the preparatory site work. This meant installing, ballasting, and testing all the track and turnouts [30].



30. Track and turnouts installed, ballasted, tested, and weathered.

I installed 15 feet of backdrop for downtown Kansas City and Union Station made from enlarged prints of my own photographs. To maintain my 1950s era, I cut away some modern buildings and replaced missing water towers on others. I also replaced modern automobiles and railroad cars with era-appropriate substitutes.

I glued the photographs to 1/4-inch foam-core sheet with spray cement and cut away the sky portion. I cut out windows in strategic locations and lit them from behind with LEDs to create depth [31, 32].



31. Downtown backdrop installed, daytime.



32. Downtown backdrop installed, nighttime.



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)

PUTTING UP PLATFORMS AND TRAIN SHEDS

With the backdrop in place, I needed to build and install 40 feet of station platforms. I built them from 1/8-inch styrene sheet I purchased from a local supplier in 4 x 8 sheets.

I consumed five 4x8 sheets of styrene building the station, platforms, and Railway Express building. I tell visitors that if it's flat, it is probably 1/8-inch styrene sheet. If it isn't flat, it's probably molded casting resin.

For expansion joints along the length of the platform, I built a jig for curbs with three MicroMark styrene scribes positioned in the middle and on each side. I inserted the styrene strips in one end and pulled them out the other, producing perfectly spaced expansion joints. I built another similar jig to properly space crosswise expansion joints.

I sprayed the platforms with Testors Camouflage Gray and weathered them with dilute India ink and Bragdon chalk. I then glued the platforms in place with Liquid Nails.



33. Forty feet of platform created, weathered, and installed.

Next came eight feet of platform canopies. The prototype canopies were unique. The architect wanted the platforms to be well-lit especially during daylight hours. To accomplish, this the outer portions of the canopy were built from 12" x 12" glass squares set into iron framing with lead used as a seal [34].

This did not work well. The severe temperature changes in Kansas City from summer to winter broke the seals, and the glass block sections began to leak. This was corrected by simply tar-papering over the whole area.



34. The Union Station platform canopies as built. Note the glass block sections.



I chose to model the canopies with the glass still uncovered to make the trains more visible as they pass through the station. Otherwise, they disappear entering one end of the station and only appear again exiting the other end [35].

About this time an article appeared describing how someone modeled a similar canopy. He created the trusses for his model from laser-cut 1/16-inch acrylic plastic.

I wrote to him and told him about my project, and he graciously agreed to cut the trusses for Kansas City. I assembled them using MEK liquid cement. The lattice girder columns came from Central Valley [36, 37, 38].

I adopted the practice of using heavy brass wire to carry the electrical current for the dozens of LEDs that would light the



35. The east end of the train shed.

platforms. One wire carries the positive and another wire the negative current. The wires can be soldered to anywhere along their length and are strong enough to support the LEDs and their attendant current-limiting resistors [36].

BUILDING THE WAITING ROOM

With the platforms in place, I could begin work on the main building. I began with the T-shaped waiting room at the rear of the station. I built the basement level from sheet styrene and fitted it to the platforms and tracks [39].

I built the rest of the waiting room from styrene sheet and strip. This section contained no complex stonework, so I did not need masters and molds. Once the waiting room was complete, I test-fitted it to the model railroad [40, 41].



36. The far east end of the train shed seen here upside-down on the workbench. Note the wiring for LEDs.





37. The west platforms at night.



38. The west canopy is in the distance, the east canopy in the foreground. The bare areas of plywood in the middle form the base for the Union Station.

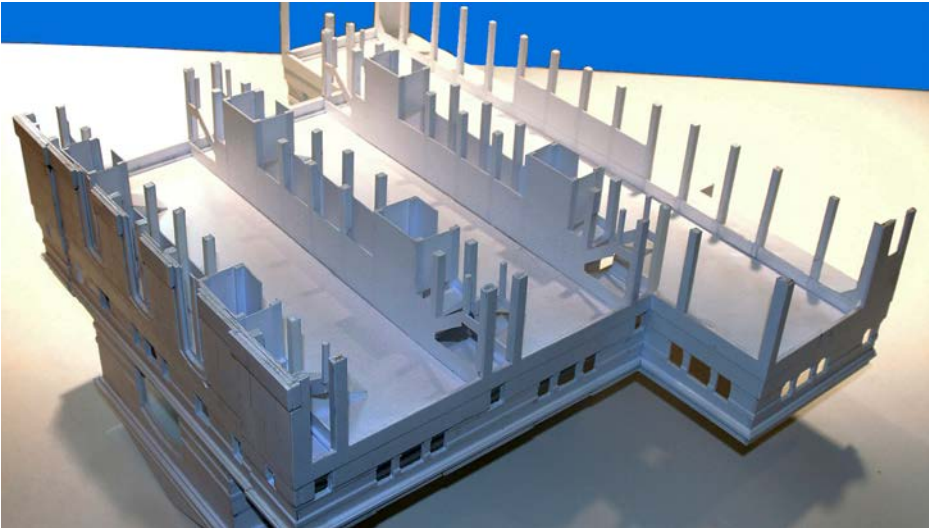


39. Fitting the waiting room basement level.



40. The waiting room shell completed from sheet and strip styrene plastic.





41. The waiting room portion of the Union Station viewed from the bottom.

THE BASEMENT AND EXPRESS BUILDING

I built the basement level station driveway with 1/8" sheet styrene. The convenient part of this is that it can be done on the workbench and then set in place on the railroad.

I moved to the left of Union Station to complete the base for the Railway Express Agency building and the driveway in front of it [43]. I built the REA building on top of the base using sheet styrene with etched brass doors and windows. The rooftop skylights were laser-cut from sheet plywood [44].

With the REA shell complete, I created the sidewalk and base for the head house and the plaza -level driveway [45]. The front portion of the Union Station will be constructed here.

The basement of the prototype Union Station was constructed of poured concrete. Above that at street level, the lower

portion of the station was constructed of polished marble with limestone above. In designing the roof for the head house and waiting room, the architect wanted use cast concrete to simulate cut stone.

That's it for this installment. Next time, I will discuss making more castings. ✓



42. The basement level built of sheet styrene test-fitted in place.



43. Bases for the Railway Express building and roadway.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



44. The Railway Express building takes shape.



45. The sheet styrene base for the head house and plaza level driveway.



RATE THIS ARTICLE

Backwoods lumber mill



MRH Running Extra | November 2021

PETER ELSEA BUILDS A WOODEN
SAWMILL KIT...



I DECIDED TO BUILD THE “STEAM SAWMILL WITH PLANER” KIT from KMP Models for my HO scale Little Trees and Surfside layout (model-railroad-hobbyist.com/node/21050). The model is based on the Lazinka mill at the High Desert Museum in Bend, Oregon, which is perfect for my railroad's setting. This kit is intense, composed of scale lumber, metal castings, and 16 pages of instructions and illustrations [1, 2, 3].

The instructions are quite detailed and reasonably clear, but the order of operations was not always the most efficient or



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

even possible. The illustration figures are not in construction order but scattered around to save space. Figuring out which illustration corresponds to each drawing is an important step that can take a few hours.

STAINING THE LUMBER

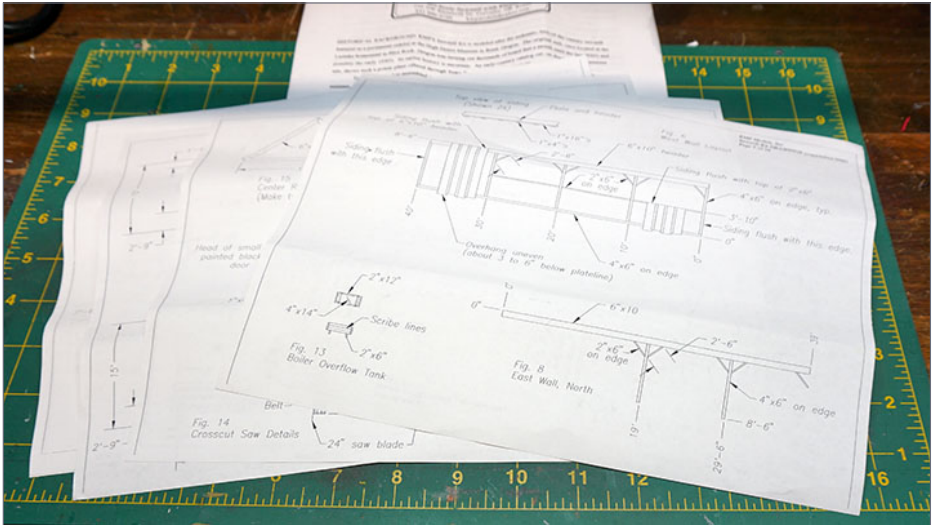
The first part of preparation was to stain the scale lumber. My layout is in the redwoods, and I wanted to build the model to represent old-growth heartwood [4].



1. KMP Models' steam sawmill kit.



2. The kit includes scale lumber for the structure and some white-metal castings for machinery.



3. Instructions consist of eight pages of instructions and eight pages of drawings.



4.The color I was aiming for: 90-year-old redwood in the cupboard under the stairs in my house.

I started with a bottle of Builders In Scale "Red" wood stain, but after several applications, it looked more like cheap pine dyed red than heartwood [5]. I needed to shop for another stain that would darken the wood but retain the red glow.

Redwood turns gray when exposed to the sun and the elements, so this was the inside color I was fussing about. I decided to proceed with some building and leave the color problem for later.

BUILDING THE MILL FLOOR

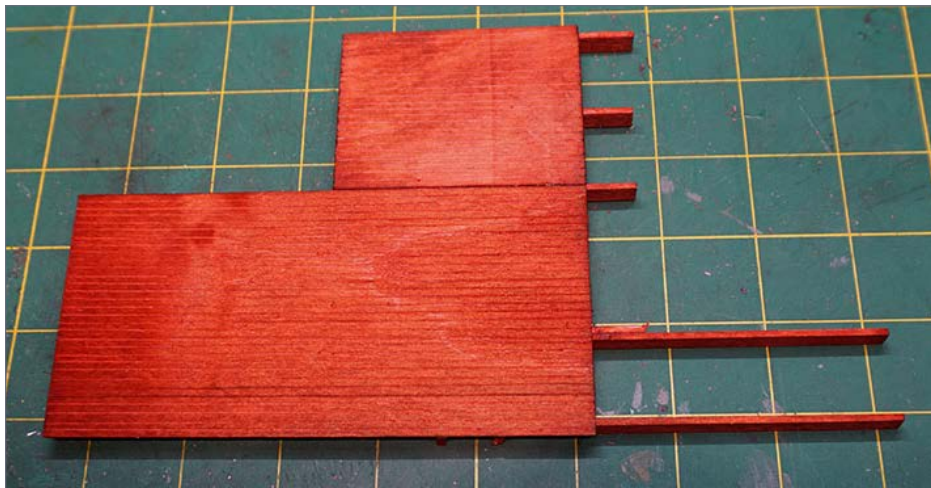
The build started with the floor, which was mostly thin plywood. The instructions said to build the floor and then scribe the plywood to represent floorboards. I didn't think the assembly would withstand the pressure of scribing, so I scribed the plywood before assembly.

The floor joists extended well beyond the edges to support a deck, built board-by-board. I used an NWSL chopper to keep the ends square and lengths uniform, and various tools to keep the boards squarely in line for assembly [8].

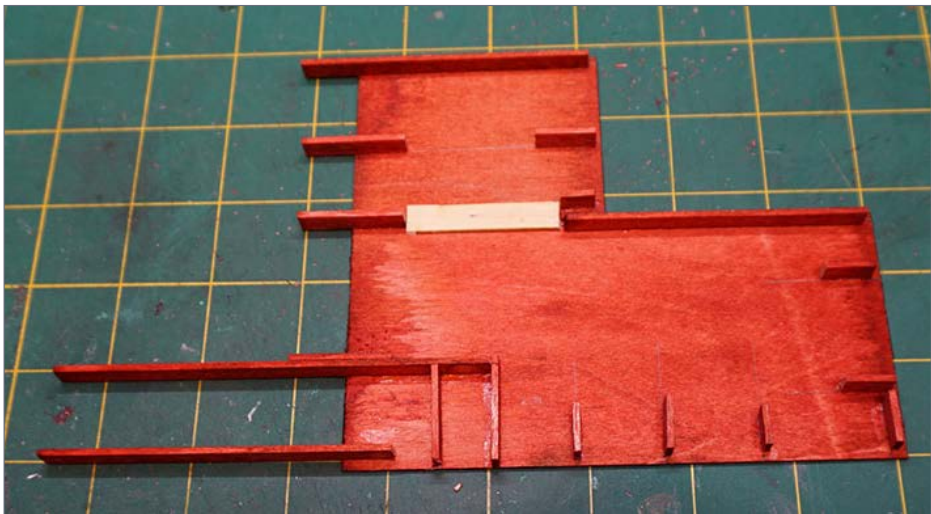


5. The stain looked much more like pine dyed red than redwood.

I put a drop of Aleene's Tacky on the bottom of a silicone bowl, then used an old GUM Proxabrush with bristles burned



6. Scribed plywood to represent floorboards.



7. The underside of the floor assembly. The beams extending to the left in this photo will support the plank deck.



off to spread the glue where needed. I scraped excess off with a toothpick.

I took a shot at fixing the color after the floor was complete. I made some washes from India ink, tried them on the bottom, then put the most promising mix on the top [9]. I had mixed success at best.



8. Gluing the floorboards to the joists.



9. Testing washes.

ADDING MACHINERY

The next steps in the instructions were to build the machinery for sawing and planing lumber. The castings were decent, with thin, easy-to-clean flash and no sprue marks. There were a few voids, but not where they will show.

I used a diamond file to remove all flash marks from the metal pieces and burnished them with one of my old flute tools. Then I applied a coat of black primer to everything. After that, it was just assembly and painting.

Many of the assemblies were built on the floor, and placement was critical. The instructions give locations in scale feet from the left and bottom edges. I used divider calipers to transfer measurements from a scale rule to the model [10].



10. Measuring placement for machinery.



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)



11. I acquired my bench motor during my flute-making days. With a 1725 rpm spin rate, a high-end chuck, hollow shaft, and custom hand brake, it functions as my “poor man’s lathe.”

Building the machinery was a challenging week-long task. The instructions and drawings did not always match, and there were several techniques to master.

The instructions said to build 17 rollers for the conveyor (where the sawn boards land). The drawing only showed 15, so I added one to each end. Then the instructions said to add one to the saw casing.

I made circular scratches on the saw by chucking it in my bench motor and applying a diamond file while it spun [11]. They don't show in the picture, but they catch the light nicely.

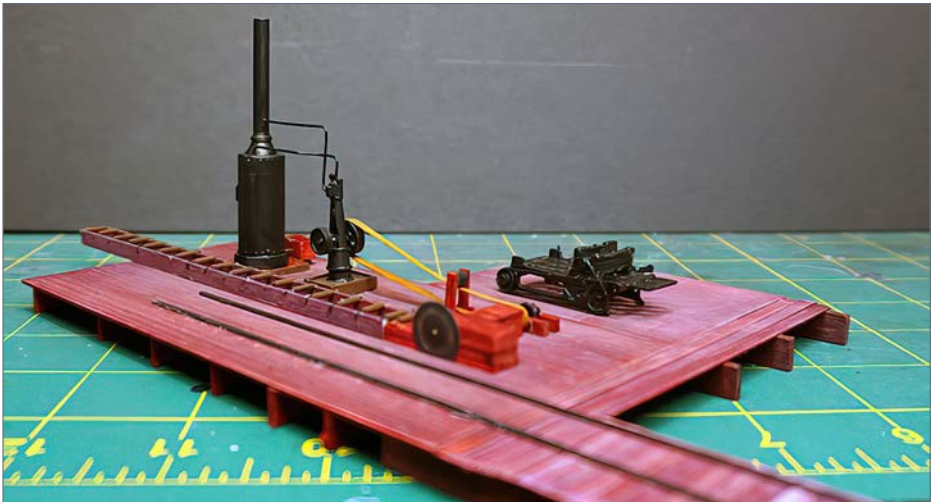
I made the big belt from paper, and it was a pain to get tight. A paper cutter that cuts with a sliding action is the best way to make these belts. There's a lot more belting in the future because everything runs off the steam engine [12].

FINALIZING THE COLORS

The walls were the next step, so I had to address the color once and for all. I went to the local lumber yards and perused their sample chips. The two that looked most promising were Minwax Red Oak and Sedona Red [13].

The process is to soak the piece in stain, let it sit a while, then wipe off the excess [13]. The time the piece soaks before wiping determines the darkness of stain. There can be significant variation from one board to the next, which is an asset in board-by-board construction.

I decided that Sedona Red produced the best color for redwood. I experimented with several applications and soak times and found a short soak time gave the best replication [15].



12. The machinery.

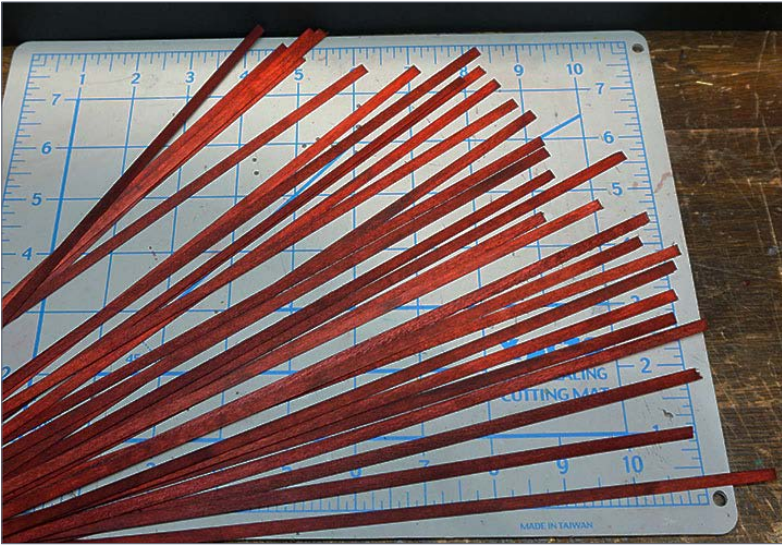




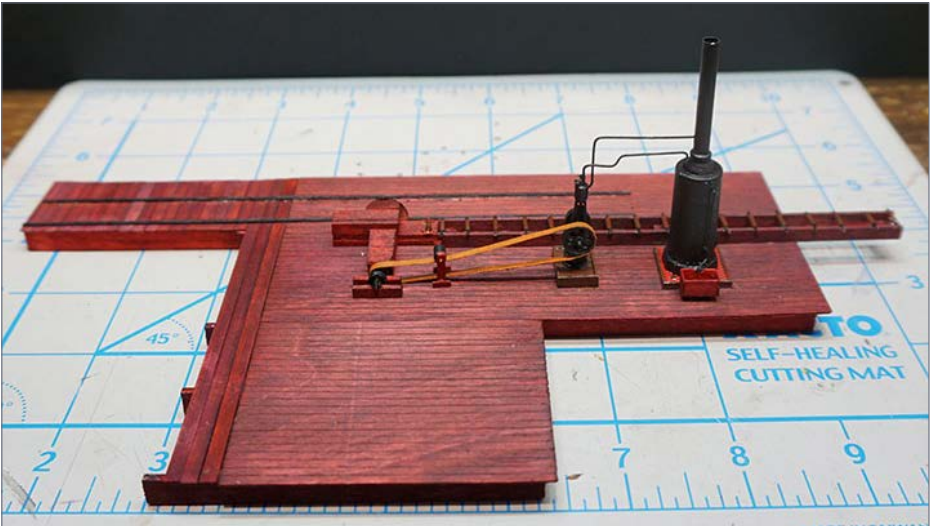
13. The center strip is the unsatisfactory red. The Red Oak stain was too dark. The Sedona Red looked best, though I applied it too heavily in this photo.



14. Working on stain application. I worked outside to avoid fuming the house.



15. Most redwood is a bit more orange but Sedona Red signified redwood for me.



16. I adjusted the color of the flooring with the new stains.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



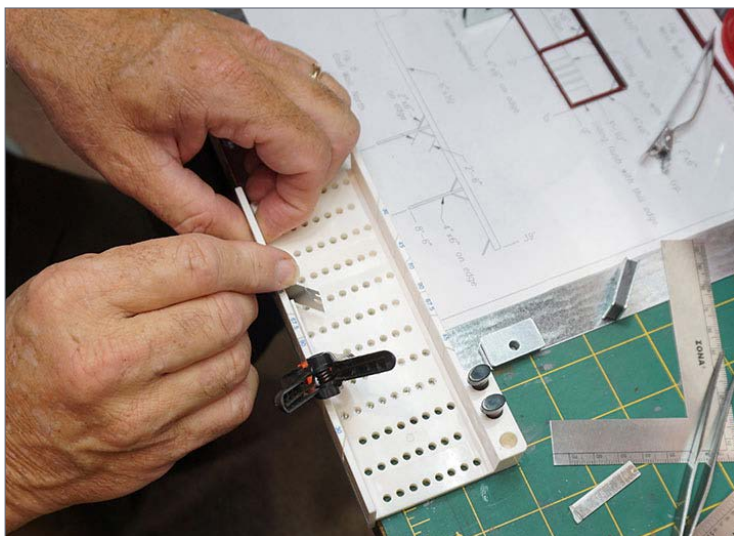
17. My workbench with the magnetic assembly jig. The drawings and a layer of mylar are on top of the steel plate to begin frame assembly. The plans hang from a pegboard to save desktop space.

SETTING UP THE WORKSPACE

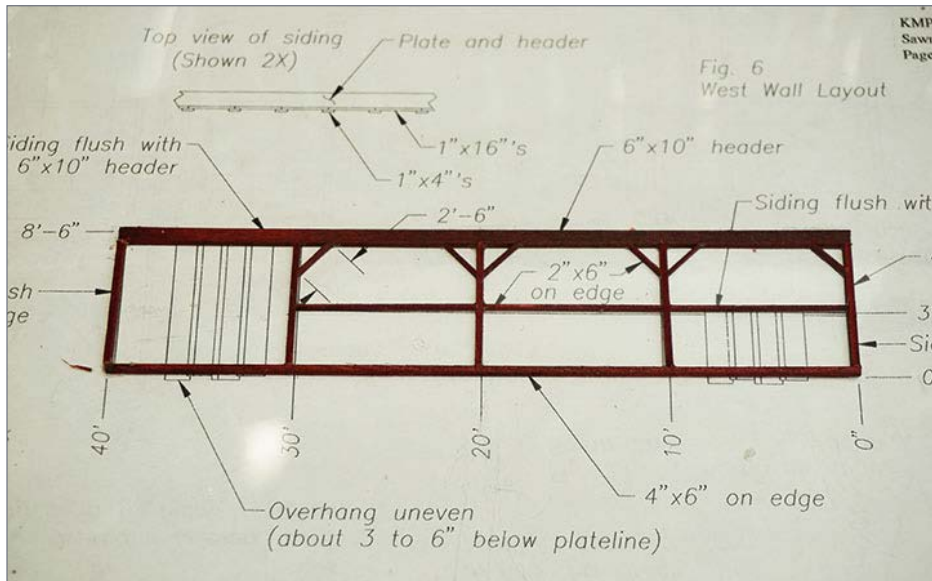
I set up a magnetic assembly base using a 12" x 12" steel plate and magnets from a dozen cabinet locks. The steel plate had a slight warp, but screwing it down to my bench flattened it. The roughly \$15 I spent on this jig was far less than any of the magnetic assembly jigs I found commercially [17].

The magnets hold everything together nicely. They can be used like weights to maintain position or slid sideways to put pressure on a joint.

I used a miter box from Midwest Products with a razor blade to get the angled cuts, and a bit of plastic for a stop so I could cut a batch[18].



18. Cutting angles with the miter box.



19. The finished framework.



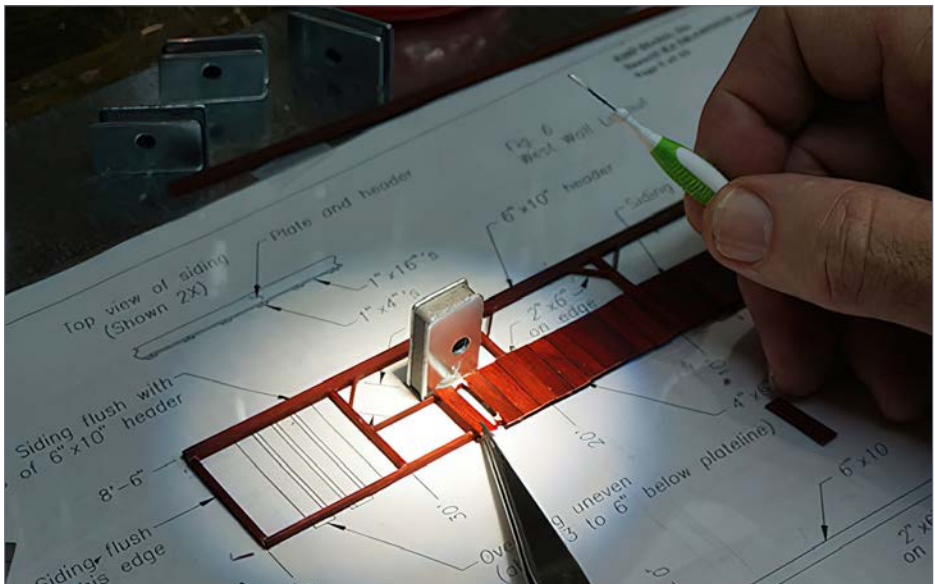
BUILDING THE WALLS

The kit instructions suggested covering the drawings with a sheet of mylar and placing the pieces over the drawings to guide assembly [17]. The instructions recommend gluing the first piece of lumber to the mylar, but I opted for double-stick tape. Most of the joints become glued down a bit because of seepage [19].

Once the framework was done, I began applying the siding. I used a magnet as a guide to keep the tops of the vertical siding aligned. The bottoms could be uneven [20].

I cut the siding boards on the chopper so the ends would be square, but instead of using a guide for length, I stuck down a paper label with marks for the maximum and minimum.

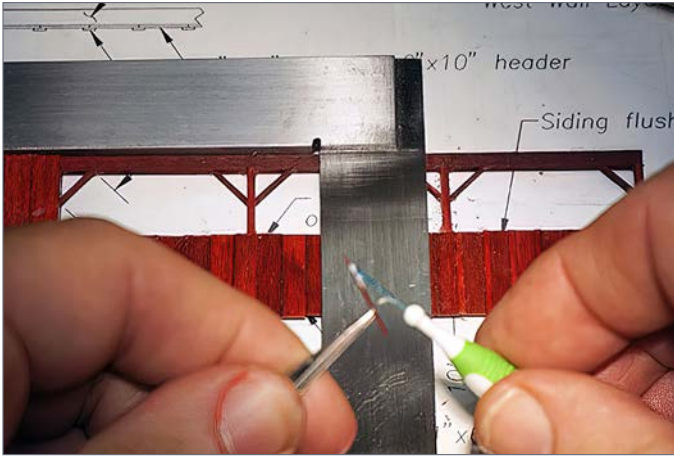
If gluing the siding boards wasn't tedious enough, the next step was to batten each board seam. I lined up the square next to



20. Using the magnets to guide siding alignment.

the seams, applied glue to the batten sticks, and put them in place. I cleaned up any excess glue right away [21].

After about six hours of work, the wall was complete. I detached it from the mylar, trimmed the battens, and used a dental tool to remove excess glue from the back [22]. Five walls to go.

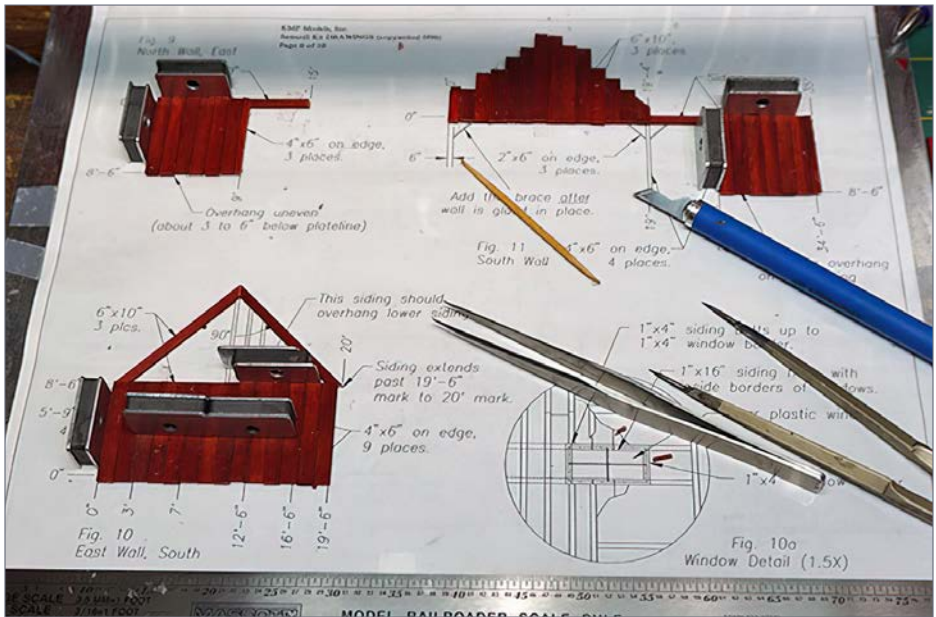


21. Applying the siding battens.



22. The completed wall.





23. Two of the walls on this sheet are gabled, and the wall at lower-left needed a window opening. I needed to trim the boards to fit.

Three of the walls are gabled, which necessitated trimming the siding boards to fit. In other cases, I had to cut out windows [23].

These precise cuts required very sharp blades. Fresh X-Acto blades are sharp enough to the job, though that edge does not last long. You need to be prepared to switch blades frequently for the process.





P. Elsea

SHARPENING X-ACTO BLADES

To save money, I re-sharpen X-Acto blades whenever I can. I first draw the blade on a fine stone, using circular strokes. I push into the edge and lift on the return stroke.

It takes some practice to learn the angle but observing the shiny part of the edge is a good guide. It should be wide and parallel to the edge. About 10 strokes per side is usually enough for a good edge.

To finish the edge, I use a leather strop. For stropping, I pull the blade away from the edge, maintaining the same angle I used for sharpening.

Eventually, the edge of the blade will start to curve. That's when you need to get a new blade.



24. I sharpen my blade with a combination stone and strop purchased from Brookstone.



RATE THIS ARTICLE



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

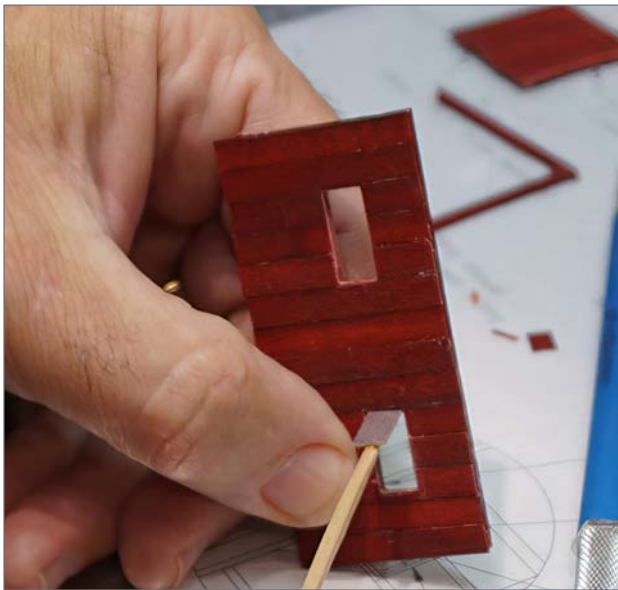
After trimming, I cleaned up the edges with fine sanding film. I used an NWSL Detail Sander, or some film glued to a bit of wood [25].

The windows are old-school, just a piece of acetate with printed muntins. I departed from the instructions a bit here – they specify putting the acetate on the studs before the sheathing. I found it simpler to apply the sheathing first.

I rough-cut the acetate windows before gluing them. Once applied, I trimmed each to hide it under the window casing [26].

I cut the window casing in my miter box with stops to guarantee a square fit. For added depth, I went with scale 2x4s for the casing instead of the 1x4s the plans call for [27].

Because of the window casings and the eaves, I couldn't use a square to line up the battens. Instead, I cut a styrene spacer to keep them straight. The risk was that errors accumulate, but crooked battens against the edges of the 1x16s would have looked worse [28].



25. This sander is made with a piece of adhesive-backed plywood glued to a toothpick. It does a good job in the corners.





26. Trimming the windows.



27. Adding in the window casings



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



28. This spacer helped align the battens.

With that, the walls were complete and ready to assemble. To square the sides and keep them plumb, I used Lego blocks with my magnet system. The magnets worked nicely to keep pressure on the drying glue joints [29].

After five days – or maybe 30 hours – of work, the model was beginning to look like a building. The wall color had really grown on me by this point [30].

The interior details were a slow process. The instructions call for a couple of interior walls that were quite similar to the main walls, but being smaller, they were much more difficult to work with. There wasn't enough room for the magnets to hold everything together, so I supplemented with small nails [31].

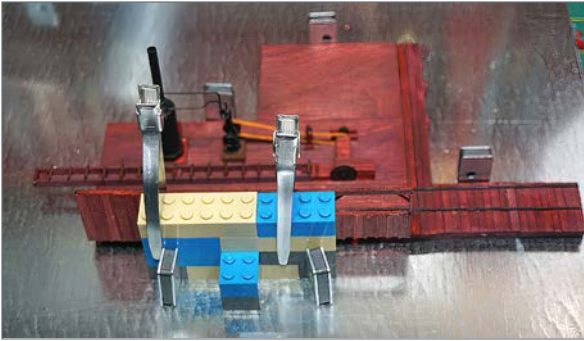
ADDING MORE TOOLS

Aside from the main saw, the kit includes a big planer and a crosscut saw to trim the board ends. The planer is a lovely

BACKWOODS LUMBER MILL | 21

casting, with intricate belt work, assembled from about six parts. The belts are made of paper strips [32].

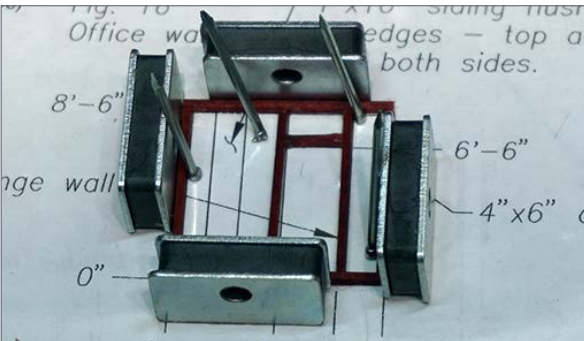
The design for the crosscut saw was skimpy, with just a frame of 2x6s and a belt in the middle. I tried to make it their way about six times, but it kept folding up on me – finally I built a version with beefed-up ends [33].



29. Lego blocks and magnets hold parts square.



30. The main walls are assembled.



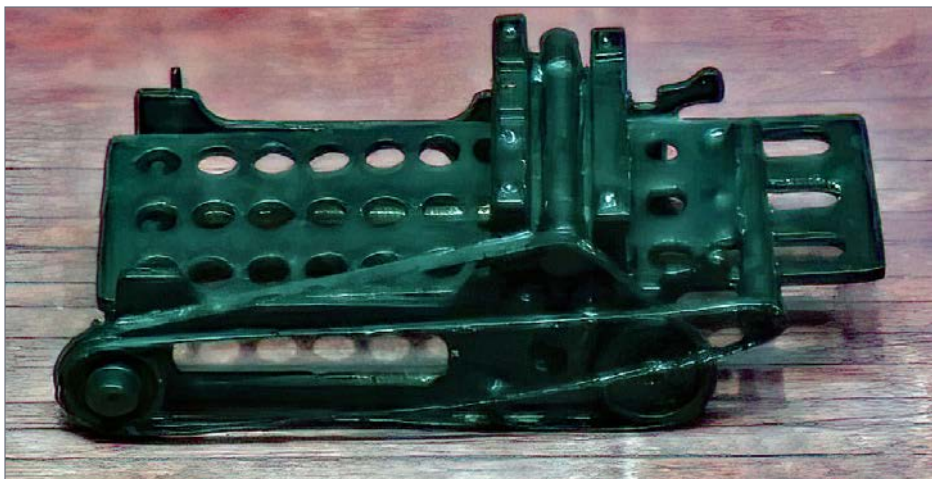
31. I used small nails with magnets to hold the interior walls together.



SUBSCRIBE

[INDEX](#)

[TABLE OF CONTENTS](#)



32. The planer.



33. The
crosscut saw.

The casting for the log carrier needed some serious attention. Its main drive rod was broken, some of the wheels were just blobs, and the dogs – the parts that grab the log – looked wrong. I fixed these issues and may eventually mount a half-cut log on it to complete the look [34].

Since this is a steam-driven plant, belts from an overhead line shaft power all the machines. The kit supplied some 1/8" dowel for the purpose since the shaft is hidden in the rafters. I decided to build something a bit more convincing.

Using my bench motor as a lathe, I turned a plastic-coated wire with one or two layers of styrene tube AC glued on. I carved in pulleys with jewelers' files. My drive shaft system looks much better [35].



34. The log carrier.





35. Pulley drive shaft.

Making the shafts and pulleys was easy compared to stringing the belts. Instead of the printed paper from the kit, I used cedar-shingle paper from RSLaserKits. I used the unnotched paper intended for cap shingles, and cut it into narrow strips.

I borrowed a technique from rigging model ships to string the belts. I threaded the material behind a pair of pulleys and used weights to tension it as the glue dried, then flipped the model and did the other side. This required working at some odd angles, but the results were worthwhile [36].

BUILDING THE ROOF

I built the board-and-batten roof included in the kit, but with difficulty. The kit's instructions called for building the roof's four sections individually and affixing them to the walls, but I preferred to keep the roof removable.

The mill has a detailed interior, which meant a figure might fall over, or a belt or something else might pop loose. Then there is the issue of lighting and maintenance. For me, an attached roof is a pain.

The panels were made of 1x16 boards, just like the sides, but only 1x16s laid crossways held them together. Working with such construction is nearly beyond my clumsy fingers, so this was slow work, especially without the benefit of roof supports.

I used Rite-way angles to help me achieve a perfect right angle for putting the roof halves together. Rite-way angles have magnets that worked well with my system [37]. I also added internal braces to the roof for structural stability [38].

I had to do a lot of trimming on the extension roof where the panels fit together, because the template angle was wrong. I fixed that and adjusted the Rite-way angles.

The plans did not call for a crown batten for the roof! I am amazed at how many structures would have leaky roofs if they were real because the crown is often left out.

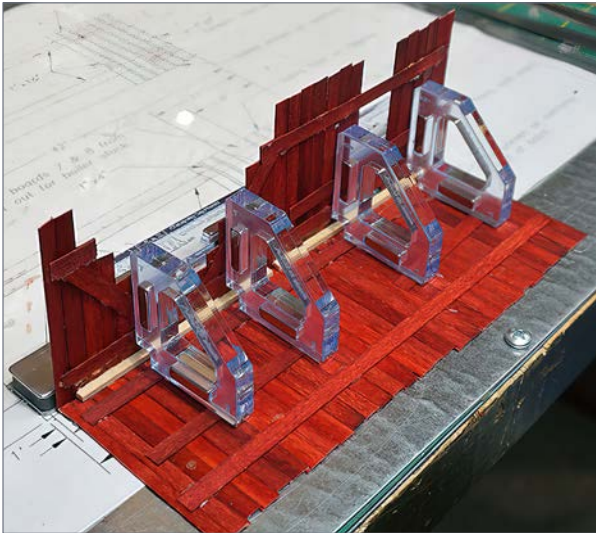


36. The shingle-paper belts have the look of fresh leather.



I used a bit of brass angle to guide a razor saw to cut four scale inches off the glued-down battens, and removed them from the other side – I had not tried to fit any to the triangular extension roof. With that, I installed the crown batten.

I added a batten in the groin and angled the other battens to fit [38]. Unfortunately, I ran out of 1x6 boards, as the kit did not have enough. I filled the hole with some corrugated iron from another kit, which I decided could represent a hurried repair.



37. Rite-way angles helped compensate for lack of roof supports.



38. Internal structural roof supports.



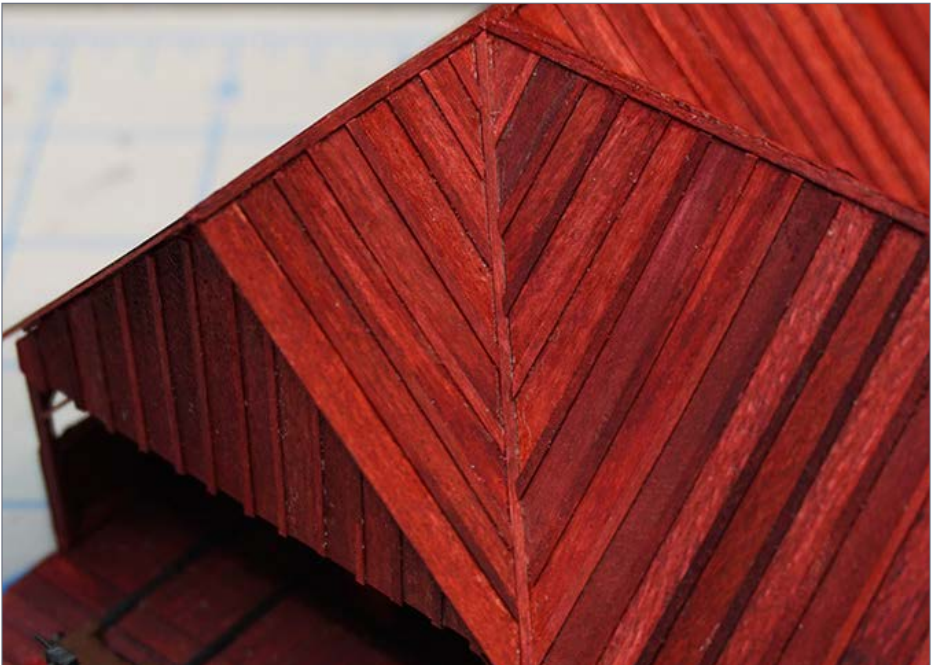
The instructions also left out the plate around the stack. It was a bit of brass with an oval hole filed in it. This scratches paint off the stack, meaning I have to touch-up the stack with a marker every time I remove the roof.

The final step was cleaning up any glue residue I missed earlier. I did this by first applying saliva to the glue spot with a micro-brush. Next, I scrubbed the spot with a fine, stiff brush.

The building will need some weathering – especially the tin roof section will need attention there. I also may add lighting. For now, the model structure was complete [40]. All else can be decided when I figure out a proper space for it on my layout. ☑



RATE THIS ARTICLE



39. The roof assembled. Note the run of the battens on the roof. They should keep the rain out.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



40. The completed model so far.

PETER ELSEA



Peter built his first model railroad as a teenager around 1960. He left it behind to attend the University of Iowa, where he earned degrees in Electronic Music Composition while working as a musical instrument builder and repairman. He then joined the faculty of the University of California as a teacher and electronics technician.

He returned to model railroading upon his retirement in 2013. His current layout is the Little Trees and Surfside (model-railroad-hobbyist.com/node/21050) which is loosely based on the Roaring Camp Railroad near his home. (www.roaringcamp.com) ■

Camas Prairie First Subdivision

Part 1



MRH Running Extra | November 2021

TIMOTHY DUDLEY STARTS
BUILDING THE TOWN OF **GREER**,
IDAHO IN TWO MODULES ...



**MODELING THE INTERMOUNTAIN WEST AGAIN
AND MAKING A SECTIONAL LAYOUT** I could move
sounded exciting, and the one-module approach (TOMA) ideal.
I chose the Camas Prairie because I love the grain and lumber
industries as modeling subjects, and I could model two
railroads sharing trackage rights.

The initial layout sections for my 12 x 12-ft room will model
Greer, Idaho with its grain mill scene and Kamiah, Idaho with



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

CAMAS PRAIRIE FIRST SUBDIVISION | 2

the Clearwater River bridge and a compressed representation of the chip-loading facility. I started these layout design elements with the idea of expansion as more space becomes available.



1. Starting with pink insulation foam, I did some track planning with flex track from my last layout. This is the track configuration for Greer.



2. I glued layers of foam together using Gorilla Glue. I built up a hill with foam (rear, center) and carved foam away (right) to represent the Clearwater River.



3. I carved a roadway with a Surform tool and notched an embankment for the Highway 11 bridge over the Clearwater River. I used weights to hold the foam while the glue dried.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



4. The underside of a scratchbuilt expanse of the Highway 11 bridge across the Clearwater River.



5. Here is the bridge in place. I used Rix Early Railings on the sides.



6. I used PL-300 foam adhesive to secure track to the bridge scene module.



7. I added all the track to the two connecting layout modules to complete Greer. I began initial shaping of the mountain with my Surform tool, and painted the module surfaces tan. True to the TOMA approach, I began with the simpler module, which has only a small metal building and the remnants of a scale shed.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



8. I used dollar-store lightweight spackle to fill in the cracks in the layers of foam.



9. I added lightweight Hydrocal rocks, colored them, then added sifted dirt.



10. I applied basic scenery texture, different colors of dirt, ground foam, and static grass to the mountain area. Highway 11 runs just behind the angled mountain area.



11. With trees and riverfront foreground scenery, the scene begins to take shape.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



12. The first module takes shape. Now onto the track and structure area.



13. Pulling dimensions from photos and Google Earth, I built a cardboard mockup of the steel shed.



14. Using Google Earth as a guide, I applied dirt and made wheel tracks. I matched textures, static grass, and trees to the scene.



15. A shot of the scene with the unfinished module attached. The square to the right will have a small house.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



16. I scratchbuilt a shed and put it in place. I painted it, but it needs weathering. I added a foam riser to match the elevation of the structure from photos.



17. The first module needs a little more scenery texture and blending to be complete.



TIMOTHY DUDLEY



When Timothy was a little boy, his dad hid an AHM train set so Timothy wouldn't find it until Christmas morning. That set started his love affair with the hobby.

He and his brother built a four-by-four foot oval layout on a piece of plywood that barely fit under their bunk beds. Since then Timothy has built a dozen or so layouts in N and HO scales.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



18. Next time I'll discuss how the rest of Greer comes together in the second module. Here is a shot just to whet your appetite.

**Tell your
friends
about
Running
Extra!**

We depend on word-of-mouth to grow ... if you don't share us, we don't grow

Timothy served in the US Navy from 1984-1990 and is now a licensed Assemblies of God pastor (www.newlife-cc.com), co-pastoring a church with his wife Cindy in Hurricane, Utah. He also enjoys playing bass on the worship team, train watching, and writing. ■



RATE THIS ARTICLE

In praise of dabbling



MRH Running Extra | November 2021

DON VAIL SEARCHES FOR THE KEY
TO HOBBY ENJOYMENT ...



MODEL RAILROADERS HAVE MORE OPTIONS

THAN EVER BEFORE. The selection of off-the-shelf products is expansive, and of ever-increasing quality. However, all these options bring choices.

The choices are not just about era, prototype, or technology. They are also about what makes each of us happy. After all isn't that what this is all about?



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

We all have our own definitions of what makes us happy and what gets in the way. A layout is great because it makes us feel great, even if it does not find its way into publication.

Each of us adopts the Johnny Mercer school of model railroading: "Accentuate the positive, eliminate the negative." We enjoy facets of model railroading, try to avoid pitfalls, and repeat aspects in what we wind up doing. Here are a few you may recognize.

AVOIDING PRESSURE TO COMPLETE

A while back, *MRH* published my track plan that took up the walls of a typical one-car garage. It wasn't too intrusive into the other practical uses of a garage, but it would still be a significant dedication of space, time, and energy to get the railroad to some visible and satisfying stage of completeness.

After whatever negotiations are settled for the space, would I be ready to commit to showing progress? Would I be OK with seeing, or justifying to others, progress that is apparently stalled at one phase or another?

The question would be the same even if I had a separate and dedicated modeling space. Using that space may still lead to an expectation of "getting something done."

I have enough deadlines in my life. Maybe I should start only what I don't mind seeing dormant if I choose to concentrate on something else for a while.

SHORT ATTENTION SPAN

I marvel at the huge and wonderfully crafted layouts in hobby publications. I wonder how many years in the basement it took to get there. Are the creators of these marvels still satisfied with the decisions that they started with?

IN PRAISE OF DABBLING | 3

I wonder if it was worth it years later. Or if they were ready to tear everything down and try something else halfway through.

Some accomplished model railroaders such as Chuck Hitchcock and Dave Barrow have been open about switching gears and taking new paths as interests and situations change. I'm not sure how comfortable I would be dismantling something like Dave Barrow's previous Cat Mountain and Santa Fe, but I do enjoy reading about what choices and challenges led Mr. Barrow to do that.

I do know that I would be more comfortable taking a new direction if I could say that the previous mission was accomplished.



1. HO shelf layout: An industrial scene in 4.6 square feet. Jack Trollope's Box Street Yard inspired the plan. The backdrop of silhouette cutouts worked well for this sparsely scenicked layout. The use of a sector plate was a real space saver. I wish I'd done more with the lighting.



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)



2. On30/On9 layout: How much railroading can you squeeze into less than 4 square feet in O scale? Narrow gauge(s) and the abandonment of traditional scenery and structures to the rescue. For something like this, the actual bones of it all provide the visual sense. Fun and challenging to try a new concept.

JUST FOR THE HECK OF IT

Certain patterns and trends are apparent in the many layouts that I've built or considered. More industrial switching and less open-space cruising. A move to the modern era. Fascination with British layout design. But how do you fit all those infatuations into a single layout? Well, you probably don't.

Sometimes it is provident to simply dabble. Test out a new obsession or curiosity. Consider the next layout to be a "sketch" rather than a finished work of art.

This usually means a smaller, quicker – and cheaper – project. It also means that if the experiment is successful, components can find their way into a more permanent follow-up.

Or it may mean that it is just a fun diversion. You can always be a serious, big-time model railroader later, but for now it's all about the latest experiment in your own model railroad laboratory.

LONE WOLF VS TEAM

Friends and helpers are great. They can add skills and outlooks and share your interests and enthusiasm. They can also help build and operate bigger and better with a shared vision.

The problem is that I can't always expect others to go along with my vision. It limits the scope of my layouts, but that's OK. Mine is mine and "ours" can take place some other place or some other day.

LIVING THE DREAM

I have built many decision grids for potential railroads over the years, scoring many designs against many entirely rational factors.

What happens then? Do I simply adopt the option with the highest numerical score?

No, of course not. In each case I find myself rooting for one scenario or another regardless of what logical scoring I impose.

That one scenario just looks and feels right, and that is what I end up choosing. I have never looked back and regretted the choices, realizing that what I end up doing are just reflections of who I am.

So celebrate what makes you, you. If small is beautiful, then make it so. The same with cutting-edge, quirky, or grandiose. It's just fine that it is all about you and the world that you are building, and that is why this hobby is forever wonderful and rich in possibilities. ☑



DON VAIL



Don resides in San Antonio, Texas but grew up not far from the Santa Anita station along the Santa Fe's Los Angeles Division, Second District. Passenger trains no longer stopped there but the horse cars still transported thoroughbreds to and from the racetrack.

His modeling started with HO loops on boards in the garage, and migrated to numerous N scale projects from high mountain runs to Linn Westcott's "Switchman's Nightmare." Don still considers his model rail projects ongoing discoveries and experiments. There is a new N scale industrial layout started along with plans for an On30 "what-if" layout located around San Simeon Bay in central California. When not railroading, Don is a marketing manager in financial services, and enjoys hiking, biking, and exploring local barbecue and Tex-Mex. ■



RATE THIS ARTICLE

**Did you know
there's an
MRH/RE index
available?**

CLICK TO FIND OUT MORE

THE AH-HAH MOMENT

column



MRH Running Extra | November 2021

JOE FUGATE FINDS THESE ODD-LOOKING
PAINT BRUSHES TO BE AMAZING ...



RATE THIS ARTICLE

WHEN PAINTING DETAILS, HAVING GOOD PAINT BRUSHES REALLY HELPS. Recently, I went looking for some reasonably-priced detailing paint brushes and I stumbled upon these brushes with quite odd-looking handles.

As I investigated further, I found a number of reviews talking about how amazing these paint brushes can be for giving you a lot of control when painting tiny details. Those contoured bulges on the handle really make a huge difference, the reviews claimed.

So I bought a set – they turned out to be quite affordable (~\$20 US). All I can say is: *wow!* They may look crazy, but boy does that handle bulge give you tremendous control. *Ah-hah!*

As a side benefit, the paint brushes no longer roll off my workbench.

I also recommend you get the [MRH Acrylic Painting Guide](#) (eBook is free to registered MRH forum members) and follow the brush painting best practices outlined there. You will have greater success with your brush painting efforts if you do.

One thing not covered in the MRH book is how to clean your brushes when you finish a painting session. For that I recommend getting a bar of conditioning hand soap. I cover the details of cleaning your paint brushes with this method in my [May 2020 Running Extra Publisher's Welcome](#).

Following these best practices with your paint brushes means they will give you many years of satisfying service. ☑



SUBSCRIBE

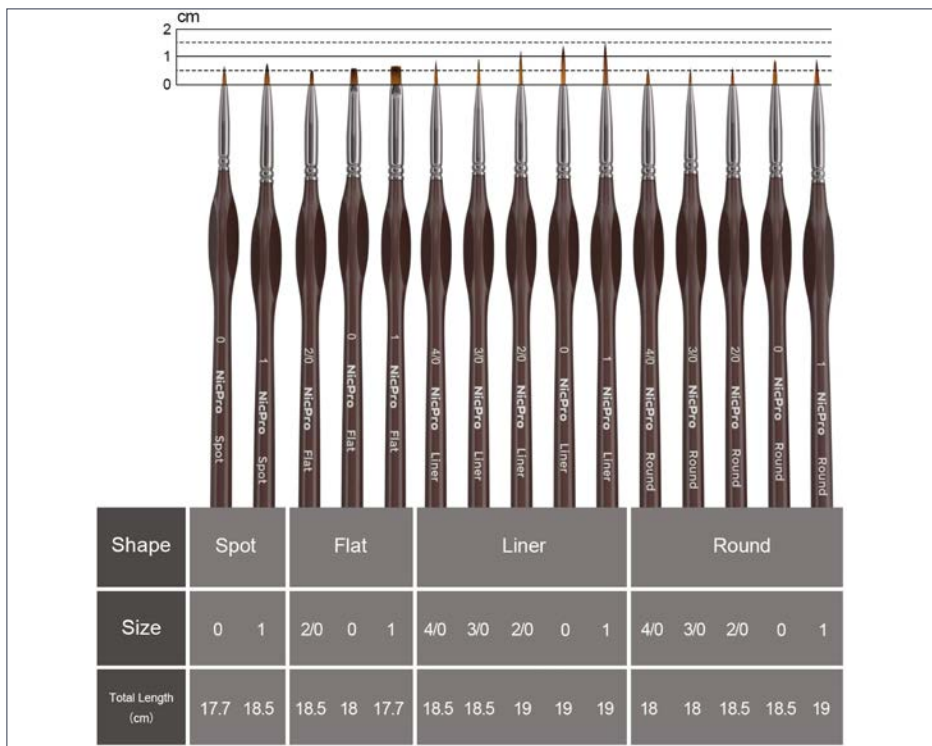
INDEX

TABLE OF CONTENTS

THE AH-HAH MOMENT | 2

1. Don't let the odd-looking handles on these paint brushes throw you. That triangular bulge on the handle gives you far greater control for detailed painting work than a normal round brush handle.

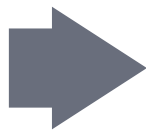
2. This diagram shows the various brushes you get in this set. Pretty much everything you need for fine detail painting. ↓



To get a shopping list for this article, visit the *MRH* website at this link: mrhmag.com/magazine/running-extra/2021-11/ah-hah-moment#shopping

Bonus section!

Here are all the pages from
the November issue of
*Model Railroad
Hobbyist magazine*
as well!



[SUBSCRIBE](#)

[INDEX](#)

[TABLE OF CONTENTS](#)

HAVING FUN WITH TRAINS

NOVEMBER 2021 | FREE

MRH

MODEL RAILROAD HOBBYIST

ALSO:

- Stopping blocks in staging
- Military model load examples
- Weathering tar paper roofs
- Modeling pine/fir trees
- ... and more inside!

Nick Campbell does ...

Extreme weathering of this covered hopper

► **READ NOW**



DOWNLOAD

[TABLE OF CONTENTS](#)

Now Available From

ATLAS MASTER® N 53' EVANS DOUBLE PLUG DOOR BOX CAR



Chicago & North Western



Grand Trunk



Van Brode Milling



Illinois Central



British Columbia Railway



Astoria Plywood



Boise Cascade



Conrail

FEATURES:

- 70-TON ROLLER-BEARING TRUCKS
- READY-TO-RUN
- ROOF OVERSPRAY
- ACCUMATE® COUPLERS

ACCUMATE® COUPLERS ARE MADE UNDER LICENSE
FROM ACCURAIL, INC.

DON'T MISS OUT!

CLICK HERE!

FOR MORE INFORMATION OR TO LOCATE A DEALER, PLEASE VISIT WWW.ATLASRR.COM.

ATLAS MODEL RAILROAD CO., INC. • 378 Florence Ave., Hillside, NJ 07205

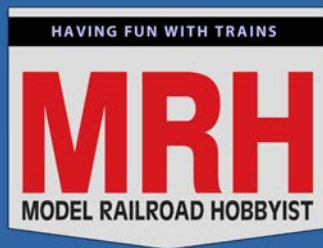


REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

STAFF



Model Railroad Hobbyist | November 2021 | #141

Editorial Staff



Joe D. Fugate, Publisher
and Editor



James Regier, Assistant
Editor



Patty Fugate, Pasteup
and Layout



Richard Bale, News and
events



Jeff Shultz, News and
events, Tech Assistant



Mike Dodd, Copy Editing



RATE THIS ISSUE

ISSN 2152-7423

Advertising

Les Halmos, Account Manager

Jean-François Delisle, Marketing Assistant

Regular contributors

Eric Hansmann, Contributing editor

Jim Six, Limited Modeler column

Ken Patterson, Reporter-at-Large

Rotating Columnists

Jack Burgess, Getting Real column

Marty McGuirk, Getting Real column

Nick Muff, Getting Real column

Mike Rose, Getting Real column

Tony Thompson, Getting Real column

Rob Clark, Imagineering

Dave Meek, Imagineering

Ray Dunakin, Imagineering

Published for the glory of God. [What's this?](#)

MRH SPONSORS



Model Railroad Hobbyist | November 2021

A - L



acculites.com



railroadhobbyshow.com



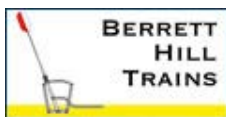
archertransfers.com



www.atlasrr.com



bachmanntrains.com



berretthill.com/trains



blairline.com



coffmaneng.com



deluxematerials.co.uk



www.digitrax.com



dwarvin.com



esu.eu/en



handiaidtrack.com



ghbintl.com



iascaled.com



krmodels.ca



litchfieldstation.com

[Vendors: Get your clickable logo on these pages ...](#)



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

MRH SPONSORS | 2

M - Z



mapleleafrains.com



micro-trains.com



store.mrhmag.com



www.modelrectifier.com



handlaidtrack.com/mt-albert-scale-lumber



ncecc.com



www.pwrs.ca/main.php



rapidotrains.com



ringengineering.com



roometteslighting.com



scaletrains.com



soundtraxx.com



sodigi.com



sbs4dcc.com



tamvalleydepot.com



trainfest.com



walters.com

Looking for something? Check the MRH Marketplace!



Take me there!

NEW ROADNAMES AND ROAD NUMBERS



N de M SD40-2



CSX SD40-3



SANTA FE Snoot

REBUILT SD40-2s



NS Admiral Cab

ARRIVING NOVEMBER 2021



PREORDER NOW


SCALE
 TRAINS

WWW.SCALETRAINS.COM/ROADTRIP
 ScaleTrains • 7598 Highway 411 Benton, TN 37307
 844-9TRAINS 844-987-2467 • International 423-299-3689

PREPRODUCTION MODELS SHOWN



© 2021 ScaleTrains.com,
 Inc. ScaleTrains Road
 Trip, and respective
 logos are trademarks of
 ScaleTrains, Inc.



REGISTER
 (free)

[INDEX](#)
[TABLE OF CONTENTS](#)

PUBLISHER'S MUSINGS



Model Railroad Hobbyist | November 2021

JOE FUGATE UPDATE ON THE RUN LIKE A DREAM LOCOMOTIVES BOOK ...



TWO OF MY THREE *RUN LIKE A DREAM* BOOKS HAVE BEEN RELEASED: *TRACKWORK* AND *ROLLING STOCK*. Yet to be released: *Locomotives*. Once it's complete, this book should be around 100 pages.

There's been a lot of water under the bridge since I started to write *Locomotives* in early 2020, so it's time for an update on this book's status.

Put on the back burner in March 2020

I started the *Locomotives* book in late 2019 and released Sneak Peek #2 in early March 2020. At that time, I estimated I had nine months left to go in writing this book.

Then as we all know, the world turned upside down in late March 2020. Due to the uncertainty about the future in those early days of the pandemic, our monthly sales plummeted 75%. In order to keep the lights on at MRH Media, we had to lay off our normal staff of contractors who help us run the business.

My wife Patty and I basically ran everything related to editorial work for several months. Once modelers got used to the new normal with lockdowns, sales started to pick up again.

PUBLISHER'S MUSINGS | 2

The holiday season for 2020 with the lockdowns still in place had superb sales. All told for 2020, thanks to excellent holiday sales, we ended the year just 1% below our sales for 2019.

Meanwhile, all extra-curricular projects such as the *Locomotives* book got shelved.

Thanks to the sales recovering in 2020, as 2021 dawned, we were able to bring staff back on. Some of the staff had gone on to greener pastures, so we had to hire some new talent, most notably, James Regier, as Assistant Editor.

We also had to rethink TrainMasters TV, as the pool of studio segments dried up and Barry Silverthorn retired. We have spun up the new virtual *Backshop Clinic* segments and as of this month are bringing back *Notch8* as a virtual segment with Bob Fallowfield. By December, we will be bringing back *DCC Decoded* as virtual.

ADVERTISEMENT

NEW SERIES! RAILROAD MAGAZINE 'YEARS GONE BY'

Founded in 1906, *Railroad Magazine* was the first, and one of the most popular railroad pulp publications, containing first-hand railroad stories and informative articles. It was published until 1979 when it merged with *Railfan Magazine* to form *Railfan & Railroad*, now owned by White River Productions. This series which starts in March 2022 will consist of 12 uniquely decorated cars to commemorate *Railroad Magazine*.

\$27.95 Each

N Scale renderings shown for representation only.



**MICRO-
TRAINS®
LINE**

CLICK HERE FOR MORE INFO

N Z
SCALE 1:160 SCALE 1:220



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

BACHMANN



TAKE CHARGE

WITH THE LATEST IN HO SCALE PASSENGER POWER

The future of long-distance passenger railroading is heading your way. Bachmann has partnered with Amtrak® and Siemens Mobility to bring you an industry first - our brand new ALC-42 Charger is arriving just as the real units are being delivered from the factory! Based on the highly successful SC-44 Charger, the ALC-42 is designed specifically for cross-country service on America's most scenic and storied routes, displaying an updated appearance with a new nose profile and cab door configuration. Thanks to both Siemens and Amtrak®, Bachmann's ALC-42 has been developed using original design documentation and employs prototype field recordings for maximum realism. Features include a TCS WOWSound® CD-quality 16-bit 44,100Hz decoder with Audio Assist® for easy configuration without CVs, and a Keep-Alive® device for uninterrupted operation, even over dirty track. The WOWSound® diesel-electric locomotive package includes an authentic horn, bell, prime mover, startup/shutdown, compressor, cooling fan, coupler close/release, brake release/application, crew alert, grade crossing quill, station announcements, and more. Take charge of your long-distance passenger operations; bring the Amtrak® ALC-42 to your HO scale railroad.



AMTRAK® #300
(Phase VI)
Item No. 68301



AMTRAK® #305
(Phase VI)
Item No. 68302

HO
SCALE



AMTRAK® #301 - 50th Anniversary "Day 1"
Item No. 68303

OFFICIAL
LICENSEE
of
AMTRAK®

Features include:

- Siemens-approved design
- DCC sound-equipped for sound, speed, direction, and lighting control
- TCS true CD-quality audio in 16-bit, 44,100Hz sound
- Keep-Alive® device that keeps your engine running during power interruptions due to dirty track or loss of electrical contact
- dual-mode NMRA compliant decoder
- voice-guided Audio Assist® programming tool for easy setup of almost all decoder functionality
- directional headlights and marker lights
- interior corridor work lights
- steady/alternate flashing ditch lights
- die-cast frame with separately applied windshield wipers, grab irons, and detail parts
- E-Z Mate® Mark II couplers

WOWSound®

Shipping December • MSRP: \$469.00 each

Bachmann Industries, Inc. • 1400 East Erie Avenue • Philadelphia, PA 19124 USA • www.bachmanntrains.com

Click for more information.

Click to
learn more



MRHMAG.COM

[INDEX](#)

[TABLE OF CONTENTS](#)



Introducing THE LUMBER STORE



ROTATING STORAGE RACK

On its own, or fully loaded with Mt. Albert Scale Lumber!

handlaidtrack.com

1-888-252-3895

PUBLISHER'S MUSINGS | 3

Moving the *Locomotives* book to the front burner

Now that the new help has been trained and becoming efficient and now that we've got a full complement of TrainMasters segments coming back online, I can bring the *Locomotives* book back to the front burner!

Sneak Peek #2 had 34 pages in it, so the book is roughly 30% done.

My first task was to convert the book from InDesign to Affinity Publisher, our new pasteup app. That's now *done*.

Next, I need to produce Sneak peek #3. I'd like to push toward 40 pages for this next sneak peek, adding another 10% to the total book that's written.

I'm hoping to get Sneak Peek #3 out by late January. I'm focusing mainly on chapter 2, "Testing, break-in, and lubrication."



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

It's more than a hobby.
It's our passion.



Model railroading is our lifelong pursuit for signature scenes and meticulous detail. For just shy of 90 years, Walther's has cultivated our craftsmanship and sparked our imaginations with everything needed to build our dream layouts. Becoming a Yardmaster rewards us with everyday special pricing and priority on the new products we love. That's why we're Walther's Yardmasters. Join us. Visit Walther's.com/yardmasters-club to learn more.

WALTHERS®

Support your local hobbyshop • visit walther's.com • call 1-800-4-TRAINS

© 2021 Wm. K. Walther's, Inc.

So what's in the *Locomotives* book?

This book is volume 3 in the *Make it run like a Dream* series. From the back cover of the *Locomotives* book:

"The Run like a Dream series came out of Joe Fugate's own experiences trying to get his HO Siskiyou Line layout to run as flawlessly as possible.

While trackwork and rolling stock form half the battle of good operation, good performing locomotives forms much of the other half. Excellent performance doesn't happen by accident, either.

Joe presents many preventive tricks you can apply, plus clever debugging tips for getting to the bottom of a problem quickly.

And finally, regular maintenance done right keeps things running well. Achieving and maintaining excellent performing locomotives is the focus of this book."

In short, this series collects all the best practices for getting superb performance and puts them under a single cover for trackwork, rolling stock, and locomotives.

The series aims to cover all scales from Z to O, as well as all eras. In the locomotives book, I'm covering both steam and diesel locomotives, for instance.

Here are the *Locomotives* book chapters:

1. Realizing the dream: Bulletproof performance
2. Preventive: Break-in, testing, and lubrication
3. Preventive: Electrical pickup
4. DCC and programming
5. Locomotive lighting
6. Locomotive sound
7. Locomotive tuning and maintenance
8. Enhancing locomotive ops realism



Now Available in HO scale for the Long Island and Pennsylvania Railroads
 RTR painted and lettered and detailed
 for the 1939 New York Worlds Fair
 3 Road Nos. each for LIRR and PRR
 Both Units Motorized and DCC ready
 and with DCC as an option

21

DD-1



GHB
International

PO Box 4063
 Gaithersburg, Maryland 20885
 email: gough@gbrrails.com
 tel: 301-515-0182

ORDER NOW

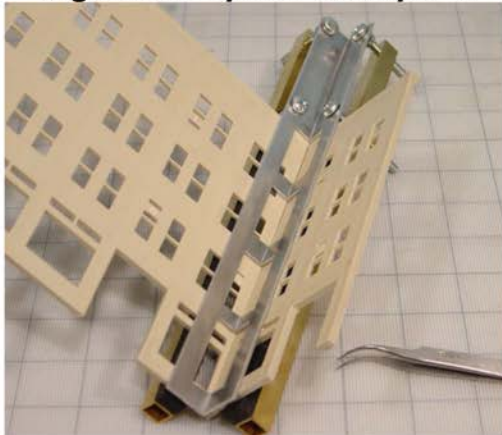
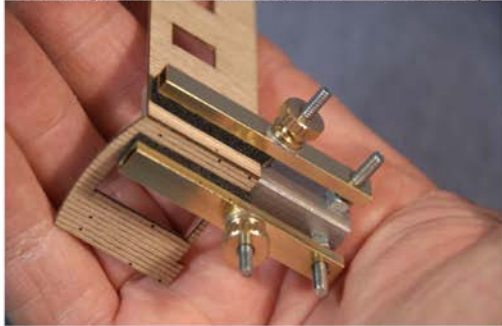
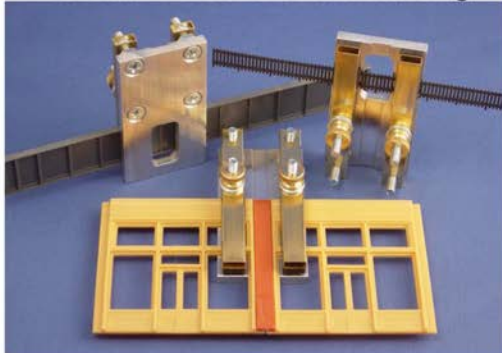


HO SCALE MODERNIZED LIRR/PRR DD-1 ELECTRIC ENGINE



\$ 499 ■ MSRP DCC Ready

\$ 599 ■ MSRP DCC EQUIPPED
 ESU LOKSOUND 5 INSTALLED

"Right and Splice Clamps"™**Quality Tools with Superior Versatility****Essential Tools for Great Modeling****Coffman Graphic Solutions**

1500 River Circle, Richmond KY 40475

Click Here**Visit our new Website:****www.coffmaneng.com****How have the first two volumes been received?**

Here's what the series customers have said about the first two books:

Trackwork book reviews ...

"Excellent reference book.

Like sitting at the feet of a master sensei and listening to the years of experience.

"You may not agree with all of the work required to achieve the results, but it is clearly a quality-driven approach based on sound trial and error." - Mike C.

"Wow! I wish I'd had this before my last layout. I'm in the planning stage for my 3rd. After reading Trackwork I'll have a much better design and smoother running! I can't wait to break ground." - David W.

Rolling Stock book reviews ...

"Excellent guide that is superbly organized and so easy to follow that I wanted to run to the workbench and dive right in.

"I especially liked the concise



REGISTER
(free)

[INDEX](#)**[TABLE OF CONTENTS](#)**




**ORDER BOOK NOW OPEN
RESERVE YOURS NOW!**

THE SHAY



The Shay locomotive was the most widely used geared steam locomotive. The locomotives were built to the patents of Ephraim Shay, who has been credited with the popularization of the concept of a geared steam locomotive. Although the design of Ephraim Shay's early locomotives differed from later ones, there is a clear line of development that joins all Shays. In 1884, they delivered the first 3-cylinder (Class B) Shay.

Class B, Lima-built 50-ton 2-truck Shay

Our rendition of The Shay will feature ESU LokSound V5 sound decoder. Cast Chassis, working external valve gear and drive shafts. Working directional lamps front and rear.

**Limited Production Run
Reservations now Open**

DCC Ready \$299

DCC Fitted \$339

DCC Sound \$449

Expected delivery Fall 2022

Easy pay 0% installment plan available

HO scale

 www.krmodels.ca

focus points that brought attention to the small details that are so important in our craft. This book will fast become a hobbyist Bible to one and all! Highly recommended.” - *Edward E.*

“I’ve been a model railroader for quite some time. I have cars that are 30-40 years old on the layout, and have always had issues with derailments. I followed the guidelines in the book and changed out all the old couplers and put metal wheelsets on all the cars. What a difference – my derailments went away! This book was well worth the money.” - *Gregory J.*

“Informative. Lots of information and concerns which I and many modelling friends had never thought about. Looking forward to the third volume.” - *Wade W. R.*

Entire series review ...

“This series is outstanding, and a classic example of – wish I’d known these things from the beginning!

“If you are relatively new to the hobby, get these pubs right away and use best practices from the beginning.

“If you’ve been around awhile, you may find yourself wanting some ‘do overs’ after reading these.

“So far the series has led me to tune up my rolling stock, which had the effect of showing that even some areas of nominally level bench and trackwork were not so level as they appeared. You can tell now because the cars roll away on their own. Combine that with the issue on trackwork, and next thing you know I’m looking at tearing out and laying new.

“What kind of great knowledge will I get from the locomotive book, and what will I start changing based on that? One wonders.” - *Kent B.*

“The first two books in the series (Trackwork & Rolling Stock) are outstanding resources. I am certain that Locomotives will be just as good.



FAST TRACKS

Build your own trackwork easily, quickly, and affordably.



TRACK BUILDING SYSTEM



Introducing Diamond Line Crossing Kits



Building an accurate crossing has long been a challenge in our hobby.

Not anymore with Diamond Line Crossing Kits!

Fast Tracks Diamond Line Crossing Kits make the job of building a good looking, accurate crossing much simpler. Precision cast parts and matching laser cut ties work together to ensure quick construction. Each of the castings are designed to press into the laser cut ties, automatically locating all the parts and electrical isolation gaps. The parts are simply pressed and glued in place.

HO scale 90 degree versions are the first in what will be a large library of popular sizes

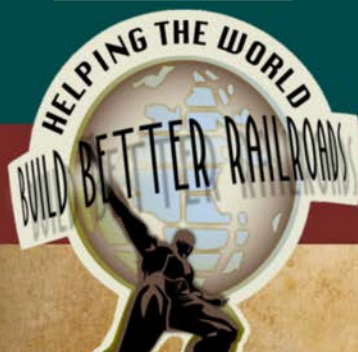
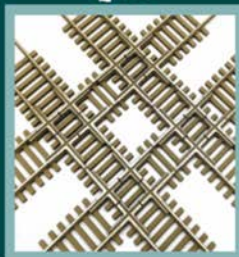
Single



Double



Quad



All Fast Tracks track fixtures
and tools are NMRA compliant



Easy Ordering • Fast Delivery • Free Shipping*

*applies to North America only on orders over \$150.00 US

shop online 24/7

handlaidtrack.com

1-888-252-3895 service@fast-tracks.net

THE TEN WHEELER



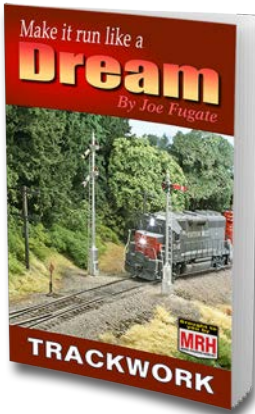
CLICK HERE



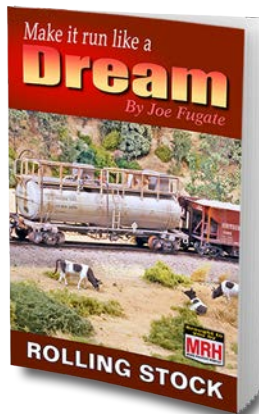
REGISTER
(free)

[INDEX](#)

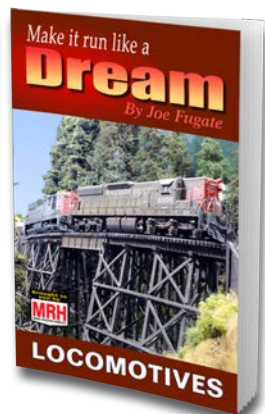
[TABLE OF CONTENTS](#)



Available NOW!



Available NOW!



Est release: Summer 2022

[Learn more on the MRH Store →](#)

"I have an operations-oriented N Scale layout and suffer the usual derailments when pushing cars into tight spurs or over crossovers. While I have not yet got my layout 'Running Like a Dream,' I feel like I now have a fighting chance. This series, especially in conjunction with the other *MRH* resources like 'Running Extra' and TMTV should help any serious modeler achieve success. Highly Recommended." - *William F.*

Final thoughts

I am pleased to see this book series is helping others realize the dream of a great-running layout. I know I would have given my eye teeth to have these books *when I started the hobby*.

Here's hoping the *Locomotives* book will top off the series – finally delivering the most comprehensive collection of hobby performance best practices anywhere. Let's make the dream come true! ☑



RATE THIS ARTICLE



Every little bit helps!

Registered MRH readers
get **another** 10% off with
the coupon code here:



**Unwrap my
coupon code now!**

[click here](#)

That's right, on top of our
holiday discounts, use this
coupon code to get **ANOTHER**
10% off the holiday sale price!



Happy
Holidays!



TMTV sale offers

[click here](#)



MRH Store sale offers

[click here](#)



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



LAST ISSUE RATINGS

Top rated articles in the [October 2021 issue](#) of *MRH* are:

4.8 October 2021 news

4.6 24 sq ft of layout fun

4.4 Make your own Jersey Barriers

Issue overall: **4.9**

Top rated articles in the [October 2021 issue](#) of *Running Extra ...*

4.8 Getting Real: Scratchbuilding three cabooses

4.6 Building a tower with 3D printing

4.3 Ah-hah Moment: New source for low temp solder

Issue overall: **4.0**

Rate the articles! Click the comments button on each article and select the star rating you think it deserves. ■

Get the latest Model Railroading News, Tips, Reviews & Opinions



**Our iTunes feed has changed search for
"Crew Call with Mike Rose" to receive the latest episodes!**

www.themodelrailroadpodcast.com

Host:

Mike Rose: www.mrhobby.com

**Don't Miss our Monthly Interviews
& Product Announcements**

THIS IS OUR IDEA OF THE PERFECT DCC INSTRUCTION MANUAL

GET
THE
DETAILS

*Instructions on the
back of the handheld.*

Run Loco: Recall the loco or press Loco and enter #, J. Adjust Speed: Use knob or press +1/-1. F0-F9: Press 0-9. F10-28: Press Shift, then two digits. Delete Loco: Press & hold Del. Stop: Press Stop. Turn on/off layout: Press & hold Stop. Speed Steps: Press Spd Step to select 14/28/128, J. Yard mode on/off: Press Sys, 3. Accessory: Press Accy, enter #, J. Press 1/2 for on/off. Route: Press Route, enter #, J. Fast Clock: Press Time. Program on Prog Track: Press Prog to select Prog Prog Track, J. To program following items, enter #, J. To skip press J. Adr = Address, SV = Start Voltage, Acc = Accelerate, dEc = Decelerate, TV = Top Voltage, CV # prompt for CV. Enter CV #, J.

Then CV data, J. Program on Main: Press Prog to select Prog Main, J. For Current Loco press J, or enter Loco #, J. Then same way as above. Read on Prog Track: Press Prog to select J. To read data press J. To skip Shift. Err = error. Set Consist: Consist to select SET, J. Enter consist # (1-127), J. To add loco enter #, J. Now use consist # as loco # to run the group. Clear Consist: Press Consist to select CLR, J. Enter consist #, J. Set Old Consist: Press Consist to select Old SET, J. Enter lead #, J. To add loco enter #, J. Run old consist group: Press Consist, Loco. Enter lead #, J. Clear Old Consist: Press Consist to select Old CLR, J. Set Cab #: Press Sys, 6. Enter cab #, J. Each cab must have unique #. Cab #1 is master and has following features. Set last cab allowed to program on Main or Prog track: Press Sys, 7 or 8 respectively. Enter #, J. Set Route: Press Sys, 5, J. Enter route #, J. To add accessory enter #, J. Clear Route: Press Sys, 0, J. Enter route #, J. Set Time: Press Sys, 1. Enter, time, J. Set Rate: Push Sys, 2. Enter rate (how many seconds for a minute), J. Select AM, PM, or Military Time: Press Sys, 4.

Made in China



MODEL RECTIFIER CORPORATION

360 Main Street, Suite 2, Matawan, NJ 07747 • Phone: 732-225-2100 • www.modelrectifier.com

FOUNDED BY ROY C. GELBER

■ Train Controls

■ Model Railroad Accessories

■ Plastic Model Kits

■ Scenery

■ Educational Kits



REGISTER
(free)

INDEX

TABLE OF CONTENTS

Best of the

MRH WEBSITE



THIS MONTH

Model Railroad Hobbyist | November 2021

Compiled by **JOE FUGATE**



Finding modern farmer figures

MRH forum member **NevinW** (Nevin Wilson) asked about where to find some modern farmer figures for his layout.

The *MRH* forum members rallied to the cause and have posted sources of many figures that could work as modern farmers in a pinch. The figures may not be specifically farmers, but they certainly can be repurposed as farmers!



[View the full thread on the MRH website](#)

▶ **MRH'S MONTHLY GREAT MODELER POSTS**



1. Chris vanderHeide has regular blog thread documenting how he's making the structures for his Algoma Central Railway.

Structures for the Algoma Central Railway

MRH forum member **cv_acr** (Chris vanderHeide) has been blogging about how he's making the structures for his Algoma Central Railway layout:

"Modeling a prototype line means most or all of the structures will be either kitbashed or customized. Particularly when you're modeling a smaller and more remote regional railway, so 'Canadian Pacific Standard no. 3 Station' doesn't really fit the bill.

"My road of choice is the Algoma Central Railway, a Canadian regional railway in northern Ontario. This thread documents structure builds my railway specific structures."

Chris' structure thread shows some great solutions to his structure needs, so follow along for some inspiring insights!

[View the full thread on the MRH website](#)



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



NSC 5092

**NATIONAL STEEL CAR 5092 CU FT
COMBO DOOR BOX CARS**



**ACTUAL
PROTOTYPE
BEFORE PAINTING**



The Pacific Great Eastern/British Columbia Railway received 1,785 of these boxcars from National Steel Car between 1971 and 1974, making them more numerous than any boxcar on the railway. They were seen all across Canada and the United States in lumber service. From 1989 they were rebuilt for pulp service and many have continued in service with CN.

**CLICK
HERE
FOR HO
SCALE**

**CLICK
HERE
FOR N
SCALE**

- 4 Styles of sliding doors, Youngstown & 3 rebuilt doors
- Doors with & without fork pockets
- 3 Different door stops (Small, Large & Large Modified)
- 70-ton Barber S-2 trucks & 100-ton trucks with modified bolsters.
- 2 Ends, riveted & non-riveted between corrugations
- Vented ends & non vented ends
- Vented sides & non vented Sides (Arched top & Wedge)
- 2 Different side sills (Notched & Straight)



NORTH AMERICAN RAILCAR CORPORATION

**PRE-ORDERS WERE ALREADY TAKEN BUT WE
HAVE A LIMITED AMOUNT LEFT FOR THE SHELF**



2. MRH forum member **transfer** has a problem: how to apply this tiger stripe decal to this loco pilot!

Front chassis stripes decaling advice

MRH forum member **transfer** started a thread on the MRH forum about how to apply tiger stripe decals to a detailed loco pilot. Definitely a thorny problem!

“What would you do after trimming the decal to maybe fit? Cut it in half? Go for it in one piece? Use Microsol ? Or Microset?”

Does anyone know how much time I have to place this decal?”

Many helpful posts came from members such as **donm**:

“First create a paper pattern. Cut out the overall size first, then slit to fit over protrusions, and finally trim to clear the coupler, step supports, and poling pockets.”

You can find a lot more tips and helpful hints on this thread. Follow along to see how it turns out!

[View the full thread on the MRH website](#)



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

**The most detailed GP9RM
on the market!**

**NOW
IN STOCK**

**CN and MC
versions**

**CLICK
HERE**

MAPLELEAF

ADVERTISEMENT

ADVERTISEMENT

 **Archer**
FINE TRANSFERS
PROUDLY SERVING MODEL BUILDERS SINCE 1989

**THE ORIGINAL
SURFACE DETAILS**

*We stock more than 200
different sheets of resin rivets,
louvers, treadplate, weld beads
and more for N, HO, S, O, G
scale railroad as well as Armor
and Aircraft so pass the word.*

LOW SHIPPING RATES
(Shipping rates are posted in the banner of our home page)

CLICK HERE TO VISIT OUR WEBSITE!

NEW ADDRESS AND CONTACT INFORMATION
Archer Fine Transfers • 305 NW Railroad St. • Youngsville, NC 27596 • USA
info@archertransfers.com • archertransfers.com

**DON'T BE A
TURKEY,
GOBBLE UP A
PROTOTHROTTLE
THIS HOLIDAY
SEASON!**

**TASTY
THROTTLE!**



3. *MRH* forum member Paul Krentz has a regular layout construction blog on the *MRH* forum, with many fun progress photos.

Pokey 3.0 construction

MRH forum member **pldvdk** (Paul Krentz) is building a free-lanced layout based loosely on the N&W Pocahontas District. He started the blog in October 2020 with this entry:

"It's been a year-and-a-half since I tore down my last layout, so we could move. After a lot of remodeling work in the new house I'm glad to say that I'm finally able to begin construction on a new layout, the Pokey 3.0!"

Hope you will enjoy following along on this new adventure! I look forward to hearing all your comments and suggestions. They proved invaluable on my last layouts, and I know they will help me make this layout the best it can be as well."

Paul frequently posts progress photos and the discussion that ensues has been quite interesting and insightful. Become a regular follower of Paul's Pokey 3.0 blog!

[View the full blog on the *MRH* website](#)



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

Before and after photos!

One particularly fun long-running thread on the *MRH* forum is called “Show us your before and after photos.” As you can see from the photos below, the transformation can be amazing and impressive. Check out the thread for many more fascinating and inspiring transformations!

View the full post on the *MRH* website



RATE THIS ARTICLE

4.5. *MRH* forum member **DaveB** (Jim D. Branum) took this toy train box car model and transformed it into a superb scale model of a contemporary SP hicube box car.

Give a gift from **MRH Media ...**



**Model Railroad
Hobbyist *Store***
Gift Certificate

DVDs, Paperbacks, eBooks, Video downloads



TRAINMASTERS TV
Gift Certificate

Streaming video channel for people who love trains

**Achieve your
hobby dreams**

MRH
MEDIA



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

WHAT'S NEAT

column



Model Railroad Hobbyist | November 2021

KEN PATTERSON COVERS THIS TIME:

- RADISSON MCGUIRE'S 1:87 SCALE MILITARY EQUIPMENT
- AN INTERVIEW WITH BACHMANN
- BUILDING A WALTHERS FIRE STATION
- FIRE APPARATUS IN 1:87 SCALE ...



VIEW READER
COMMENTS



click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

THIS MONTH RADISSON MCGUIRE VISITS KEN WITH A NEW COLLECTION of combat ready

1:87 military models and Ken interviews Larry Harrington of Bachmann Trains. Ken then shows how he built an HO scale Walther's Fire Department Headquarters Building and a variety of 1:87 scale fire apparatus that could go with it. ☑



Radisson McGuire's 1:87 scale military equipment collection



1. Radisson was on "What's Neat" in July 2019, showing Ken some of the military models he had collected and built. He's back with more vehicles, including models of combat ready vehicles. He also covers many of the models of vehicles that you might see on a modern military train. Radisson will be back next month with a segment on painting a vehicle in the NATO camouflage pattern.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



2. Among the vehicles Radisson brought were this M1070 Heavy Equipment Transporter(HET), seen here paired with an M1000 semi-trailer carrying an M1 Abrams tank. Radisson's model includes a detailed cab with photo-etched parts.



3. Radisson shows off a lineup of heavy armored vehicles, including two M1 Abrams tanks, an M1150 Assault Breacher Vehicle, an M88A2 Hercules tank recovery vehicle, a Buffalo MRAP, and an M9 ACE armored bulldozer.

Ken interviews Larry Harrington of Bachmann Trains



4. Ken interviews Bachmann's Larry Harrington about some of their newest products, including the Siemens ALC-42 and smooth side passenger cars.



5. Here Larry shows the Siemens ALC-42 in the "Day 1 livery" paint scheme. Bachmann is doing only a single run of this paint scheme and it is pre-sold to dealers and distributors.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

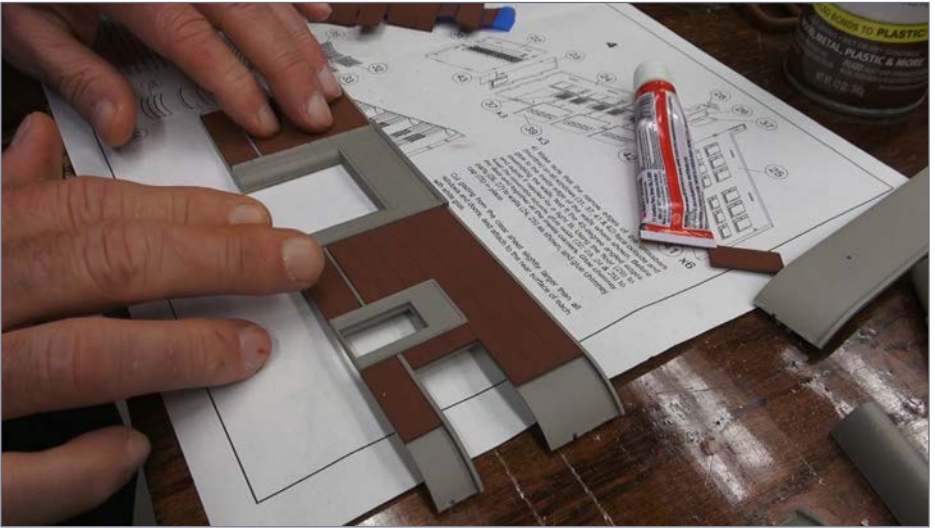
Building Walthers Fire Department Headquarters kit



6. Ken starts building the Walthers Fire Department Headquarters by painting the parts while they are still on the sprues. He decided not to use an airbrush to paint this structure, instead using Rustoleum spray paint.



7. Ken uses a fine diamond file to clean up the nubs left from cutting the parts off the sprues. Next time he'll use flush-cutting sprue cutters to prevent this problem.



8. Ken uses Testors plastic glue from the tube to glue the brick inserts into the wall pieces.



9. After installing all the windows, Ken assembles the front three sides of the building, and test-fits them onto the base before adding the fourth wall.



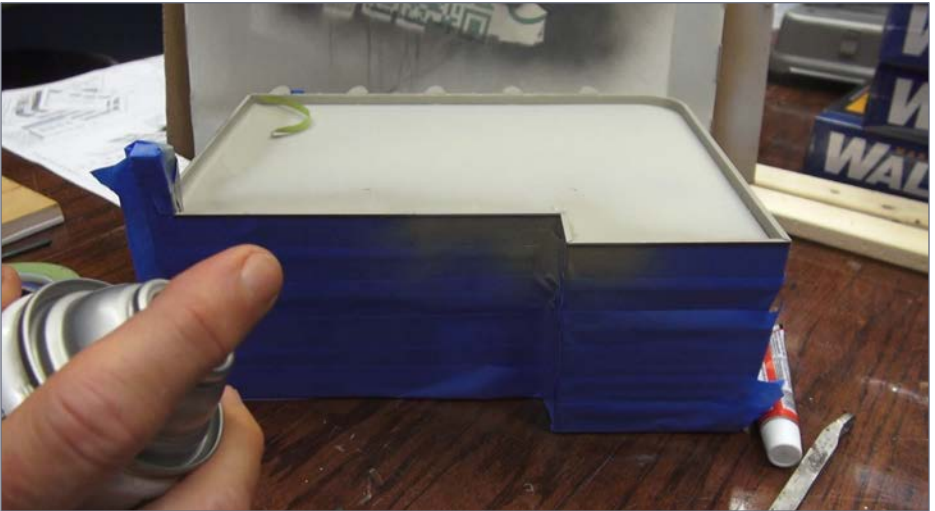
REGISTER
(free)

[INDEX](#)

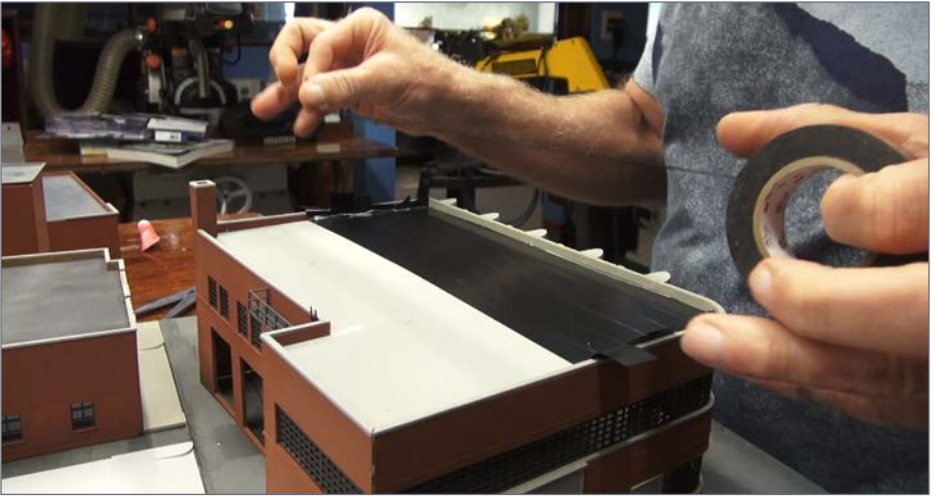
[TABLE OF CONTENTS](#)



10. Ken puts glue onto the backs of the curved brick inserts and then simply places them into the walls.



11. After assembling the entire structure and gluing on the roof, Ken masks the brick walls and sprays the trim on the top with the concrete gray paint he used on the non-brick walls.



12. Ken uses rows of electrical tape to replicate rolled roofing. After trimming the tape, he'll apply flat black paint to the roof, and add some gloss black to represent tar lines.



13. After attaching the base, the building is complete and ready for photography.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

Lasercut structures. Highway, storefront and billboard signs.

**Neat ag customer for your railroad:
Farmers Fertilizer Supply**



**WHAT'S
NEW?**

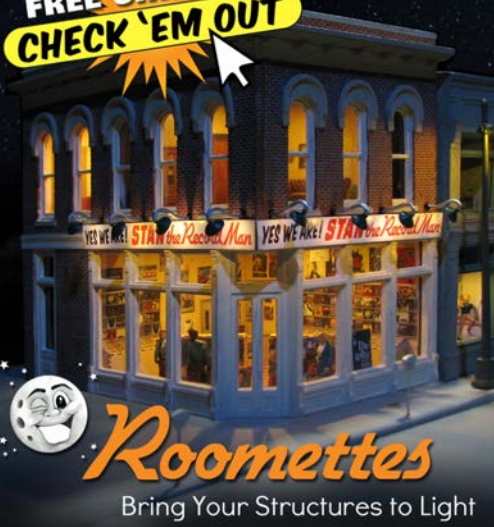


Established 1993...

Blair Line

LET'S GET LIT!

**FREE SHIPPING
CHECK 'EM OUT**



Roomettes

Bring Your Structures to Light

Looking for Goose Sounds?



Look no further! We have
prototypical sounds for your Galloping
Goose in our Tsunami2 Baldwin & Others
decoders. This sound profile is available in
most Tsunami2 decoder formats.

Available now at SOUNDTRAXX.com or your local retailer!



14. This shows the back side of the building with one of the bay doors installed in the down position.



15. Ken also built the Fire Department Drill Tower, used for training firefighters in carrying equipment up and down stairs, among other things.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



16. The Fire Department Repair Shop building can be used as an industry or utility repair shop or other building that needs to have vehicular access.



17. The Walthers Fire Department buildings fit together with a common look and color palette.

Fire apparatus in 1:87 scale



18. Looking through the Walthers Catalog, Ken collected many of the available fire department vehicles, also referred to as fire apparatus, for this episode of “What’s Neat” and the September 11th episode of “What’s Neat This Week”:
youtu.be/fVrkJqfYpMA

**Please include a phone
number when emailing us if
you *need* a reply!**
**(Just in case your spam filters eat
our email response ...)**



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



19. Two of the fire apparatus that Ken shows in the video are these Walther's Scenemaster Pumper and Hazmat trucks that have been modified by East Coast Circuits (eastcoastcircuits.com) with up to 42 solid and flashing LED lights in a single vehicle. To see all the military and fire vehicles, as well as the full interview with Larry Harrington and the complete fire station build, watch the What's Neat video linked at the beginning of this article. ■



RATE THIS ARTICLE

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



Locating tiny non-magnetic screws

Get this eBook now ►

click here

MRH **RUNNING**
EXTRA
Each eBook ~100 pages

Digitrax

Introducing the UT6 & for Digitrax Comp



- **Compact size for easy one-hand**
- **Color 1.5" LCD Screen**
- **Full numeric keys for easy Loc**
- **Fine speed control with a large**
- **Removeable LocoNet® cord**
- **Forward/Reverse toggle switc**
- **Off/On switch, uses AA or BP6**

Find out more @ www.digitrax.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



UT6D Utility Throttles Complete Train Control!

Hand operation

UT6

Utility Throttle

\$105.00 MSRP

Automotive selection

UT6D

Duplex Utility Throttle

\$170.00 MSRP

Encoder knob

Compatible with Braking

2400MH batteries

**View all features and *more*
on our website!**

digitrax.com/throttles/

Don't settle for all your locos
sounding the same!

ESU now has **OVER 100**
"LokSound" files to choose from!



Because "Close Enough" is no longer
"Good Enough"

LokSound.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

Automatic staging stopping blocks



Electrical Impulses

Model Railroad Hobbyist | November 2021

GREG CIURPITA SHOWS A SOLUTION FOR STOPPING TRAINS RELIABLY IN HIDDEN STAGING AREAS...



MANY MODELERS RELY ON BLOCK DETECTION TO DETERMINE THAT A train has completely entered a staging block. This can be challenging with hidden staging, momentum, and excessive speed.

One approach is an automatic stopping block at the end of the staging block that can be unpowered and automatically stop a train.

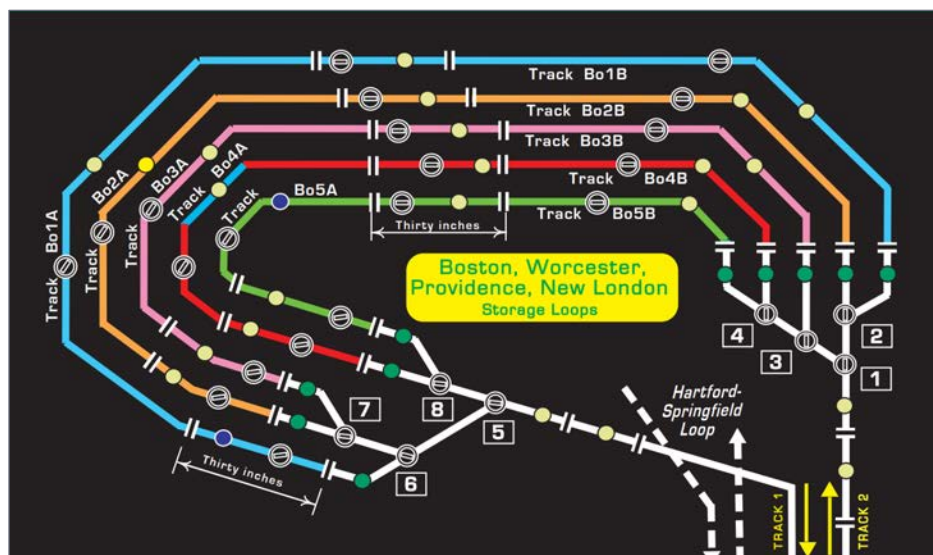
AUTOMATIC STOPPING BLOCKS | 2

A 30-inch stop block should suffice for most H0-scale trains, even if the locomotives have stay-alive capacitors.

Of course this isn't very sophisticated, and does require additional block detectors. It makes sense to use a little bit of circuitry to make operation a little more reliable, especially for a distracted operator. As a bonus, cutting off power will reduce idle power requirements and sound levels.

A separate panel switch routes power to each staging track block, allowing you to cut off power. I've been working on several staging loops with three to five tracks, each long enough for two trains.

If a staging block is ~18 ft, six sections of flex track, the last section of flex track can be left isolated (gapped). You can isolate



1. As you follow the train from Track 2 into Staging 1 (blue) from the bottom right, the train goes through two entrance blocks and an interlocking block with turnouts. It then enters Bo1B (Boston) block and a 30" stop block, and on to the Bo1A block and stop block before exiting through the interlocking and back to Track 1.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

RailPro™**NEW
TECHNOLOGY****RE RING™
ENGINEERING**

DCC + RADIO CONTROL

HO Scale Locomotive Module

**ULTIMATE
SERIES
SOUNDS****TRUE
MOTION
TECHNOLOGY****LIGHT
EFFECT
EDITOR****DIRECT™
RADIO
+NET**

New Sound Technology and Mathematical Model Motion Control + more!!!



+



Equals
"DUAL MODE"
Control by DCC +
Radio Control

**Click Here to
Watch Video**

For more information visit our Internet site: www.RingEngineering.com

ADVERTISEMENT

STREAMLINED BACKSHOP

Sales ... Service ... Solutions ...



WOWSound ?

WWW.SBS4DCC.COM



LOK SOUND
EST. 1999



SOUNDTRAXX



MRHMAG.COM

[INDEX](#)

[TABLE OF CONTENTS](#)

the last segment as a stop block. The panel diagram shows a five-track staging loop. In the diagram, each staging loop stores two trains. Each loop is divided in half, and each half divided into 2 blocks – two main blocks and two stopping blocks [1].

Each of the staging blocks, including the main and stopping blocks, have block detectors, panel LEDs and switches to cut off power. All the switches have a 1K resistor wired across them to limit power but low enough to allow sufficient current for the detectors to indicate occupancy even when the switch is off.

Consider a train intended to stop in staging track block Bo1B with a train occupying block Bo1A. Operation is as follows:

- Turn on the Bo1B main block and verify the Bo1B stopping block is off.
- Train enters the staging area at a reasonably slow speed and proceeds through the entrance blocks.
- The main Bo1B block detector should indicate when the train has entered the main block
- The stop block detector will indicate when the train enters the stop block and the train should come to a stop.
- Turn off the switch for the main staging block, especially if there is an engine consist.
- Set the throttle to zero. With the stopping block unpowered, there's no hurry.

Exiting staging from Bo1A is as you would expect:

- Turn on the switches for both the main and stopping blocks.
- Throttle the train up to take it out of staging.
- Turn off the stopping block, leaving the main block on for the next train entering staging.

If there is a train in the second staging block (Bo1B), it needs to be moved up:





Southern Digital

WWW.SODIGI.COM

Celebrating 28 Years serving you

All New Items from **Digital**
Complete Train Control



Evolution Express DuplexRadio
List \$645, Your Price \$516



Evolution Express
List \$460, Your Price \$365



DT602D Radio Throttle
List \$260
Your Price \$208



UT6D Radio Utility Throttle
List \$170
Your Price \$136



DT602 Super Throttle
List \$195
Your Price \$156



UT6 Utility Throttle
List \$105
Your Price \$84



UR93 Duplex Receiver
List \$125
Your Price \$99.95



BD4N Block Detector
List \$36
Your Price \$29



BXPA1 Auto Reverser
List \$49
Your Price \$39



**Ni-MH Battery for
DT602 or UT6**
List \$12
Your Price \$9.60

DCC Conversions, Service & Support

E-mail: sales@sodigi.com (770) 929-1888





YOUR HEADQUARTERS **DCC**

Litchfield

S T A T I O N

GREAT GIFT IDEAS!
NCE | Digitrax | Speakers
SoundTraxx
Train Control Systems
ESU LokSound
Tam Valley Depot
RailPro



www.LitchfieldStation.com
sales@litchfieldstation.com
623-298-7355



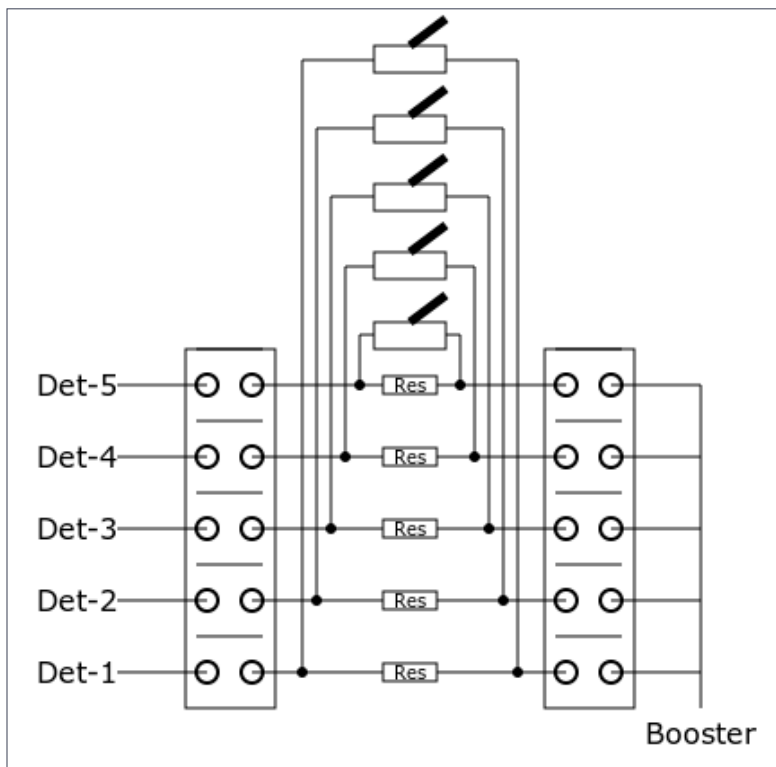
REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

- Turn on the Bo1A main and both Bo1B blocks and verify the Bo1A stop block is off.
- Throttle up to move the train
- The train should stop as it reaches the Bo1A stop block.
- Turn off both Bo1A blocks and the Bo1B stopping block.
- Set the throttle to zero.

With alert operators, this is unnecessary. A short block at the end of staging makes it easier to know when a train is near the end of the staging block, even without the power switch.



2. Panel switch wiring.

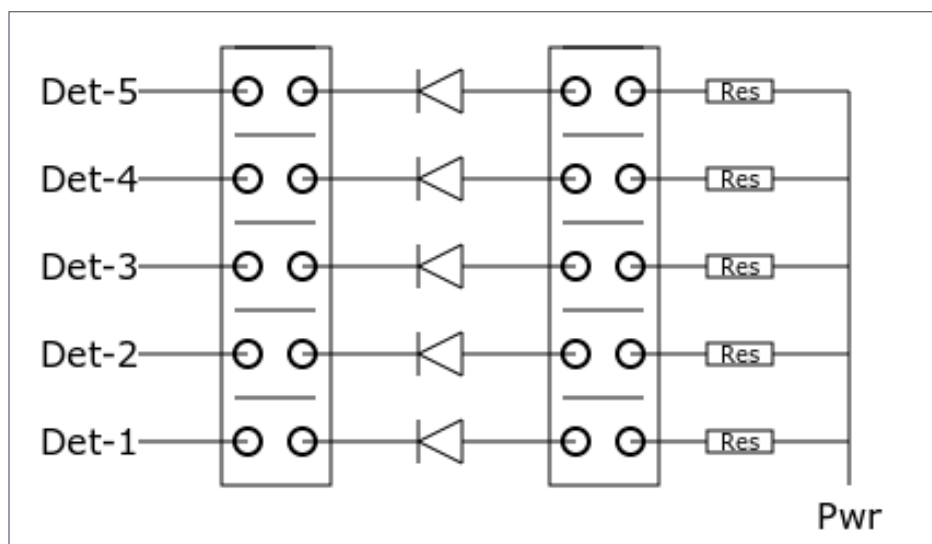
PANEL WIRING

There are several approaches for wiring the panel to minimize confusion. The diagram illustrates the wiring for five tracks, conceivably main blocks Bo1A-Bo5A. You can use larger barrier strips as needed [2].

This panel has a pair of barrier strips for each panel switch. All the terminals along one edge of one barrier strip are wired to the booster.

Each terminal of the second barrier strip is wired to a block detector. A resistor is wired between the pair of barrier strips and each panel switch is wired in parallel with the resistor to the same barrier strip terminals [2].

This approach with resistors wired between barrier strips avoids soldering a resistor across each switch. Bringing the



3. Panel LED wiring.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

TamValleyDepot.com



**Home of the
Frog Juicer**

Dual Frog Juicer

Automatic DCC Polarity
Reverser can be used to:

Power Two Frogs

Crossovers

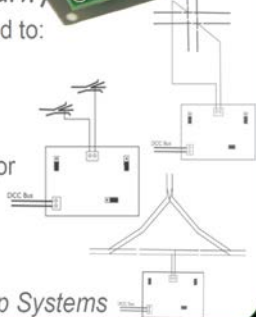
Crossings

Automatic Reverser for
Turntables

Wyes, Loops

Circuit Breaker

Use with 2-10 Amp Systems



**Your ad here
could reach
65,000+
for as low as
\$222 a month.**

Click to learn more ...

ADVERTISEMENT

Make LocoNet wiring extremely simple!



ACCU-LITES, inc

Your DCC Center!



**Suitcases belong in your baggage
cars, not under your layout!**

Check out the DCC Vampire II ...

This guy does the job of two suitcase connectors!

And really holds the connection good too!

CLICK NOW TO DISCOVER THE AMAZING VALUE!



Dealer Inquiries Accepted

booster connection into the panel also minimizes wiring by requiring only one wire from the panel to each detector.

Additional wires are needed from the detector to drive the panel LEDs [3].

These can also be similarly wired to a pair of barrier strips with either ground or power (e.g. 5V) replacing the "Booster" connection.

An LED replaces the resistor between the barrier strips. A resistor could be between the common ground/power and each barrier strip terminal instead, avoiding the need to solder resistors in series with each LED. ☒

GREG CIURPITA



Model railroading motivated Greg to become an electrical engineer, and is a retired embedded firmware developer using those skills helping others build and maintain their layouts. ■



RATE THIS ARTICLE

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



**Narrowing your
layout scope**

Get this eBook now ►

click here



**RUNNING
EXTRA**
Each eBook ~100 pages



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

END OF TRAIN DEVICE

NEW SAFETY GREEN



Patented Technology - US Patent 7,549,609

**Bright Red
Flashing Light!**

**Installs in minutes!
No freight car
modification required!**

Does not affect Load!

↓ Car without Load ↓



↓ Car with Load ↓



**Click Here to
Learn More**

**RE RING™
ENGINEERING**

ADVERTISEMENT

Great control in a tiny package



**Original
Touch Toggles**

- Touch Toggle™ plug in controls
- Bright clear indication
- Easy setup
- Flexible system

Stall Motors, Twin-coils,
Power, and Servos

Now for Tam Valley Depot
and MRservo too!



**BERRETT
HILL
TRAINS**

Made in the USA



What will they think of next?

www.berretthillshop.com

From first train set to railroad empire...

*Our complete line of DCC products
grows with you. Discover the fun!*

- Designed and manufactured in the U.S.A.
- Preferred for ease of use and ergonomic design
- Unlimited scalability for any size model railroad
- Plug-and-play means more time running trains
- Great customer service and excellent support



See your dealer



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



Visit our new and improved web site for all your DCC needs!

- Get the latest new product announcements
- Watch our detailed how-to videos
- Browse the all-new Information Station
- Enjoy secure online sales, day or night!

Visit **ncedcc.com**



MRH MARKETPLACE



Learn more ...

Get Yours Now! ▶



ModelTreeStore

Conowingo Models




Wood Craftsman Kits
Visit Conowingomodels.com

Grade Crossing Pro/2
 Photocell, IR or current sensing detection
 Improved infrared detection!
 Optional on-board bell modules
 Timing options for flashers, gates, and bell
 Use slow motion motors or servos with your gates

Please visit our website and online store!

LOGIC RAIL™
 TECHNOLOGIES
 info@logicrailtech.com

(281) 251-5813
www.logicrailtech.com



**4 NEW WEATHERING
POWDER SETS**



AVAILABLE AT:
www.monroemodells.us

NEW CREATIONS



VICTORIAN RAILROAD BUILDINGS, LLC
newcreationsvictorian.com

click me! 



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

mini prints



Craftsman-quality 3D printed miniature railroad animals, figures and scenic details

miniprints.com

make your model railroad come alive

MOUNTAIN SUBDIVISION HOBBIES

www.modelrrsupply.com

FREE USA SHIPPING OVER \$49.00

MRH Readers save with code:

MRHMAG19

SOUTHWESTERN RAIL SYSTEMS

Electronics for Modular Model Railroads

Home of the FMTP, the Free-mo Throttle Panel

The FMTP combines the functionality of a panel-mounted throttle hub with an adjustable DC output for running accessories such as lights and/or turnout motors

Click this ad to visit our shop for details >>

Model Railroad Control Systems

Geoff Bunza Project Boards

DCC Occupancy Detectors

CMRInet Compatible Nodes

Layout Telephone Systems

RFID Switchlist Generator

Switch Machines and Drivers



LOOK
at what's new at
Black Cat this month

Click here for
our website

Etched CPR Van
Phosphor-bronze splash
guard & end ladders



Black Cat Publishing

(204)489-5005

ajfergus@mymts.net

blackcatdecals.com



PRECISION DESIGN CO.

**CUSTOM DECALS FROM
YOUR OWN ART IN JUST ONE DAY**

PDC.CA

FULL COLOR & SOLID WHITE

click to learn more!



East Coast Circuits
Innovating Your Model Railroad Layout

P.O. Box 25412
Providence, RI 02905

Lighting Circuits For Your Layout

Random Lighting Circuit - Burning Fire Circuit
Traffic Light Circuit - Crossing Signal Circuit

Custom Lighted Vehicles
HO & O Scale Emergency Vehicles
HO & O Scale Trucks & Cars

Eastcoastcircuits.com

Eastcoastcircuits@gmail.com

Bridge the gap

... with Mountain Pacific Scenics





NEW KIT: AT&SF Fe-Q/Fe-R/Fe-V



westerfieldmodels.com



Squeaky's Trains

Handcrafted & Exclusive Models
DCC Products, Service, Installations

Let's play with trains!

Offering:
SoundTraxx, TCS, NixTrainz,
Atlas, RailPro, MTO Battery, Kadet,
and many more Railroading Supplies!



SqueakyTrains.com

An advertisement for ITLA Scale Models. It features a photograph of a detailed model of a train station, Grimsby Station, with a red roof and white walls. The station is surrounded by greenery and a train track. The text 'Imagin'at!' is written in a stylized font at the top, followed by 'Laser Art Products'. Below that, 'ITLA Scale Models' is written in a bold, black font. The text 'Grimsby Station - HO Scale Precision Laser Cut-Wood Kit' is written in a red, italicized font. At the bottom, there is a red button with the text 'CLICK HERE FOR MORE INFORMATION' and the website 'www.itlascalemodels.com'.

When talking
to hobby
vendors,
please
remember to
mention MRH.



[REGISTER](#)
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

INTER-ACTION
Hobbies
Preserving History in Miniature

"Got a Smoke?"



Kit HO-5032

www.interactionhobbies.com

PRE-SIZE
MODEL SPECIALTIES

P.O. Box 6 Paonia, CO 81428
Ph. 970 527 4586
Made in The USA

Cast resin items for All Scales.
Tunnel portals, bridge piers, abutments, culverts, and retaining walls.
Trackside details and sage brush tree armatures.

"FREE SHIPPING see website for details"

Your ad here could
reach 65,000+
for as low as \$88
a month.

Click to learn more ...

MONASHEE
LASER
ENGINEERING

COME VISIT US
CLICK HERE

MANUFACTURERS OF FINE RAILROAD
STRUCTURES AND ROLLING STOCK MODEL KITS

WE'RE BEHIND YOU ALL THE WAY

Sceniking®.com
...nothing compares...
Click to learn why!

Great Decals!™
FEC, Interstate, Virginian
Railway, & L&N Titles
After Hours Graphics Line
Coupler Gages and More
In O, S, HO, and N Scales

Human[city] Junction
Model Railroad Videos | Tutorials, Reviews, Interviews, Hangouts

YouTube Channel Sponsored By
CMR Products | 7% off on House Brands
Iron Planet Hobbies | 10% off and Free
Shipping in the USA

Use Discount Code "HUMAN"
Please visit us out at www.humancityjunction.com

click me!



Pursuing Excellence

THE TRAINMASTER, LLC
Detailed Craftsman Kits

www.TheTrainMaster.com

EXTREME WEATHERING



NICK CAMPBELL FADES, WEATHERS, RUSTS,
AND ADDS GRAFFITI TO A PULLMAN STANDARD
HOPPER FROM TANGENT MODELS ...



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)





I CHOSE A PROTOTYPE I FOUND ON “THE RUSTBUCKET” FORUM from Matt Guerrant. The car had fading, bleed-through, ghosting, patches, heavy grime/dirt, rusting, and spillage. After seeing the photos, I just had to take on the challenge of modeling it.

Here is the primary side first followed by the "other side" which was a different but similar hopper, as I didn't have photos of both sides of #15322 [1, 2].

The techniques I used reflect those I've seen from other artists on “The Weathering Shop” website. Gary Christensen especially had a “color transition fade” I found indispensable to weathering this hopper [3].



1. I could not resist modeling AEX 15322, an ex-CNW hopper. But I only had photos of this side of the car to work with.





2. For the other side of the car, I chose AEX 15334. Not the same car, but it'll do.



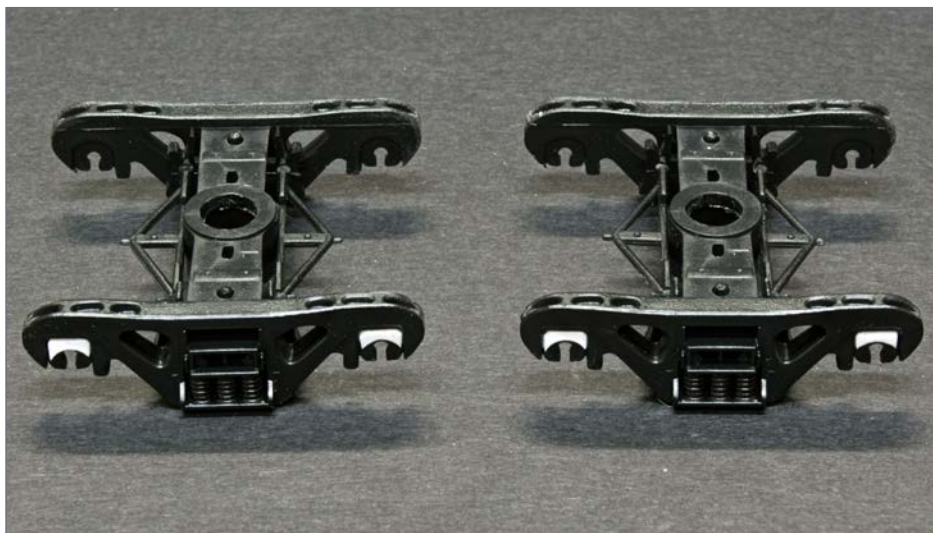
3. I began with an out-of-the-box model from Tangent.

I began by washing the model with mild dish soap and a soft brush. From this point until the final clearcoat sealant was thoroughly dry, I did not handle the model without wearing latex gloves.

Once the model was dry, I sprayed it with a coat of Testors Dullcote to give the surface “tooth” for weathering. I set the body aside and moved to work on the wheels and trucks.

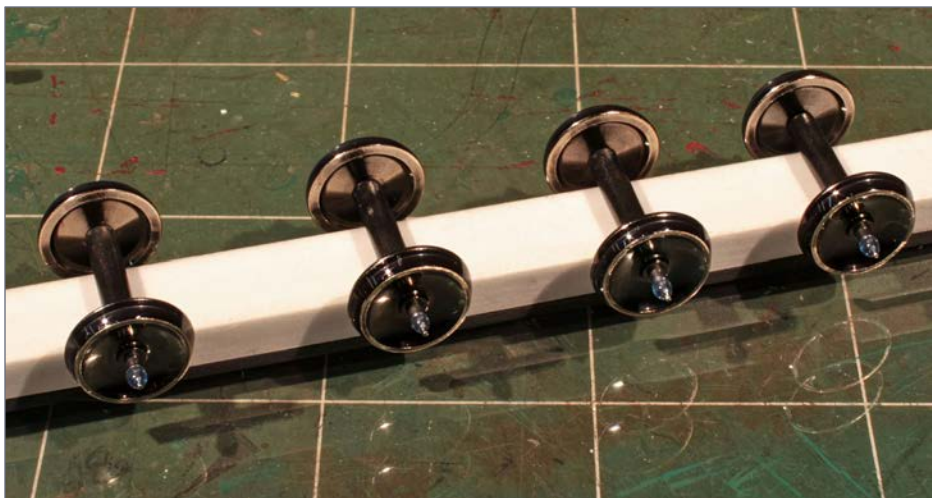
WEATHERING THE TRUCKS

Although Tangent’s model is wonderfully detailed overall, the wheels do not have a proper back profile. This bothers me because they are highly visible through the end cages. I opted to substitute a pair of Athearn Genesis 100-ton trucks with 0.88” tread width [4-7].



4. The downside to the Athearn trucks is that they have a deep void where the axle bearing should be. I scratchbuilt and added my own (light gray).





5. I used 800-grit sandpaper to rough up the surface of the wheels for better paint adhesion. I used Microscale's Micro Mask on the wheelsets' threads and needle bearings. Because Micro Mask is a liquid, I had to turn the wheels constantly until it had set enough to not flow to the lower side.



6. I sprayed the trucks and wheelsets with Rustoleum dark gray auto primer to give everything a uniform dark color.



7. I prepared a series of washes using inexpensive craft acrylic paints and water, based off colors I saw in the prototype photos. I applied five washes of burnt umber, two of burnt sienna, and a final wash of gray. I gave the wheels and axles the same treatment.

FADING PAINT



8. I used a fresh X-Acto blade and gently scraped off the black ink from the yellow CNW lettering. I errantly roughed-up the surrounding surface, but it should not be noticeable when the model is complete.





9. I began with very thin washes of light blue. I followed with washes of dark blue, green and orchid. The herald would almost disappear every few washes, so I used a damp toothpick to clean paint away.



10. I applied several washes of orchid to the roof. I transitioned the roof hatches from blue to white with successive washes.



11. On to the other side of the car, I applied the light blue washes as on the other side. Then I applied light and dark green washes successively until I had the look I wanted.



12. I began with my orchid base wash and applied washes of orange and red to better match the prototype color. I used a sharp X-Acto blade to chip away paint from the ribs and allowed the orchid wash to run down the sides of a few.



REGISTER
(free)

[INDEX](#)

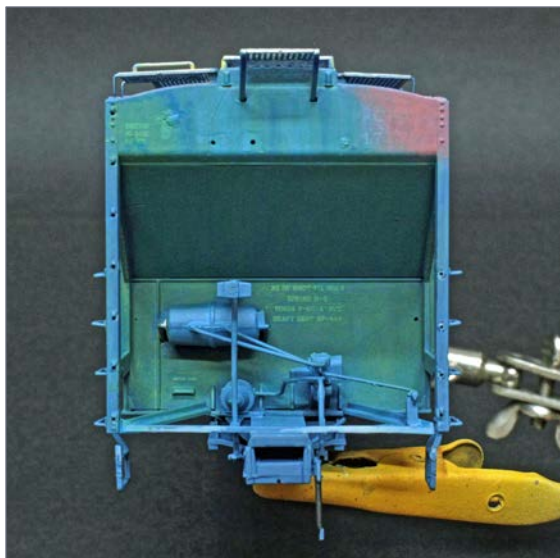
[TABLE OF CONTENTS](#)



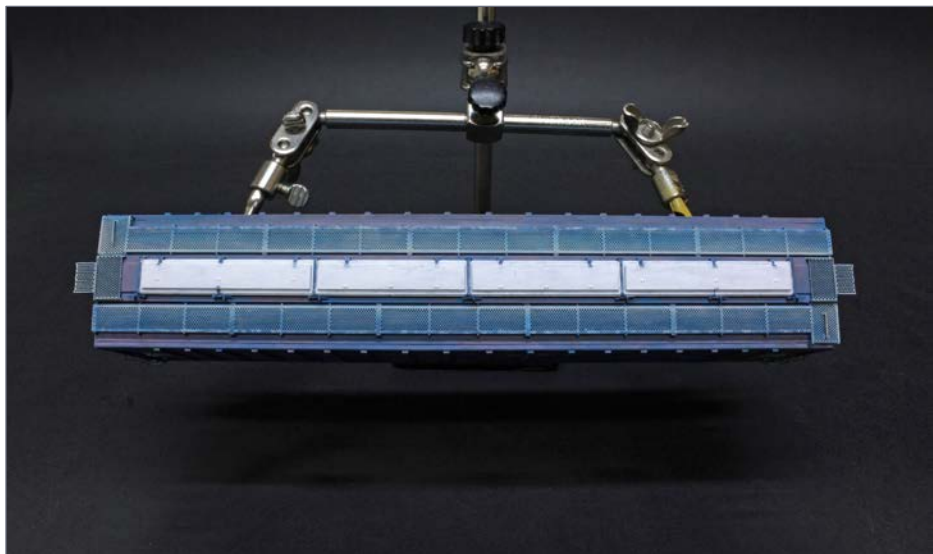
13. I dry-brushed highly thinned darker blue colors onto the side for color variation. As you can see from the glass on my workbench, I have mixed and used many color washes on this model so far.



14. I used the same process to fade the paint on the car's ends as I did for the sides.



15. The brake end.



16. For the roof walk, I used a series of gray washes. I then gently scraped off the wash for a chipping effect. I also filled-in the roof weathering down the center of the car.



GETTING DIRTY



17. I Started with a clean car bottom.



18. I applied a layer of dark brown, almost black grime to the bottom of the car. I used a series of highly thinned acrylic paint washes of burnt umber and black to achieve the effect.



19. The next layer of filth on the prototype appeared to be tan dirt/dust. I made a wash with a color called territorial beige to replicate it. I layered washes to achieve a light-to-heavy "dirt" build-up with the heaviest being towards the bottom.



20. I repeated the process of applying burnt umber and black washes to add a grimy look to the car ends. Here we see the brake end.

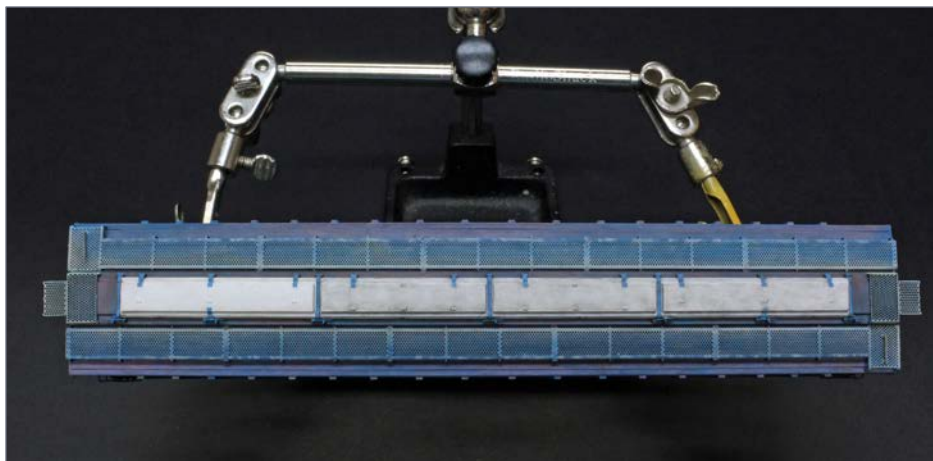




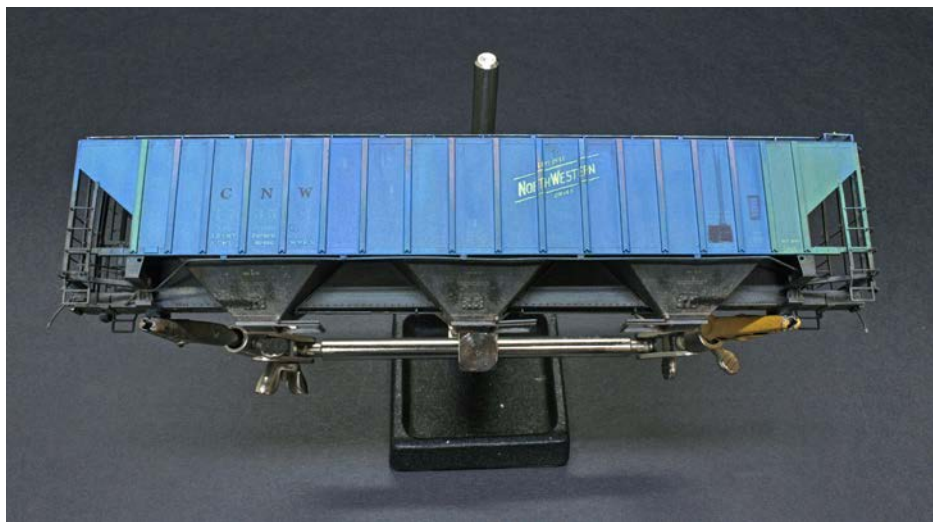
21. I used gouache paints to represent wheel splatter on the car ends. Gouache manipulates nicely. I applied it with a sharpened toothpick.



22. I replaced the end cages and gave them the same grime treatment I used on the bottom and ends. I did the inside of the cages while they were still off the car. Here we see the brake end.

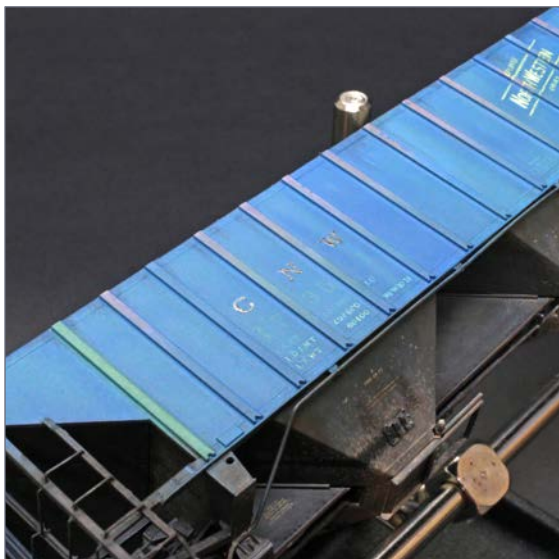


23. I used a mix of white and black gouache to put gray grime on the hatches.



24. I used a very fine liner brush and diluted black acrylic to paint the CNW reporting marks to begin the ghosting effect. I used a sharpened damp toothpick to erase any errors. Note the dark blue streaking I added elsewhere on the car using the dry-brushing technique.





25. I applied Future acrylic floor wax directly over the CNW reporting marks with a fine liner brush. This gave the reporting mark a smooth surface so that I could remove the patch paint easily from the lettering later.



26. I applied patches using thinned white acrylics. I used a sharpened damp toothpick to remove buildup on the CNW lettering and to keep the patch outlines clean.

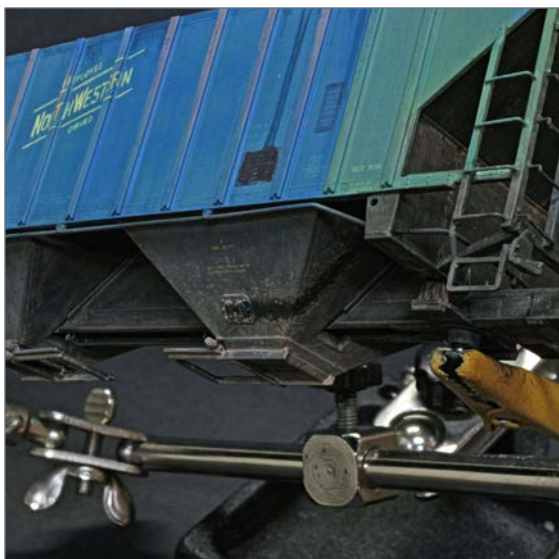


27. The prototype photos showed several colors of patchwork in addition to the white. I replicated that by layering several colors of craft acrylic paints, again working in very thin application layers.



28. I added patches to the ends using the same technique. Working in thin layers allows for easy cleanup, and allows the paint to stay at a scale thickness.





29. I used black and raw umber gouache paint to add wheel splatter to the bays' undersides.

RUST IN PEACE



30. I added heavy side rusting and grime using heavily thinned burnt umber and black acrylics. I especially concentrated on the sides of the ribs. The end decals are in place.

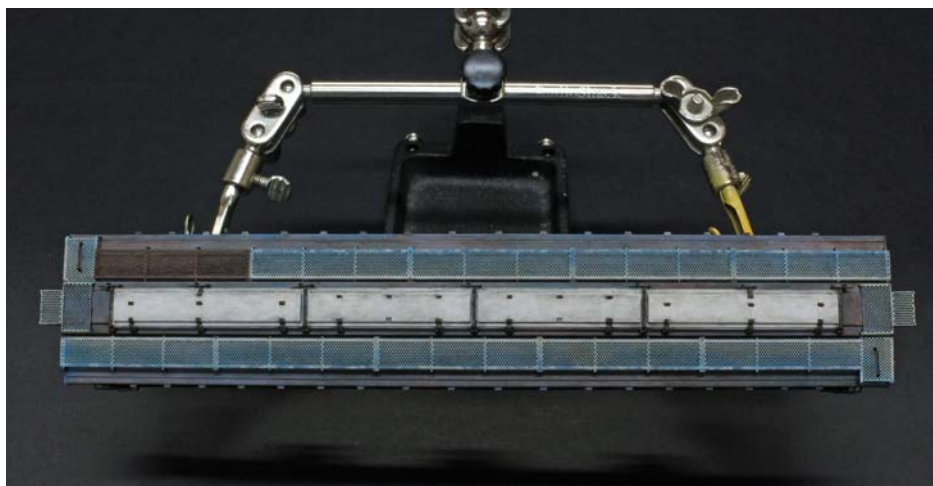


31. I added the reporting mark and other decals to the non-ghosted side, then added additional layers of rust and grime using an almost dry (damp) brushed, heavily thinned burnt umber and black acrylics. Washes of brown and gray on the bottom represent more grime.



32. For the ghosted side, I used much the same process for decaling and weathering. In addition, I used water-soluble burnt sienna oil paint to create the underlying hue for rust. I used Van Dyke Red oil paint for some of the heaviest rust areas. I followed this with the washes of brown and gray craft acrylics.





33. I rusted a section of the roof walk completely and dirtied-up the hatches some more.

With the fading, weathering, and rusting steps completed, I added another ultra-light dusting of gray to represent road dust. When the dust layer was dry, I sealed the work with a sprayed layer of Dullcote. Since I would be using water-based acrylics for the graffiti, I wanted a solvent-based seal to protect the work I had done so far.

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



**Modeling Kansas City
passenger facilities**

Get this eBook now ▶

click here

MRH **RUNNING**
EXTRA
Each eBook ~100 pages





34. I began the graffiti process by adding reflective striping to the car's ribs per photos. I then proceeded to use my ultra-fine liner brush and thinned acrylics to paint the graffiti. I began in white and worked in layers, adding other colors in as needed, for about 10 layers total. As always, I cleaned up any blemishes with a sharpened wet toothpick.



35. I used oil paint to represent graffiti overspray in some areas. To prepare the paint, I dabbed a small amount onto a piece of cardboard so the carrier oil could leach out and leave behind more pigment. I then applied the paint with a very small, stiff brush.



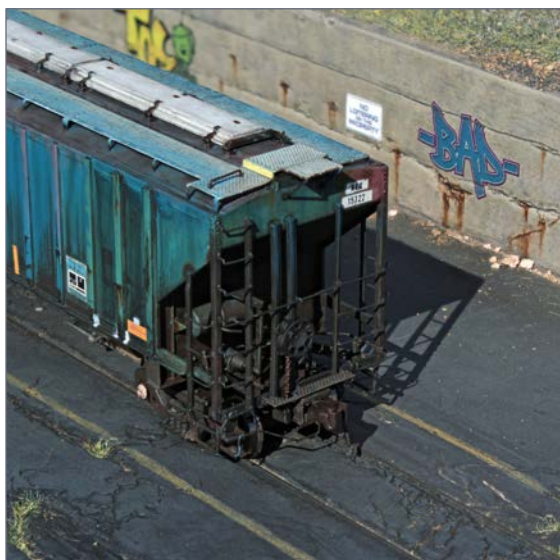
A final seal of Dullcote finished the paint work. I installed the couplers, trucks, brake wheel chain and cut levers. Total time on this model was about 81 hours.



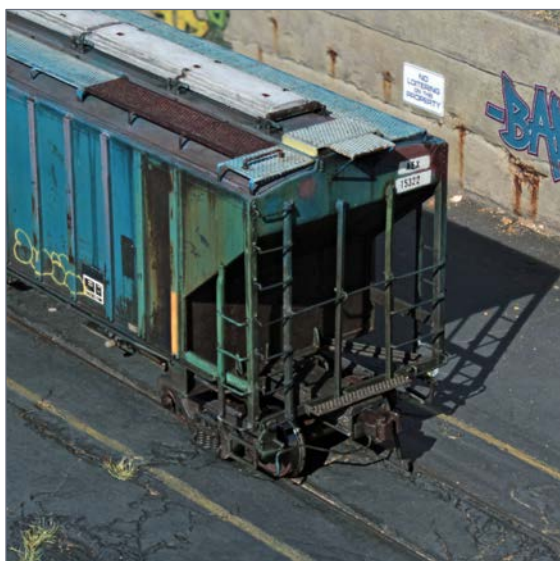
36. The finished ghosted side of the model with graffiti.



37. The finished non-ghosted side, as yet untagged per prototype photos.



38. The finished brake end of the car.



39. The finished non-brake end of the car. ☒



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

NICK CAMPBELL



As a boy, Nick often accompanied his grandfather on errands. When he would see a train coming, his Grandpa would pull his truck over to the side of the road to watch. As the train roared by, shaking the truck, it always left an impression on Nick, as did the tuxedo scheme of the Southern Railway.

Train sets Nick received as Christmas gifts from his father between the ages of five and 11 planted another seed. After an absence from the hobby during early adulthood, Nick stopped in a hobby shop, and the train bug bit again!

He was hooked, and a trickle of new models (rolling stock/engines) began to find their way to his home, and he began a layout.

During the layout-building phase, and a very regular internet search on model railroading questions, Nick stumbled upon the "The Weathering Shop" website. Being a visual artist already, seeing these models transformed into miniature replicas of reality was fascinating to him. "The Weathering Shop" has a forum called "The Rustbucket." Just about every technique he has employed was found on "The Rustbucket." The tutorials and answers to questions about how to accomplish weathering goals have been invaluable.

What started as an art project has turned into prototype modeling. Nick hopes to continue to learn new techniques and produce many more accurate models. ■



RATE THIS ARTICLE

WHAT'S NEW on TMTV!

Non-members: Watch episodes for \$1.99 ea, become a member for unlimited access

Brought to
you by
MRH
MODEL RAILROAD HOBBYIST

No mess foam scenery-3: Finishing the scene



Exploring the hobby's roots

MRH Hobby News staffer Richard Bale was there! He talks about rubbing shoulders with John Allen, Irv Altham, the KaDee twins, and other hobby greats.



Joe Fugate



Richard Bale



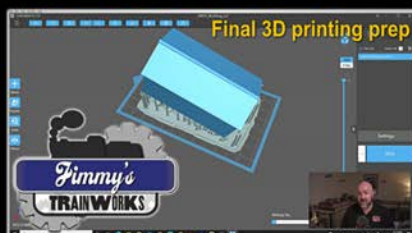
Plus we get a live tour of Randy Lee Decker's Game & Daphetid resurrection project!

MRH QAT

Recorded on Saturday, Sep 18th

QAT #9

Exploring the hobby's roots



Slicing a 3D design for printing



Quick-n-easy bushes



Photo editing for modelers



TRAINMASTERS.TV

Don't miss out on these videos! **CLICK NOW**



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

Modeling tar paper roofs



Model Railroad Hobbyist | November 2021

GREG BAKER SHOWS HOW TO MAKE CONVINCING TAR PAPER ROOFS ...

CONTINUING THE DISCUSSION OF UPDATING AND MODIFYING PLASTIC ROOFS TO better represent the prototype, this month we focus on tar paper roofs. I'll go through several stages of weathering to show how to represent anything from a brand-new roof to a roof in need of replacement.

MODELING TAR PAPER ROOFS | 2

Tar paper roofing has been around for centuries. Different from roofing felt, which is an underlayment for other roofing materials, tar paper is the final, top layer.

Tar paper is very common on flat roofs, but you can also find it on sloped roofs. The material can be stapled or nailed in place, though adhesives such as hot asphalt are more commonly used.

The material is sold in rolls of various width and length. The most common is 3' wide by 36' long. Like all roofing, this material requires overlap bottom-to-top and at the seams. Tar paper is laid starting at the bottom and working up so the water can run down and not get trapped between layers.

For a flat roof, roofers work from side-to-side, overlapping enough material to prevent it lifting in rain and wind. Remembering this helps modeling tar paper in a believable manner.



1. Left-to-right: Sloped roof needing replacement, mid-life, and nearly new.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



2. Left-to-right: Flat roof nearly new, medium-aged, needing replacement. Note the patched areas where the aging roof has been repaired.

SLOPED ROOFS



3. Roofing material from a Walthers kit is very clearly plastic.



4. My first step is to use a sharp #11 blade and sandpaper to clean off burrs and eliminate casting marks. Then I work along the edge and cut small notches at the top of each run to disrupt the perfectly straight edges.



5. I use the knife to cut nicks and dings along the bottom edge of the roof to add character.





6. The lack of texture is a giveaway that the roof is plastic. sanding to work with the grain enhances the look and adds tooth for painting. This sanding stick from Excel has a replaceable belt and is one of my favorite tools.



7. Since rolls are 36' long, I start at the bottom with a scale ruler and make marks every 30' to represent material overlap. I then scribe a line at each mark to represent seams. A newer roof is ready for painting after this step.



8. If I am going for an older roof, I use a flat blade to lift, stress, and cut the plastic along the bottom edges, to give the appearance of a tar paper roof that is starting to fail. Don't place your hand in front of the blade, as it can slip.



9. Ready for the next step. The upper roof is new and the lower roof needs repair.





10. The new roof. I add a coat of flat black spray paint to the plastic, spraying at a good distance. I lay the roof panels on the ground and allow the paint to fall onto the plastic. Spotty coverage, rather than even, is good to represent texture.



11. I followed the same procedure as [10] on this derelict roof.



12. I brush-in weathering and color using Tamiya Gloss Black and Vallejo Flat Earth, White, and Black.



13. Left-to-right: I use a 6 Flat, a 6 Round, and a 20/0 round brush to add weathering.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



14. I use the flat brushes to apply a wash of Flat Earth paint and water to provide a base coat and blend the colors. I use very little paint for a new roof (left). I increase the mix to almost 50:50 for an older roof (right).



15. I use a broad brush to apply a wash, working from top-to-bottom. Leaving the water to dry on a flat surface creates a nice base coat of weathering.



16. When the brown wash is dry, I decide how old the roof is going to be. Asphalt roofs tend to fade from black to gray, getting lighter and more worn as they age. For the newer section of roof, I used a wash of Vallejo black and water. For older roofs, I mix in white to create various shades of gray.



17. This represents a much older roof, so I used almost a 50:50 mix of water and gray paint. I work from top-to-bottom for a streaked look.





18. For a newer or less-weathered roof, I use a 00 brush and Tamiya Gloss black to paint along the seam lines to represent sealing. This is not necessary on all roofs, but it adds a bit of color and depth.



19. The final step is to dry-brush the model. I use all the colors to add variation to the roof. For the newer roof, I use mostly black, then add some light gray for the medium-aged portion.

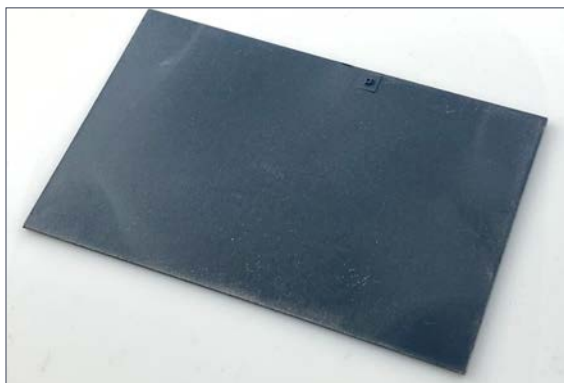


20. For the aged roof, I dry-brush mostly light gray and brown.

After dry-brushing, these roofs are ready for installation. You can add other details such as rust streaks from metal vents, bird droppings, patches, and repairs.

FLAT ROOFS

Although the material is the same, the installation is different, mainly in that the rolls overlap less than on a sloped roof. Each joint has a generous amount of sealing tar. I developed some techniques to capture this look.



21. This out-of-the-box older roof from a Walthers kit have some texture and a spot for a smokestack, but lack seam lines.



REGISTER
(free)

[INDEX](#)

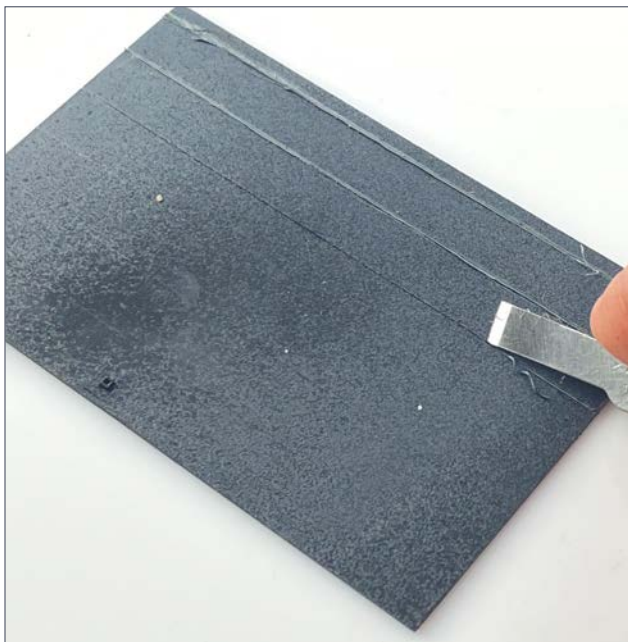
[TABLE OF CONTENTS](#)



22. I begin by adding seam lines. Most rolls are about 36" wide and are laid with a few inches of overlap. To simplify, I scribe lines 3' apart using a scale ruler and a #11 blade.



23. Most rolls are around 100' long, so I measure along the horizontal and scribe seams to represent the transition from one roll to the next. Then I dust the roof with flat black spray paint. As with the sloped roof, the aim is for a spattered look.



24. To model a roof that is in need of repair I push a #17 flat blade along the scribed horizontal line to create a 'V' groove. For added effect I then place the tip of the blade in the groove and lift.



25. I use the Tamiya Gloss black and a 20/0 brush to paint along the seams to represent tar sealing lines. I load the brush with enough paint so it creates some blobs and unevenness. Tar seams are never perfect in real life.





26. Some patches, tar splotches, and other details to add to the look. I added Vallejo black over the seam lines on the older roof at left to weather the black.



27. I use a wash of earth brown and water as a base for further weathering, and to dull the gloss paint. I go very lightly with the brown on a newer roof (left) and heavier for an older roof.



28. I apply gray wash using horizontal strokes with a wide flat brush to represent aging. The lower portion has no gray wash to represent a practically new roof.



29. I use the same gray wash for an older roof, then use a round brush to dab flat earth on some locations to represent dirt and grime.



RATE THIS ARTICLE



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



30. With just a few more details, the roof looks old and worn out. Playing around with these techniques can create some great variety and really add to the overall look of a building.

GREG BAKER



Greg Baker has been “seriously” model railroading since 2000, but as long as he can remember he has always been fascinated by trains. Greg’s main interest is the Spokane Portland & Seattle Railway and its operations in Oregon in the late 1960s. He enjoys the operations along the Oregon Trunk, but has recently started a modeling project

based on Astoria, Oregon.

Greg lives in the Portland, Oregon area, and has started a job with a local transit agency there. He is excited to be back in Oregon and to enjoy everything it has to offer, while spending time with his wife and two kids. He is currently working on remodeling his garage into a workshop and layout room. ■

Penny wise and pound foolish with your hobby?

SPECIAL DEAL:

Subscribe now and get
the next 12 issues plus
ALL 34 BACK ISSUES!

Every copy of MRH's Running Extra has tricks that can save you hundreds of dollars and hundreds of hours ...

~250 pages, \$2.99 ea.

1 year sub: \$29.99 next 12-issues (\$19.99) +
all 33 back issues (\$10)

You can buy and download single issues or get a 12-issue subscription (\$19.99) and get all back issues for just \$10 more!

~100 pages of all-meat in-depth articles and columns + all the free MRH pages ... one download gets it all!

**Get MRH
Running Extra**

[click here](#)

October 2021 - \$2.99

MRH **RUNNING**
 =====**EXTRA**
 Apprentice with savvy modelers

Jim Six reviews this BLI ...
SP&S 4-8-4 Northern
 ► **READ NOW**

Full
October
MRH
inside!

ALSO in this month's edition:

- Scratchbuilding three cabooses
- DCC upgrade for an Atlas GP38
- Build a structure with 3D printing
- Help with layout dust control
- ... and much more inside!

ADAPTIVE EDITION enhanced by partial reprinting on screen only [INDEX](#) [TABLE OF CONTENTS](#)

270+ pgs ... as a paperback, would be 3/4" thick -- for just \$2.99!

Paper mags: ~8 cents per page

Running Extra: ~1 cent per page!



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

SAVVY MODELER *Online*



RATE THIS ARTICLE

Model Railroad Hobbyist | November 2021



Fir/pine tree modeling

Grant Eastman shows how to make some great looking scale fir/pine trees on his **Southern Alberta Rail** channel. Follow along with this 7 minute video to learn how easy making great looking conifer trees can be. While Grant's trees are N scale, his methods work for any scale from Z to O.

This step-by-step how-to video shows you the entire process and how easy great looking conifer trees can be to make! ☑



**VIEW READER
COMMENTS**



GREAT MODELER VIDEOS ON THE WORLD WIDE WEB



The Amherst Railway Society Railroad Hobby Show

January 29 & 30, 2022

Save the dates!

**Click
to learn
more ...**



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

NOVEMBER NEWS

column



Model Railroad Hobbyist | November 2021

RICHARD BALE AND JEFF SHULTZ
REPORT THE LATEST HOBBY
INDUSTRY NEWS ...



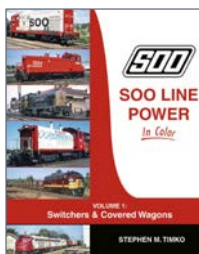
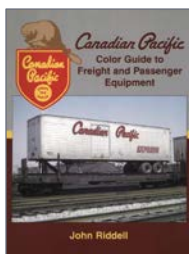
VIEW READER
COMMENTS

NEW PRODUCTS FOR MULTIPLE SCALES



Broadway Limited Inc (BLI) has posted a video on YouTube showing the new PRR I1sa and Milwaukee Road S3 in HO scale and the USRA 2-8-2 Mikado in N scale. Also included was a sneak peak of a test sample PRR E-6 4-4-2 Atlantic. Click on the info link to view the video.

Info: youtu.be/gCqNqn4Qu00



Morning Sun Books has published a digital reprint of *Canadian Pacific Color Guide to Freight and Passenger Equipment*. Author John Riddell provides a comprehensive examination of the rolling stock on this trans-

THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS

continental system, focusing on the 1950s -1970s era.

Morning Sun has also released *Soo Line Power In Color, Volume 1: Switchers & Covered Wagons*, by Stephen M. Timko. This initial volume of MStP&SSM power offers 300 color photos of Soo Alco, EMC, EMD, Baldwin, Fairbanks-Morse diesels, plus one lone GE unit.

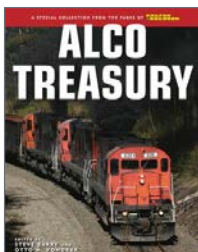
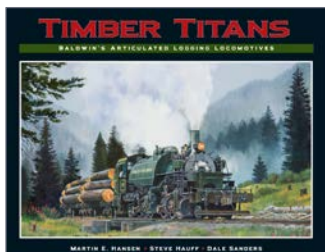
Info: www.morningsunbooks.com



Motrak Models has introduced two new Workstations. Measuring 10-1/2" long x 6-1/2" deep x 4-3/4" tall, the workstation kits are constructed of Masonite hardboard. The Vallejo Workstation holds 22 Vallejo/MIG/AK eye dropper (17ml) bottles, and the Paint Workstation provides a 1"

deep open area for storing assorted paint bottles. The workstation also includes two rows of drawers. The top row has two drawers that are 2-3/4" deep, and the bottom row is split into four drawers that are 6-1/4" deep. Two of the bottom drawers are 3" wide and the other two are 1-7/8" wide. There are holes for mounting the workstation on the wall.

Info: motrakmodelsusa.com



White River Productions has released the second printing of *Timber Titans: Baldwin's Articulated Logging*

Locomotives. This new 256-page hardcover edition by Martin



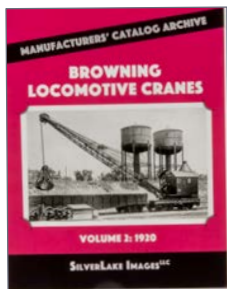
REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

E. Hansen, Steve Hauff, and Dale Sanders presents these fascinating logging locomotives in construction order and great detail with statistics and full histories that document each locomotive from the day it left Baldwin's Eddystone, PA factory to its ultimate disposition.

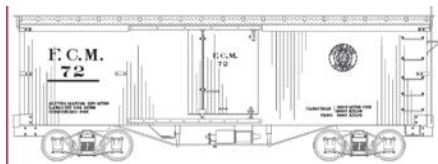
Also new from White River is *Alco Treasury*, a comprehensive collection of stories about the American Locomotive Company diesels and the railroads that used them. The 96 page softcover book presents the best of Alco articles from the pages of *Railfan & Railroad Magazine*. Both books are available now from dealers.



Silver Lake Images has published a reproduction of a *Browning Locomotive Cranes* catalog from 1920. The 52 page softcover book includes descriptions of cranes, their components, and photos of cranes being used in a variety of industries.

Info: ronsbooks.com

O SCALE PRODUCT NEWS



Leadville Designs has introduced a kit for a 30' FCM (Ferrocarril Mexicano) boxcar. The On30 scale craftsman-style kit includes laser-cut wood

body components and an arched roof of corrugated tin. Additional parts include injection molded plastic, 3D-printed, and etched brass details. Suitable decals are included. Trucks and couplers are not included.

Info: leadvilledesigns.com

S SCALE PRODUCT NEWS



Pre-Size Model Specialties has issued a new S scale kit for a 50' Southern Pacific class A-50-6 single-sheathed door-and-a-half automobile car. The model is based on a prototype built in 1923 that served well into the 1950s. The kit features a one-

piece detailed resin body with Z bracing and a separate floor/underframe. The kit includes 3D printed details, wire grab irons, wood running boards, full brake rigging and correct decals. Trucks and couplers are not included.

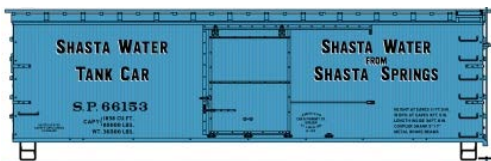
Info: www.pre-size.com

HO SCALE PRODUCT NEWS



New easy to assemble HO scale kits from **Accurail** include this 50' steel boxcar with offset double plug-

doors. The car wears a Wisconsin & Southern TP&W paint patch. The model is based on a Plate C prototype built in June 1971.



Accurail has released a 3-car pack of 36' Southern Pacific double-sheathed wood boxcars specially decorated for Shasta Water. The kit

was inspired by a prototype built by American Car & Foundry.



This 36' Canadian Pacific single-sheathed wood boxcar is based on a Fowler prototype.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



Also new from Accurail is this BNSF triple-bay covered hopper.

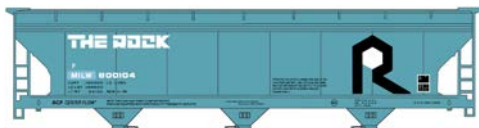


This 50' welded steel boxcar with exterior posts and a plug door from Accurail is based on a car

built for the Clinchfield Railroad in November 1973.



The HO scale kit for this Burlington Northern twin-bay ACF Center Flow covered hopper is available now from Accurail.



Accurail's December/January production schedule includes a 3-car set of this Rock Island triple-bay Center

Flow covered hopper with a Milwaukee Road patch. All Accurail HO scale freight car kits come with Accumate couplers and appropriate trucks with Delrin wheelsets.

Info: www.accurail.com.

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



Scratchbuild a backwoods mill

Get this eBook now ▶ ← click here

Each eBook ~100 pages

MRH **RUNNING** **EXTRA**





R. Bale

EMD SD60M DIESEL LOCOMOTIVE

EMD introduced the SD60 in the summer of 1984. The clean lines of the huge body were similar to its SD50 predecessor. Most of the changes were internal, including a new V16 3,800hp prime mover, wheel slip control, and microprocessor controls. Production continued through 1991 with nearly 600 SD60s purchased by American railroads. Five years later, EMD began offering the SD60 with the wide nose safety cab with a 3-piece windshield that earned the newly designated SD60M the nickname Tri-Clops. Union Pacific was the first road to order these new SD60M locomotives followed by Burlington Northern and SOO Line. BN's SD60M locomotives went on to the merged BNSF while the SOO Line units went to Canadian Pacific. Some of the BNSF units turned more mileage with Norfolk Southern and in lease service for CEFX.



An **Athearn** Genesis version of an EMD SD60M

diesel is scheduled for release in December 2022 in five road names. Nicknamed 'Tri-Clops' for the 3-piece windshield, road names for Athearn's HO scale SD60M include Union Pacific with pilot mounted ditch light and a large plow.



Soo Line/
Canadian Pacific
units will come
with a large

EMD plow, winterization hatches and a roof mounted strobe light.



Genesis SD60M
units decorated
for CIT Group
will have a

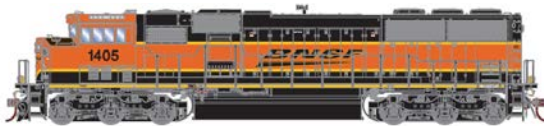


REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

small EMD plow and deck mounted ditch lights. Three numbers will be available with variations in the patched paint scheme including Primed for Grime.



BNSF units will also have a small EMD plow, and both

front and rear deck mounted ditch lights.



Ex-Union Pacific SD60M units acquired by Webb Asset

Management come with a large plow. They retain the UP flag and winged nose art in a Primed for Grime scheme.



R. Bale

EMD SD59M-2 DIESEL LOCOMOTIVE

Beginning in 2012, Union Pacific returned 28 SD60M diesel locomotives to EMD for rebuilding that included replacing the existing V16 prime mover with a 710G3B-T2 turbocharged V12 with electronic fuel injection. The UP SD60M car bodies retained many of the original components and subassemblies, having them recycled and recertified as equal to new. EMD also installed a new control system that is adaptable to both minimum emissions and minimum fuel consumption modes, depending upon the specific locomotives assignment. The rebuilt units were designated SD59M-2.



Athearn has announced plans to release an HO scale SD59M-2 in

December 2022. Spotting features of the new Genesis model include a newly built flared radiator section, a new 4500-gallon

safety fuel tank, and a windowless nose door. In addition to the flag scheme shown, two road numbers of the Union Pacific locomotive will be available with lightning stripe and a nose shield with wings.

Athearn Genesis locomotives, including the SD59M-2 and SD60M listed in this report, come with LED lighting, coupler cut levers, MU hoses, trainline hose, see-through cab windows, cab interior details, walkway tread, windshield wipers, wire grab irons, sander lines, see-through steps, Celcon handrails, and fuel tanks detailed with fillers, gauges, and breather pipes. The Genesis all-wheel drive utilizes a 5-pole skew wound motor with machined flywheels. DCC sound equipped models come with SoundTraxx Tsunami2 sound.



R. Bale

EMD SD40-2 DIESEL LOCOMOTIVE

The SD40-2 was one of EMD's most popular locomotives. During its 17 year production run that began in 1972, EMD produced nearly 4,000 of the 3,000hp SD40-2s. Although higher-horsepower locomotives were available, the reliability and versatility of the SD40-2 made it one of the best-selling models in EMD's history. The SD40-2s principal improvement over the SD40 was its modular electronic control systems. A variety of low front noses ranging from 81" to 123" in length housed additional electronic gear along with a more commodious toilet for crew members.



Athearn has included an EMD SD40-2 diesel unit in its

December 2022 production schedule. The Ready-to-Roll HO scale model is based on the best-selling prototype produced by



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

EMD in the 1970s. Six road names will be available in this release including ex-Southern high-hood units decorated for Norfolk Southern with the locomotive set up for operation with the long hood forward.



Features unique to Santa Fe SD40-2s include an air conditioner on the

cab roof and the headlight moved from the cab to the nose with the original location plated over.



Athearn reports that the colors and art work on its B&O SD40-2 diesel

locomotive have been upgraded and approved by concerned Chessie System experts.



Athearn's KCS version of the SD40-2 will have a nose mounted gyralight, front and

rear ditch lights, and a Chessie style rock plow.



An ex- Milwaukee Road SD40-2 decorated for EMD Lease (not a demo) will have a

short fuel tank. The model will come with two different styles of plows in a poly bag for installation by the modeler.



Completing this December 2022 release of RTR SD40-2s

is a Union Pacific version with a cab mounted strobe light, a large snow plow and post-1984 grey trucks. All Athearn SD40-2 road names will be available with Tsunami2 Sound with dual

cube speakers. The models will also be available for standard DC operation with a Quick Plug 21-pin NEM connector for installation of an aftermarket decoder.



Athearn plans to release its HO scale 20,900 gallon 51' general service tank car in December 2022. The Ready-to-Roll model should be well-

received since it has not been available new since the summer of 2015. The HO scale car is an accurate model of the prototype built by Richmond Tank Car in the 1960s.



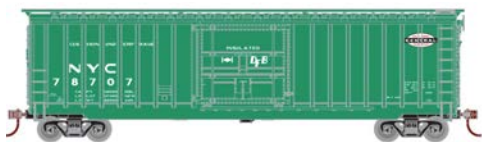
Decorating schemes will include PEMEX (placarded for gas, oil or diesel fuel), TLDX (dicyclopentadiene), Santa Fe (flammable liquids), CELX

(ethyl acetate), and Burlington Northern Santa Fe (flammable liquids). The model comes with 100-ton roller-bearing trucks with 36" metal wheelsets.



Also coming from Athearn at the end of 2022 is a 60' Gunderson high-cube boxcar with double plug doors. Road names will be

RailNet, Providence & Worcester, Norfolk Southern, Southern Pacific, and two TTX schemes.



Roundhouse brand models in Athearn's Dec 2022 production schedule include a 50' outside braced plug door boxcar with 70-ton roller-

bearing trucks with 33" machined metal wheelsets.



Road names announced for this release are Santa Fe, Burlington Northern, Chessie



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

System, Reading, Lehigh Valley, and New York Central. Athearn has included a car decorated for Hobbies for Good, and has pledged to make a donation to the charitable organization for each model purchased.



A Roundhouse 30' flatcar completes Athearn's December 2022

production schedule. In addition to the Maintenance of Way scheme shown, the HO scale model will be available decorated for Denver & Rio Grande Western, New York Central, Southern Pacific, and New Haven. A Pacific Electric version with side rails will also be included. All of the Athearn and Roundhouse brand freight cars mentioned in this report will come with McHenry knuckle couplers and appropriate trucks with machined metal wheels.

Info: www.athearn.com.



R. Bale

ALCO HH600/660 SWITCHER

Between 1931 and 1940 the American Locomotive Co (Alco) built 177 high hood (HH) switching locomotives with horsepower ratings ranging from 600 to 1000hp.

The 600/660hp units represented more than half of the nine year production run. Various physical changes occurred during the extended period of production including a major change in 1934 when industrial designer Otto Kuhler improved the appearance of the boxy, utilitarian switchers. All of Alco's HH600 660 series locomotives were delivered with Alco's own Blunt trucks which were specifically designed to handle the rough, uneven secondary track often found in industrial switching areas.





Atlas plans to deliver an Alco HH600/660 diesel switch engine during the third quarter of next year.



The HO scale model will be produced from new tooling and will be equipped with Blunt trucks with separate brake cylinders, molded coil spring

detail, and metal truck chains.



Additional details include separately applied metal grab irons, lift rings, stanchions, handrails, and coupler cut levers.



Road names will be Erie Lackawanna, Jersey Central, Lehigh Valley, New Haven (McGinnis scheme), Railco, Santa Fe, and two Southern Pacific

schemes. Booth DC and DCC versions will be available.



Heading the list of new HO scale freight cars coming from Atlas during the third quarter of 2022 is a newly tooled Master series Trinity 3230 cu. ft. pressure

differential covered hopper. The cars smaller size enabled it to be loaded with heavier ladings such as cement.



Details on the Master series model include separately applied wire grab irons and cut levers, and etched metal roofwalks.



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



and CLSX- Cargill Salt.



Road names on this run will be BNBX-Greenbrier Management Services, GACX-General American, CBFX-CIT Group, LAFX LaFarge North America,

Atlas has included a classic 40' AAR standard postwar boxcar in its 2022 third quarter production schedule.



The HO scale Atlas Master series model will have 8' Youngstown or Superior sliding doors. Additional variations include straight or diagonal paneled

roof, and either 4/4 corrugated, Dreadnaught, Improved Dreadnaught or Dartnot ends.



Road names on this run will be Detroit & Mackinac, Erie, Kansas City Southern, Maine Central, Pennsylvania Railroad, and Canadian National.



New paint schemes and road numbers will soon be available for this Atlas triple-bay covered hopper. The Trainman series model is based on a 4750 cu. ft.

car Thrall designed in the late 1970s, primarily for grain transport.



Atlas will offer the HO scale ready

to run model decorated for Union Equity, BNSF (with conspicuity stripes), CATX, David J. Joseph Transportation,

Midwest Railcar (ex-Rock), Minneapolis, Northfield & Southern, and EAFX-Rail Logistics.



Atlas has included a Trainman series HO scale 52' Evans gondola in its 2022 third quarter production schedule.



Aroostook, Chicago West Pullman, Illinois Central Gulf, JOBX, MHF Logistic Solutions, and Bethlehem Steel.



Road names include GE Railcar Services, Maine Central, Bangor &

All of the Atlas freight cars in this report will come with metal wheelsets and

Accumate couplers.

Info: www.atlasrr.com



Bachmann Trains has released models of EMD's iconic FT-A locomotive in HO scale. Road names in this release include Santa

Fe, New York Central, Lackawanna, Southern, and Western Pacific. The models feature a can motor, all-wheel drive, RP25 wheel contours, and E-Z Mate Mark II couplers.

This run introduces TCS Sound Value DCC, which includes a prototypical horn, bell, and prime mover sounds, usable on both DCC and DC layouts. The locomotive is also equipped with a Keep-Alive

capacitor device to ensure continuous power even on dirty track or short sections of track that do not carry power.

Info: bachmanntrains.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



Cannon & Co. is selling a parts kit for an HO scale model of a Berwick Foundry & Forge Plate C boxcar with a 10' plug door. The model is based on a

prototype built in 1970 with a 50' 8" interior length, a capacity of 5260 cu. ft., and 20" Keystone cushioning. The craftsman style kit (Item B-5010) includes both outer and inner sides, rib and hat sections, Plate C ends, door hardware and details sheet. Additional parts are to be supplied by the modeler.

Info: shop.cannonandco.net



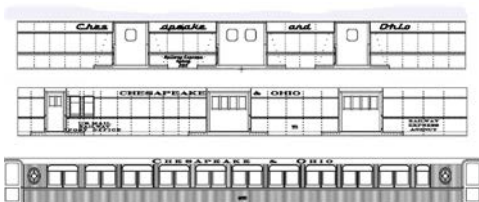
The Chesapeake & Ohio Historical Society has several 3D-printed car sides that experienced modelers can use to build prototypically correct cars by applying the sides to

donor passenger models such as Walthers, Bethlehem Car Works, Athearn, and others. 3D sides are available now for C&O series 413-420 wood combine car (above) and a heavyweight express horse car (below).



Car sides are also available for a modernized horse car, a heavyweight RPO-express car, and a coach with wood sides.

Info: chessieshop.com





Conowingo Models has introduced a 24' tool car. Featuring board-on-board construction and an all-wood floor. Trucks and couplers are available as an option, with both Tichy and Kadее arch bar trucks available with Kadее #148 couplers.

Info: conowingomodels.com



including Route of the Hiawatha and Electrified Olympian.



ExactRail has completed another release of its HO scale Milwaukee Road rib side boxcars. Four as-delivered paint schemes are available with various slogans

Additional schemes include a 1963 repaint with the famous angled logo, and a car decorated for the Chicago, Terre Haute & Southeastern, a regional coal line controlled by CMStP&P.



The HO scale Platinum series ready-to-run model features 5/5 Dreadnaught ends, Youngstown sliding doors, Kadее #58 couplers, wire uncoupling levers, and 50-ton

Barber S-2 plain-bearing trucks with machined metal wheelsets.
Info: www.exactrail.com



RATE THIS ARTICLE



REGISTER
(free)

[INDEX](#)

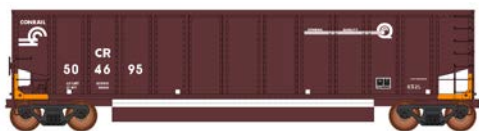
[TABLE OF CONTENTS](#)



R. Bale

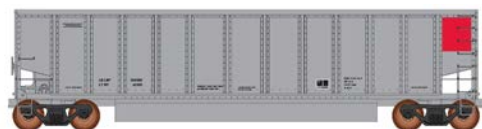
COALPORTER GONDOLAS

Unit trains of specially designed gondolas began to replace conventional coal carrying hopper cars in the 1970s. The new gondola design replaced moving hopper doors and high-maintenance locking mechanisms with long tubs on either side of the cars center sill. Eliminating the hopper outlets provided additional coal-carrying capacity in a car of the same length. One of the most popular of the modern coal gondolas is Johnstown-America's BethGon Coalporter. In production since 1978, these cars are distinguished by their angled end slope sheets and two lengthwise tubs below the frame levels. Gondola cars dedicated to coal hauling have rotary couplers allowing them to be emptied by a rotary car dumper.



InterMountain plans to release both 13- and 14-panel Coalporters by December 1st. Road names

for the HO scale 13-panel cars will be New York Central, two CSXT cars, and four Conrail schemes.



Three data only cars with red, yellow, and blue end panels are included in the 13-panel group.

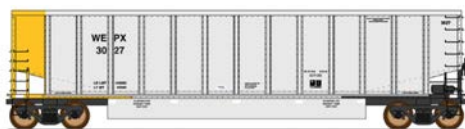


Eleven road names will be available for Coalporters with 14 side panels.



They include BNSF, SULX-Sultran, FPPX- Fayette Power, Canadian National, HIPX-Houston Lighting &

Power, TGNX-NRG Energy, WFX- Western Fuels, Conrail, GSNX- Gulf States Utilities, JECX-Jeffrey Energy Center, and WEPX- Wisconsin Electric Power.



Info: www.intermountain-railway.com



The latest release from **Kadee** is a 40' PS-1 boxcar decorated for the Southern Railway. The HO scale model is based on a prototype Pullman-Standard built in 1948 with P-S ends and Superior 7-panel sliding doors. The ready-to-run model comes with Kadee metal couplers and self-centering Bettendorf -type plain-bearing trucks with metal wheels.

Info: www.kadee.com



Kato USA is anticipating a March 2022 release date for three HO scale GE P42 locomotives

decorated in Amtrak's 50th Anniversary paint schemes.



Featuring Kato's coreless truck-motor drive system, the models will be available in both DC and DCC/Sound versions.



The paint schemes being offered are the 50th Anniversary Phase V paint, the 50th Anniversary Midnight Blue paint, and

the 50th Anniversary Phase I paint.

Info: katousa.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



Maple Leaf Trains has introduced a kit for an HO scale GP9RM with covered classification light housing. As with other GP9 kits from Maple Leaf this GP9RM version includes numerous 3D printed detail parts, formed wire parts, etched metal windshield wipers, steps, stanchions, and grilles.

Info: www.mapleleaftrains.com



Micro-Mark has developed unique pliers that spread plastic truck frames, making it easy to remove or replace wheel sets. The specialized tool is available for HO standard gauge trucks only.

Info: www.micromark.com



National Scale Car has introduced a craftsman-type mini-kit to build an HO scale Baltimore & Ohio class M55 1937 ARR standard 40' boxcar.

The kit replicates cars built by Pressed Steel Car and Pullman-Standard to the 1937 design with car builder ends, flat seam roofs with interior carlines, and Duryea under frames. Kits are available with a choice of Pressed Steel or Pullman-Standard car ends. There is also a choice of underframes.

The mini-kit includes all of the components needed to rebuild a donor car into a prototypically accurate model of a B&O 40' class M55, M55A, or M55B 1937 ARR boxcar. Donor cars, to be supplied by the modeler, can be InterMountain, Red Caboose, or



IMWX 40' boxcars with a 10' IH and 6' doors.

Info: www.nationalscalecar.com



R. Bale

HAWKER-SIDDELEY TEMPO COACHES

In 1968, Canadian National introduced Tempo – a modern, aluminum, head end power (HEP) equipped passenger fleet built by Hawker-Siddeley. The new cars were assigned to service in Southwestern Ontario. After ten years of service, the fleet was transferred to VIA Rail Canada and in 1983, the Tempo coaches were converted from 575V to 480V so they could be hauled by VIA's LRC and Amtrak's F40 locomotives, frequently on the International between Toronto and Chicago. With the loss of cafe-bar-lounge cars on several routes in the early 1980s, VIA Rail converted six Tempo coaches to snack coaches. The conversion altered the arrangement of windows on the VIA cars.



Rapido Trains has announced a special limited run of VIA Rail Tempo snack coaches. The HO scale cars replicate

half a dozen coaches VIA converted to snack coaches in 1983. Rapido's product development team scaled the model from blueprints and field measurements.

Features include full, multi-color interiors with individually-installed seats, track-powered interior lighting and working marker lights, etched-metal end gates, complete underbody



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



details with separate piping and conduit, and trucks with ball bearing wheelsets. Info: www.rapidotrains.com



Sylvan Scale Models is booking reservations for an HO scale 57' Canadian National double deck automobile transporter. The model is based on 75 cars

delivered to CN in 1959. Subject to the receipt of sufficient orders, the HO scale kits will be produced in four variations including the as-delivered CNR maple leaf scheme, above.



Additional schemes include the all-blue CN noodle Car-Go-Rail service from early 1960's, and CN's black and white passenger service scheme.

Eight of the prototypes were used in automobile transportation service on CN's Super Continental passenger train in the 1960's and 1970's. Later in their careers, some cars were converted to handle boats and roof trusses. One was turned into a cattle car. Each kit comes with the appropriate decals. The kits are unassembled and unpainted and do not include trucks or couplers.

Instructions on how to build these kits is available at hudsonbayrailway.blogspot.com/2021/10/cn-auto-transporter-build.html

Tangent has completed the fourth production release of its 86' Greenville double plug-door boxcars. The well-executed model



is an accurate HO scale replica of the prototype auto parts cars built by Greenville during the 1960s.



Several of the road names have unpainted aluminum doors. All versions come with Kadee couplers and machined metal wheelsets.



Road names include Santa Fe Bx-106 and Norfolk Southern B20 which both come with 70-ton Barber S-2A trucks.



The Union Pacific BF-90-5 version of the car rides on 100-ton Barber low-profile S-2-C trucks with Hyatt roller-bearing caps.



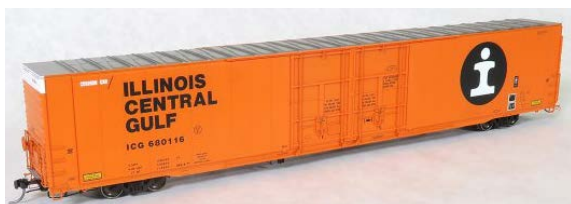
A spotting feature on the Conrail car is the Morton cross over platform.



REGISTER
(free)

INDEX

TABLE OF CONTENTS



Additional road names available now include Illinois Central Gulf, Pennsylvania Railroad, and

Southern Pacific. Due to the car's extended length, Tangent recommends track curves of 24" or larger for these models.

Info: www.tangentscalemodels.com



Walthers has scheduled another production run of its Proto series EMD F7 diesels with delivery planned for April 2022. Both F7A and matching

F7A/B sets will be available in standard DC and with LokSound 5 Sound and DCC. Units decorated for Baltimore & Ohio and Great Northern will have a single headlight at the top of the familiar Bulldog nose.



F7A units decorated for Chicago & North Western and Southern Pacific will have a second headlight in the nose door.



Air horns, antenna systems, and pilots will be road specific. All versions will have Farr side grilles.



Walthers has scheduled a January release date for a new run of its Proto series 85' Pullman-Standard Bi-Level

commuter coaches and cab coaches. The HO scale models will feature authentic window tinting and sprung operating diaphragms. For the first time Walthers commuter cars will be available with optional LED interior lighting.



Coaches and cab coaches will be available decorated for Chicago & North Western. The

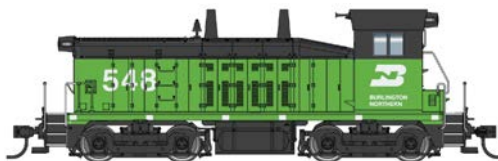
coach will also be available for Southern Pacific.



R. Bale

EMD NW2 DIESEL SWITCHER

Electro Motive Corporation introduced the NW2 diesel switch engine in late 1939. With a rating of 1,000hp, the NW2 was considered quite powerful for a locomotive that weighed only 124 tons and was just a little over 44' in length. EMC, and subsequently EMD, built 1145 of the popular NW2 before production ended in 1949. More than 50 North American railroads purchased the popular switcher. Many NW2s, readily identified by their dual conical exhaust stack, are still in service on short lines, light industrial applications, and tourist lines.



Walthers plans to release a group of EMD NW2 switch engines in February. The versatile diesel was one of EMD's biggest successes

with more than 1,100 built. Walthers Mainline series HO scale



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

model is based on Phase V units built in 1949. Spotting features include a louvered radiator grille, dual tall conical exhaust stacks, large center cab windows, and six louvered side doors with a letter board gap.



Road names will be Burlington Northern, Chesapeake & Ohio, Erie Lackawanna, Great Northern, Lehigh Valley, and Southern Pacific.



Walthers EMD NW2 switch engines will be available for standard DC operation and with ESU Sound and DCC.



Also coming from Walthers in Feb-

ruary are 85' General American G85 flatcars. The HO scale models will come with GATC hitches in both up and down positions, or with container pedestals as appropriate to the car being modeled.



Features of the Mainline model include a heavy diecast metal center sill, and 70-ton roller-bearing trucks. A minimum track radius of 24" is recommended.



Road names will be Erie Lackawanna, Pacific Fruit Express, Railway Express



Agency, Union Pacific, VTTX, TTX-Trailer-Train, and two GTX-Trailer-Train (brown and yellow) cars.



was influenced in the design of this HO scale Mainline model by unit cars that served the Powder River Basin coal mine.



Road names in this release are Burlington Northern, CSX, Chicago & North Western, Norfolk Southern, Denver & Rio Grande Western, and Conrail. All Walthers models mentioned in this report come equipped with Proto MAX compatible metal knuckle couplers.

Info: www.walthers.com

N SCALE PRODUCT NEWS



it has not been available new since the spring of 2016. The N scale car is based on a prototype built by Richmond Tank Car in the 1960s.



Decorating schemes will include PEMEX (placarded for gas, oil or diesel fuel), TLDX (dicyclopentadiene), Santa Fe (Class 3 flammable liquids), CELX (ethyl acetate), and Burlington Northern Santa Fe (Class 3 flammable liquids). The model comes with 100-ton roller-bearing trucks with 36" metal wheelsets. Info: www.athearn.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



Master series model is based on a 1,500hp prototype EMD built in 1952-1953.

Atlas' 2022 third quarter production schedule includes a group of N scale SD7 and SD9 diesel locomotives. The Atlas



Road names will be Chicago North Western, Baltimore & Ohio/Chessie System, and Chicago, Burlington & Quincy.

Both DCC units with sound (Atlas Gold series) and analog DC units (Atlas Silver series) will be available in this production run.



Additional new N scale models coming from Atlas next year include a twin-bay coal hopper with offset sides. The injection

molded plastic model comes with a removable coal load.



Road names will be Canadian Pacific, Chicago & Eastern Illinois, Baltimore & Ohio, Reading, Maine Central, Hallett, Pittsburgh & West

Virginia, and Norfolk Southern.



A new group of N scale tank cars fitted for transporting kaolin (clay slurry) is coming from Atlas during the third quarter of next year.



Road names will include ACFX-white over blue, ACFX white over black scheme, Dupont, Engelhard, SHPX and ACFX Thiele.



The models will come with 100-ton roller-bearing trucks.



The final N scale model on Atlas' 2022 third quarter production schedule is a 3560 cu. ft. covered hopper. The Trainman series model is based on an ACF Plate B Center Flow design with five roof hatches and three discharge outlets. Special features include roping staples and weld seams on the side sheets.



Road names will be ACFX, Cancarb, Georgia Pacific, C&O, Chessie System, CSX, ACFX-Kerr McGee, Potash Corporation, and Duluth, Missabe & Iron Range. All

of the Atlas N scale cars mentioned in this report will be equipped with Accumate couplers.

Info: www.atlasrr.com



InterMountain plans to release a group of N scale Trinity 5161 cu. ft. triple-bay covered hoppers this month. The models feature an etched metal roofwalk

and Micro-Trains trucks and couplers. Road names and a release date will be announced as soon as the container clears the port of entry.

Info: intermountain-railway.com



New N scale 40' standard height corrugated steel containers available this month from **Jacksonville**

Terminal include Maersk Line, K Line, Farrell Lines, YM Line, NOL Neptune Orient Lines, and a CMA CGM eco container labeled with bamboo flooring.



REGISTER
(free)

INDEX

TABLE OF CONTENTS



Forty-foot Hapag-Lloyd containers are available with a choice of either the small and large blue logo.



Jacksonville Terminal's latest run of 17- post NSC well-cars is also available now. This release offers single packs in

two road numbers for Canadian Pacific, and two for TTX, with an additional 2- pack in TTX schemes.

Info: www.jtcmodeltrains.com



November 22, 2021, is the deadline for ordering one of **Kato's** E8A locomotives custom painted in the Rock Island Rocket scheme. The N scale model is being offered as part of Kato's Kobo custom line. The model will

be custom built and modified by a master modeler in Japan. Delivery is planned for February 2022. The model can be ordered with DC, DCC, or DCC plus sound, through KatoUSA or an authorized Kato hobby retailer.

Info: www.katousa.com



Micro-Trains has released an N scale model for a Chicago & North Western 70'

heavyweight baggage car. The model is based on a prototype built in 1921 that saw service on C&NW into the early 1950s.



Also released to dealers by Micro-Trains is a 4-pack of Santa Fe SFRD steel refrigerator cars with each car having a different number.



Micro-Trains based this 50' D&RGW boxcar on a prototype built by ACF in the mid-1960s with double Youngstown sliding doors.

The N scale model depicts the car after it had its ladders shortened and running board removed in 1977.

Info: Contact a dealer.



Rail Smith is accepting advance reservations for a D&RGW lightweight

baggage car decorated in the Rio Grande's distinctive four-stripe scheme. The ready-to-run N scale models are based on prototype cars that ran regularly on D&RGW's Royal Gorge and Prospector. Although not apparent in this illustration, the cars have full skirts. Delivery is planned for the first quarter of 2022.

Info: www.lowellsmith.net



Showcase Miniatures has N scale kits for both standard and narrow gauge versions of a 60-ton 3-truck Class C Shay locomotive. The model is based on West Side Lumber

Company locomotive No. 12. The multi-media craftsman kit is



REGISTER
(free)

INDEX

TABLE OF CONTENTS

composed of pewter, resin and 3D printed parts. Special details include two extensive photo-etched frets. To add heft to the model, some of the parts are cold-cast with brass filled resin.



The completed kit can be operated with one or two 9 mm power trucks which may be purchased separately. To see the locomotive in operation go to:

www.youtube.com/watch?v=4U-hDS6Fo_o

STRUCTURES & SCENIC SUPPLIES



scale Ford pickup trucks during the third quarter of 2022. The trucks will be sold in sets with one F-250 and one F-350 in each pack.



Atlas reports it will release a selection of 1:160

Burlington Northern, Canadian National, CSX, and Southern Pacific. The vehicles will also be available in plain white, and yellow.

Info: www.atlasrr.com

Decorating schemes will include Amtrak,



Conowingo Models is selling an HO scale kit of the Pennsbury Hydroelectric Mill. Components include Rail Scale Models cedar shake roofing, ridge beam, roof supports, rock paper, and Tichy windows and doors. The water wheel can be motorized.

Info: conowingomodels.com



New items from **Frenchman River Model Works** include an O/On30 scale Cemetery set. The 10 tombstones, iron fence, and 10 stone fence posts are all unpainted cast resin.



Frenchman River has released the Wedge Bar. Designed by Thomas Yorke, the dilapidated HO scale corner business can serve as a bar or soda shop. The kit includes an unpainted cast resin building, plus cast cornice, meter box, and sidewalk. Decals are included.



Also new from Frenchman River is an O scale kit for Kharon Brothers Funeral Parlor. Although Thomas Yorke designed the building to be built on a slope, the structure can easily be built for a flat surface. The kit includes numerous resin cast structure components, assorted scale lumber for the stairs, aluminum roofing material, laser-cut

window glazing, tar paper, finials, wire and signage. Two coffins are included.

Info: frenchmanriver.com



Inter-Action Hobbies has released a kit to build two rowboats in HO scale. The 15-scale-foot boat is made of laser-cut and engraved resin impregnated board, laser-cut birch

veneer, and 3D printed resin hulls. The finished models are 2"long x 4/5"wide x 1/2"high.

Info: www.interactionhobbies.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)



station wagon features rear fender skirts, a roof top luggage rack and wide white wall tires.



This 1948 Dodge pickup is fitted with wood side extensions.



Features on Oxford Diecast's new 1965 Ford Mustang convertible include large wheel covers and thin white wall tires.



Also new from Oxford Diecast is a 1956 Ford Thunderbird.



Completing Oxford's list of new 1:87 scale vehicles is a 1959 2-door Pontiac Bonneville couple in Mandalay Red.

Info: www.walthers.com



PBL Summit has introduced an N scale storefront kit for a Lowe's Home Improvement Center. The assembled model is 12-3/4" wide by

3/4" deep. The craftsman-style kit is composed of milled white styrene plastic and laser-cut white acrylic with clear acrylic window glazing. A building-mounted sign and street sign are included along with illustrated assembly instructions. The model requires painting.

Info: www.summit-customcuts.com



Rusty Rail has released resin castings for an HO scale 1932 Ford 3-window coupe. Info: www.rustyrail.com



Scotty's Model Shop has two new products available. The first is a working HO scale derail. 3D-printed, the derail is hinged to allow it to either sit on the track or be

opened so that train cars can pass. Available for Code 70, 83, or 100 rail, the derail can be spiked or glued in place. Sold in packs of two, the derails come unpainted. The pictured code 70 derail is installed on Tom Klimoski's Georgia Northeastern RR.



The Fiberrail track cleaning tool, available in N, HO, S, and O scales, uses a microfiber cloth insert to clean grime off the rails. 30-packs of additional microfiber inserts are available. Info: scottysmodelshop.com



Tichy Train Group has introduced an HO scale for a one-room school house. The plastic injection molded kit includes the main building an outhouse, optional doors and porch railing, and 28" of picket fence. The main building has a footprint of 2-3/4" x 4-1/2".

Info: www.tichytraingroup.com



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

DISCLAIMER

The opinions expressed in this column are those of the writer and do not necessarily reflect the opinion of Model Railroad Hobbyist or its sponsors. Every effort is made to provide our readers with accurate and responsible news and information, however, neither Model Railroad Hobbyist or the writer of this column can be held responsible for any inaccuracies or typographical errors that may inadvertently appear in this column.



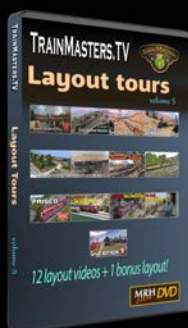
RATE THIS ARTICLE

ADVERTISEMENT

NEW VIDEOS from the Model Railroad Hobbyist Store



**HO DCC
Install
examples**



**Layout
Tours
Volume 5**



**Signaling
your
layout**



**Cool Tools
and
tips ...**

Shop the MRH Store



ADVERTISEMENT

MRHMAG.COM

[INDEX](#)

ADVERTISEMENT

[TABLE OF CONTENTS](#)



BRIEFLY NOTED AT PRESS TIME ...

Moloco has HO scale pre-painted 33" nickel-plated, insulated wheelsets in a choice of standard 0.110" or semi-scale 0.088" tread.

Info: www.molocotrains.com

N scale passenger car specialist **RailSmith** has released Tioga Rapids, a lightweight car wearing the livery of the Texas Special as operated jointly by the Frisco and MKT railroads. RailSmith is currently taking reservations for Mount Hood, a lightweight SP&S car in the decorating scheme of the Empire Builder.

Info: www.lowellsmith.net

Toronto-based **Rapido Trains** is interviewing for a customer service/administrative specialist and a graphic artist. Being a lover of trains is not mandatory for either job but, by law, being a Canadian citizen is.

Info: rapidotrains.com/content/rapido-careers

New HO models coming from **Walthers** next August include a Proto series SD45. New Mainline freight cars scheduled for release early next year include a 60' hi-cube Plate F boxcar and a 53' Railgon gondola. We'll have details next month. ■



RATE THIS ARTICLE

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



**Camas Prairie
modular layout**

Get this eBook now ►

click here



**RUNNING
EXTRA**
Each eBook ~100 pages



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

SELECTED EVENTS



Model Railroad Hobbyist | November 2021

NOVEMBER

Due to COVID-19 restrictions, please check with any organization hosting an in-person event for the latest status of the event.

Ongoing 2021

ONLINE, Zoom, dates vary, see website. Operation Special Interest Group Meetups – limited attendance available.

Info: www.opsig.org/Virtual

Archive: www.opsig.org/Virtual/Past

ONLINE, Zoom & YouTube, Wednesday & Saturday, see info. “New Tracks” Meetup, hosted by Jim Kellow, MMR.

Info: newtracksmodeling.com

ONLINE, Facebook & YouTube, dates vary, see Facebook page. “NMRax” organized by Gordy Robinson, Martyn Jenkins, Gert Muller, Jordan Kramer.

Info: www.facebook.com/groups/nmragroup

ONLINE, YouTube, every other Saturday. 4th Division, Pacific Northwest Region, NMRA hosts online layout tours and clinics.

Archive: www.youtube.com/c/4DPNRMovies

ONLINE, Zoom, Second Tuesdays, 8pm EST. “Off the Beaten Track” featuring Narrow Gauge layouts, clinics and manufacturers.

Info: groups.io/g/NNG

AROUND THE USA, IN-PERSON, Various dates. ScaleTrains.com Road Trip.

Info: www.scaletrains.com/roadtrip

November - December 2021

COLORADO, LONGMONT, December 10-12, 2021, Boulder Model Railroad Club's 44th Annual Rock-n-Rails Train Show. Boulder County Fairgrounds, 9595 Nelson Road.

Info: bouldermodelrailroadclub.org/index.php/train-expo/44th-annual-train-expo-2022

FLORIDA, MELBOURNE, December 4, 2021. Original Melbourne Train and Toy Show, sponsored by Schultz Space Coast Trains, Azan Shrine Center, 1591 W Eau Gallie Blvd.

Info: schultzspacecoasttrains.com

INDIANA, DANVILLE, November 20, 2021. Danville Train Show, presented by the Central Indiana Division-NMRA. Hendricks County Fairgrounds, 1900 E. Main St.

Info: cidnmra.org

INDIANA, FORT WAYNE, November 20, 2021. Model Railroad Show & Swap, sponsored by Maumee Valley Railroad Club, Inc. Coliseum Bingo, 911 W. Washington Center Rd.

Info: maumeevalleyrailroad.com

ILLINOIS, WHEATON, December 12, 2021. Great Midwest Train Show, Dupage County Fairgrounds.

Info: trainshow.com

MASSACHUSETTS, MARLBOROUGH, December 4-5, 2021. New England Model Train Expo, sponsored by the NMRA HUB Division. Best Western Royal Plaza Trade Center.

Info: www.hubdiv.org/fallshow

MASSACHUSETTS, ORLEANS, November 27, December 4, 11, 18. Nauset Model Railroad Club Open House, Rear of Hilltop Plaza, 180 Route 6A.

Info: www.nausetmodelrrclub.com



MICHIGAN, SALINE, November 28, 2021. Rails on Wheels' annual Southeast Michigan Train Show. Washtenaw Farm Council Grounds, 5055 Ann Arbor Saline Road.

Info: www.railsonwheels.com/#trainshow

NEW YORK, HICKSVILLE, November 26-28, December 3-5, 10-12, 2021. West Island Model Railroad Club Open House. Broadway Business Center, 485 South Broadway, Unit 22A.

Info: www.westislandmodelrailroadclub.com/home.html

OHIO, LIMA, December 11, 2021, Train Town Train Show and Swap Meet, sponsored by NMRA NCR Division 3. Allen County Fairgrounds, 2750 Harding Highway. Contact Jim Marquardt, 260-437-3844 for more information.

OREGON, PORTLAND, November 13-14, 20-21, 27-28, December 4-5, Annual Columbia Gorge Model Railroad Club open house, 2505 N Vancouver Ave.

Info: cgmrc.com/events

OREGON, RICKREALL, December 4, 2021. Willamette Valley Model Railroad Annual Train Show and Swap Meet. Polk County Fairgrounds, 520 S. Pacific Hwy. West.

Info: wvmrm.webs.com

Future 2022-2023 by location

NEW ZEALAND, CHRISTCHURCH, April 15-18, 2022. Back on Track National Model Railway Convention 2022. St. Andrews College, 347 Papanui Rd.

Info: www.modelrailcon.nz

FLORIDA, PALMETTO, February 19-20, 2022, 43rd Annual RealRail Model Train Show, hosted by RealRail: The Railroad Education and Learning Center of Florida. Bradenton Area Convention Center, 1 Hazen Blvd.

Info: realrail.org/upcoming-events/rail-pass

MASSACHUSETTS, WEST SPRINGFIELD, January 29-30, 2022. Railroad Hobby Show sponsored by the Amherst Railway Society. Eastern States Exposition Fairgrounds, 1305 Memorial Avenue.

Info: www.railroadhobbyshow.com

MISSOURI, St. LOUIS, August 7-14, 2022, NMRA National Convention and National Train Show. St. Louis Marriott Grand Hotel, 800 Washington Avenue.

Info: gateway2022.org

OREGON, EUGENE, May 10-14, 2022. PNR 2022 Regional Convention, Valley River Inn.

Info: pnr.nmra.org/1div/Eugene2020/home.htm

PENNSYLVANIA, MALVERN, March 24-27, 2022, Valley Forge Railroad Prototype Modelers 2022. Desmond Malvern Conference Center.

Info: www.rpmvalleyforge.com

TEXAS, GRAPEVINE (Dallas Area), Summer 2023, NMRA National Convention, Gaylord Texan Resort & Convention Center, 1501 Gaylord Trail.

Info: www.2023texasexpress.com

TEXAS, PASADENA (Houston Area), February 12, 2022, The Greater Houston Train Show, presented by the San Jacinto Model Railroad Club. Pasadena Convention Center, 7902 Fairmount Parkway.

Info: sanjacmodeltrains.org ■



RATE THIS ARTICLE

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



In praise of dabbling

Get this eBook now▶

click here



RUNNING

EXTRA
Each eBook ~100 pages



REGISTER
(free)

INDEX

TABLE OF CONTENTS



24TRAINS.TV *It's all about trains*



*All things train related,
whenever, wherever.*



WWW.24TRAINS.TV



On 24TRAINS.TV you can find:

videos | travel reports | magazines | vlogs
model railways | workshops | documentaires | holidays

MRHMAG.COM

[INDEX](#)

[TABLE OF CONTENTS](#)

REEFER MADNESS



CLICK HERE!



REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

CLICKABLE ADVERTISER INDEX

[Accu-Lites](#)
[Amherst Railroad Hobby Show](#)
[Archer Fine Transfers](#)
[Atlas Model Railroad Co.](#)
[Bachmann](#)
[Berrett Hill Trains](#)
[Black Cat Publishing](#)
[Blair Line](#)
[Canyon Creek Scenics](#)
[Coffman Graphics](#)
[Conowingo Models](#)
[Crew Call with Mike Rose](#)
[Digitrax \(2 page spread\)](#)
[East Coast Circuits](#)
[ESU LokSound](#)
[Fast Tracks](#)
[GHB International](#)
[Great Decals](#)
[Humancity Junction](#)
[Inter-Action Hobbies](#)
[Iowa Scaled Engineering](#)
[ITLA Scale Models](#)
[KR Models](#)
[Litchfield Station](#)
[Logic Rail Technologies](#)
[Maple Leaf](#)
[Micro-Trains Line](#)
[miniprints](#)
[Model Railroad Control Systems](#)
[Model Rectifier Corp](#)
[Model Tree Store](#)
[Monashee Laser Engineering](#)
[Monroe Models](#)
[Mountain Pacific Scenics](#)
[Mountain Subdivision Hobbies](#)
[MRH Store \(1\)](#)
[MRH Store \(2\)](#)
[MRH Store \(3\)](#)
[Mt. Albert Scale Lumber](#)

[Murder to Scale](#)
[NCE \(2 page spread\)](#)
[New Creations](#)
[North American Railcars \(PWRS\)](#)
[Pre-Size Model Specialities](#)
[Precision Design Co.](#)
[Rapido \(1\)](#)
[Rapido \(2\)](#)
[Ring Engineering \(1\)](#)
[Ring Engineering \(2\)](#)
[Roomettes](#)
[Scale Trains](#)
[Sceniking.com](#)
[Soundtraxx](#)
[Southern Digital](#)
[Southwestern Rail Systems](#)
[Squeaky's Trains](#)
[Streamlined Backshop](#)
[TAM Valley Depot](#)
[The Trainmaster Inc](#)
[TrainMasters TV](#)
[24 Trains.tv](#)
[Walthers](#)
[Westerfield Models](#)

in the **NOVEMBER 2021 MRH RUNNING EXTRA!**

Did you see this article?



Better detail painting brushes

Get this eBook now ▶ ← click here

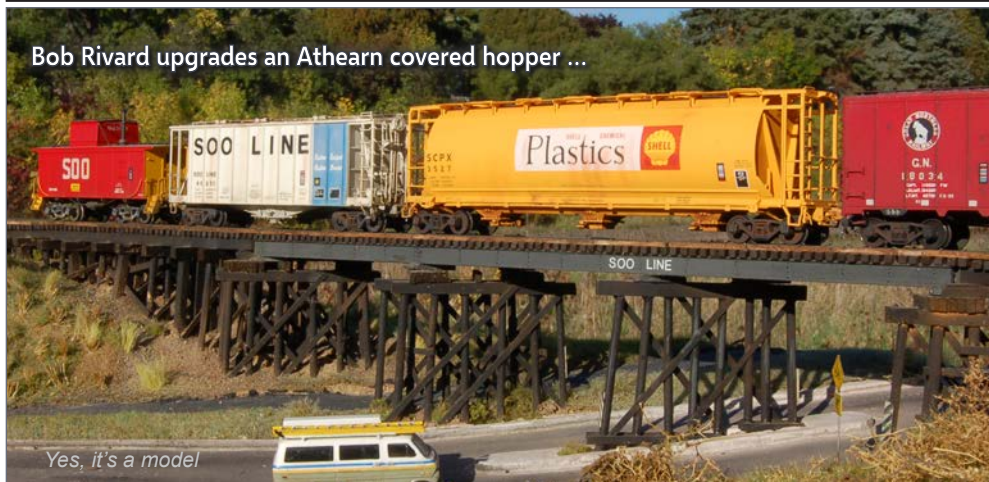
Each eBook ~100 pages

MRH RUNNING EXTRA

Clickable "other" index
[Other – Contents](#)
[Other – Cover](#)
[Other – MRH Marketplace](#)
[Other – MRH Sponsors](#)

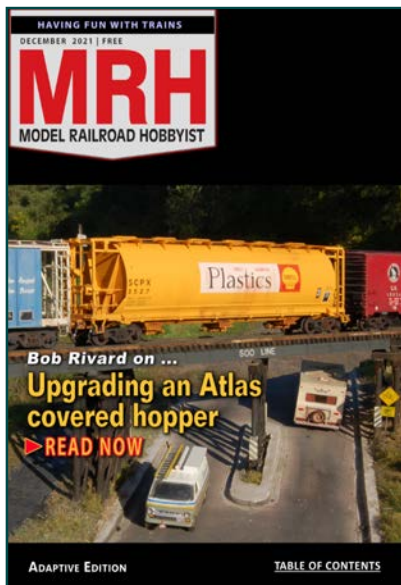
Coming next month in MRH ...

Bob Rivard upgrades an Athearn covered hopper ...



Yes, it's a model

Henry van Wyk builds suction-operated semaphores ...



Add a "live" horn to your layout ...



... coming December 15th in the
December MRH



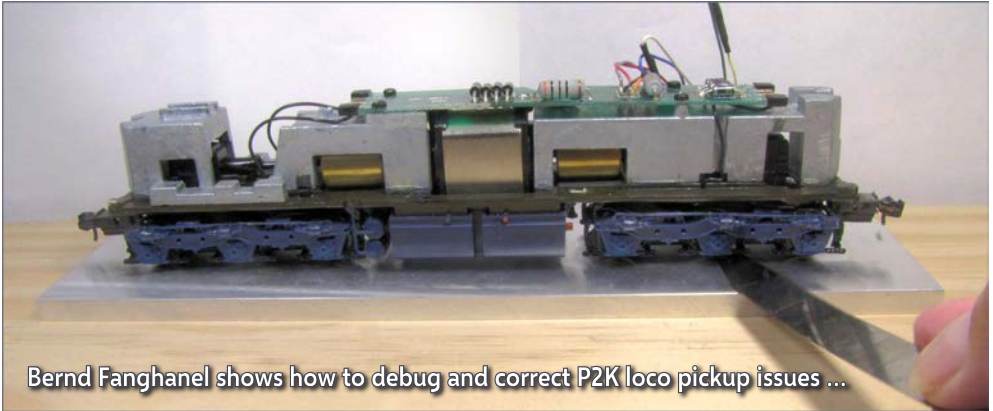
REGISTER
(free)

[INDEX](#)

[TABLE OF CONTENTS](#)

Coming next month in Running Extra ...

... all the MRH articles and ads, PLUS:



Bernd Fanghanel shows how to debug and correct P2K loco pickup issues ...



Do historically accurate models matter?

December 2021 - \$2.99

MRH **RUNNING**
EXTRA
Apprentice with savvy modelers

Bernd Fanghanel shows how to ...
Debug P2K loco pickup issues
▶ **READ NOW**





Also these articles:

- Lorem ipsum dolor sit amet
- Consectetur adipisicing elit morbi
- Vestibulum tempus vehicula
- Mauris tempor libero ipsum pellentesque
- Nullam porta ut arcu at lobortis
- ... and much more!



Modeling a railroad tie maintenance scene ...

... all this and much more!

SUBSCRIBE AND SAVE UP TO 75%