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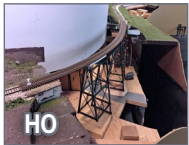
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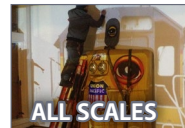
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PUBLISHER'S WELCOME

introduction



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JOE FUGATE: ZIP TEXTURING UPDATE ...



WAY BACK IN THE SEP/OCT 2010 ISSUE OF MRH, I wrote an article titled, “Zip Texturing Resurrected” [mrhmag.com/magazine/mrh-2010-SepOct/zip_texturing_resurrected] in which I updated Linn Westcott's 1960s zip texturing techniques for the 21st century.

The dry powder pigments mentioned in my 2010 article are no longer available, so here are fresh links to dry color pigments currently available from Amazon, on the right.

To get greens for things like moss on rocks, I mix yellow and blue together. I use yellow with a brown / black mix to get tan dirt colors.

Because of our less intense indoor lighting, just taking dirt from the outside doesn't look right – it's way too dark. By mixing white plaster with the dirt colors I make using these pigments, I can lighten it up so it looks right indoors. And the plaster in the mix allows simply wetting to affix it.

One trick I also like to use to get the colors to look like they're outdoors: find a photo that has a dirt color I like, then view the photo under the lay-out lighting and mix a dirt color to match the photo. As a result, I get dirt colors that look like they're what you see in an outdoor photo, so they just naturally look “right.”

One method I'm using more and more with my zip texturing: I'm applying it with a brush. With a strainer, I put down an initial layer of zip texturing that's in the ballpark color-wise, mist it with water and let it harden as normal. Then I apply a dry layer of zip texturing that's exactly the dirt color I want. This final layer gives me *exact* dirt color control.

So check out my original article – and with these updates, you're all set! ☑

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Terracotta

\$16.79
✓prime

Dry Pigment Size: 1 Lbs.
Color: Terracotta brown



Shop now



Jet Black

\$16.79
✓prime

Dry Pigment Size: 1 Lbs.
Color: Jet black



Shop now



\$21.38
✓prime

Dry Pigment Size: 3.56 oz.
Color: Cadmium yellow medium



Shop now



\$14.99

FREE SHIPPING

Dry Pigment Size: 8 oz.
Color: Ultramarine blue



Shop now

1. Here are the colors I use for my zip texturing dirt and weathering mixes: a burnt sienna/terracotta brown, black, yellow, and blue. I deliberately use a red-brown so it's easy to create red clays, for instance. For background scenes, I include a bit of blue and black to add “blue-gray distance” to the mix.

THE LIMITED MODELER

column



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JIM SIX USES DIGITAL
PHOTOGRAPHY ON HIS LAYOUT ...



I FOUND AN UPSIDE TO LIMITING THE SIZE OF A model railroad. A smaller layout helps me focus on detail and realism. I am about to remove my layout to finish the basement. A new, smaller layout project will follow. With less layout, I will try to be as realistic as my talents will allow. For many years, I have been saying I prefer a smaller layout that is awesome than a large layout that is not. In simple terms, more is not always better. I have visited too many layouts that fit into the “more” category that are certainly not “better.”

BACKDROP IMPACT

There was a very nice photo backdrops article in the June issue of *MRH/RE* that featured several of my photos. What the article did not discuss was the “impact” of photo backdrops, which can be dramatic, ho-hum, or even detract from an otherwise-nice layout. I have seen them all.

Here are two examples. [1] has a hilly backdrop implying a mountainous terrain. [2] has a flat-to-slightly hilly backdrop. The

▶ DOING MORE WITH LESS

THE LIMITED MODELER | 2

difference to me is dramatic. They are the same location on my layout, but with two different photo backdrops. I feel a layout backdrop is a critical element.



1. While Jim's coaling tower is not weathered or fully detailed, the backdrop sets the scene.



2. The same coaling tower scene with a different backdrop in place reveals a starkly different appearance.

I've seen too many model railroaders give little thought or effort to their layout's backdrop. If the ultimate in realistic appearance is what you want, then a photo backdrop is a great option. While I have seen awesome painted backdrops, they are artistic at best, and typically not realistic. There is no mistaking a painted backdrop as a realistic photo. I believe a backdrop will make, or break, a model railroad scene.

While I like the feeling of [2], I far prefer the feeling of [1]. I prefer hills or small mountains versus the flatlands I have been modeling for the past dozen years. While driving home from Florida recently, we traveled through central Kentucky and saw awesome scenery in that area. It looks like the parts of West Virginia where the New York Central operated.

MODELING LOCATION

While I loved the eastern Kentucky scenery, I have West Virginia on my mind. My layout setting must be focused on the New York Central. Most folks don't realize the New York Central Lines ran from Toledo southeast through Ohio and into West Virginia – almost all the way to Virginia. This NYCL division might work for me. The south side of Charleston had a diverse industry base, and the coal traffic would be moving from West Virginia to the Great Lakes and Chicago. An appropriate photo backdrop can set the layout location. While I have not given up on Sturgis yet, this new location is catching my attention. I will make up my mind as the basement is finished.

Here are a couple more backdrop comparison photos [3, 4]. Again, they are the same scene but with

different photo backdrops. I am becoming convinced to move my layout's location to a hilly setting as suggested by [3, 4].



3. A Pennsy coal train passes on Jim's layout with the current backdrop.



4. Here's the same train in the same location with a different backdrop in place.

PHOTO BACKDROPS

To be clear, my focus is on using photo backdrops I make from personal photos. Commercial backdrops have a place, and might be a subject for another time. Creating photo backdrops from our own archives, or photos from a friend, means that nobody else will have the same backdrop. We can use specific photos to match the settings we are modeling.

We can create photo backdrops using a smartphone camera or a digital SLR (DSLR) camera. While our hobby seems to be obsessed with using DSLR cameras, I have done well with photos from my



5. Sample photo Jim found on the internet.

iPhone camera. Other smartphones work just as well. I contend that a DSLR or other camera is not required for this and many other hobby applications.

Most of the photos I used for my backdrop were taken with an iPhone 4 and an iPhone 4s. I have since upgraded to an iPhone 7 Plus. All of these have produced large enough photos with enough resolution to create good backdrops.

I generally work with photos I have taken or with photos from the internet. I recommend using photos from the internet that are at least 3,000 pixels wide. Anything less will cause issues when mat-

ing with higher-resolution photos. My iPhone produces images that are 4,656 pixels wide. With careful cropping, you can get an image at least 3,000 pixels wide.

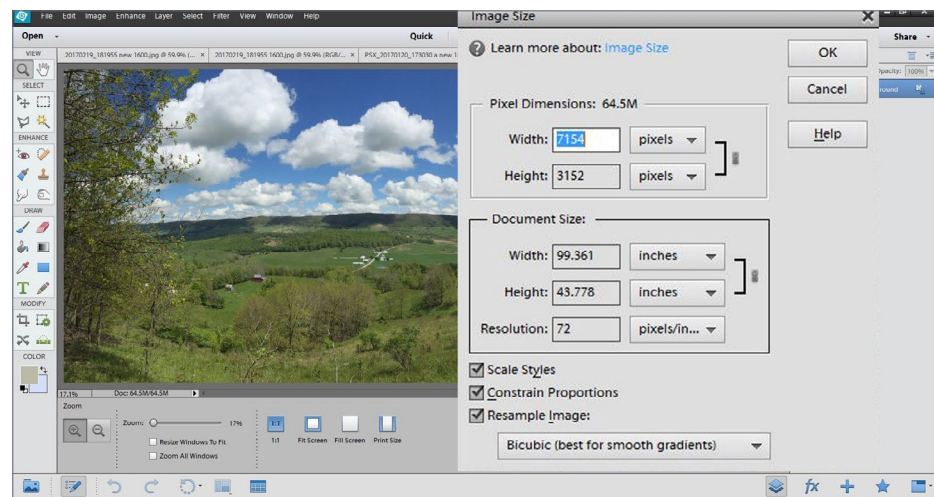
The scene in [4] began with a photo I found on the internet, [5]. While I do not know the location of [5], I do know it fits the hilly setting I want for my new layout. Any

photo I use, from the internet or otherwise, must match my layout setting. A generic commercial backdrop will not meet my needs. The last thing I want is my backdrop to be the same as one on someone else's layout. I feel the same about my structures and scenery. I want my layout to be unique and not look like anyone else's.

PHOTOSHOP ADJUSTMENTS

The sample photo [5] is a large image, more than 7,000 pixels wide, at 72 pixels per inch (ppi) resolution. When the image is opened in Photoshop Elements, we click on the Image menu item, then Image Size to view the parameters [6]. The image dimensions are in the upper portion of the dialog box.

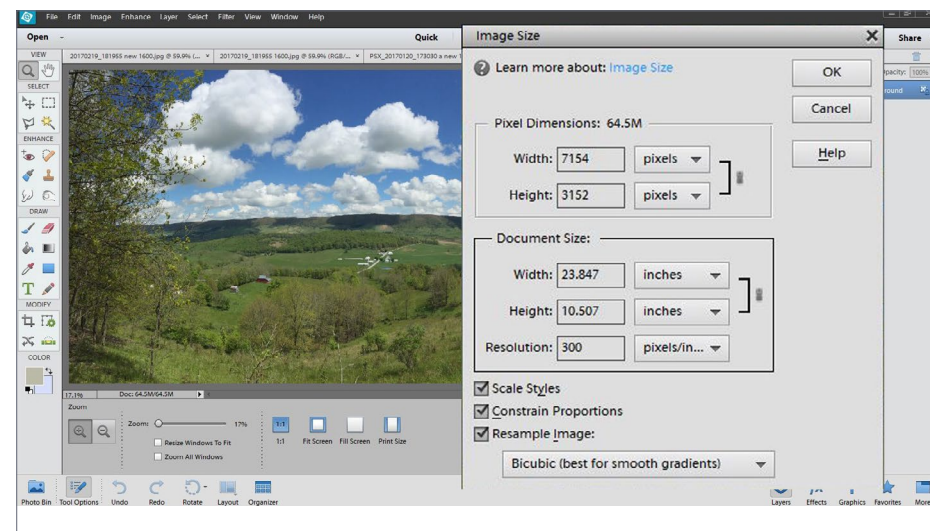
I retained the original width but changed the resolution to 300 ppi in the dialog box seen in [7]. While [6] can make a great backdrop,



6. Image dimensions can be reviewed using Photoshop Elements or other graphic programs. The 7,154-pixel width is highlighted in blue.

not all the photo can be used. As this is a large image, I chose to crop the photo to remove the trees on each side of the original [8]. Since there will be no clouds in the sky on my layout's backdrop, I cropped out most of the sky. The remaining sky will be cut from the photo print with scissors before pasting the photo onto the backdrop. When the photo is this large, more than 7,000 pixels wide, you can afford to make a generous crop.

The cropped photo [9] is ready for the backdrop. Note the cloud shadows on the hillsides near the horizon. Since the sky in my backdrop will be blue without clouds, I need to remove these shadows. I edited out the shadows on the hills by copying sections of the hills that were not shadowed onto the shadow areas using the Clone tool in Photoshop Elements.



7. Jim altered the image parameters in the open Image Size dialog box.

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It is important to understand the key to a successful backdrop is the transition from the 3D layout to the 2D backdrop. In [1, 4], several Scenic Express Super Trees and bushes are installed near the photo backdrop. They were painted with a summer-green foliage color to blend with the tree color in the photo backdrop. This makes it difficult to see the transition from 3D to 2D.



8. A smaller portion of a large image may fit the scene better than the full photo. Jim has set the crop marks here.



9. The cropped photo for Jim's backdrop still needs a tweak or two.

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Too many of us overlook how faded most backdrop photos look when compared to the 3D foreground layout. This appearance detracts from the realism of the scene. To compensate, I oversaturate my backdrop photos by jacking up the color and contrast levels in Photoshop Elements. Compare [10] and [11], which has elevated color saturation. The scenes in [1, 4] show how the photo



10. The cloud shadows have been removed in this image. The black area in the bottom right was also filled in using the Photoshop Elements Clone tool.



11. Jim has removed the sky and clouds and increased the color saturation.

backdrop blends well with the foreground layout, hiding the transition from 3D to 2D.

BACKDROPS CHANGE THE SCENE

I present another pair of photos [12, 14] to compare flatlands and mountain railroading by only changing the backdrop. I feel this

effect is dramatic using the same layout scene. Another image from my archive [13] shows the mountainous photo that was added to the scene in [12].

I am very pleased with the effect of the mountain backdrop photo [14]. Eleven Scenic Express Super Trees were installed at or near the backdrop base to blend the 3D foreground with the 2D

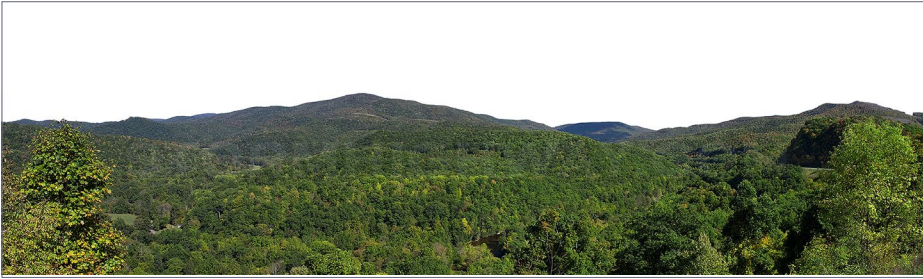


12. Jim's original scene representing southern Michigan topography.

background. Each tree was painted with two shades of green. I'm so pleased with these scenes that I might save them to reuse on the next layout.

ANOTHER USE FOR DIGITAL PHOTOGRAPHY

I also use digital photography for layout structures. I modify buildings by cutting sections from photo prints and pasting them onto



13. A view of the mountains ready for backdrop use.



14. Same scene and train, different backdrop. Compare with [12].

the sides of buildings. Initially my efforts were hit-and-miss, but after a few years I've become adept with this application. I am building convincing structures with less time and work compared to conventional methods.

I've been working on a combination of two different Walthers Cornerstone kits [15] for a factory. They are different architectural styles, with the gray section representing newer construction added to the original red building. Preparing the structure using conventional means is more work than I want to devote. Instead of painting the structure and installing all the window castings and glass, I decided to affix photo prints to the model.

I located photos of brick on the internet, then used Photoshop to scale and clean them up. I scaled brick sections to exactly fit the building panels [16] and did the same thing for the various windows [17]. While the building model is not yet completed [18, 19], you can see how the photo prints work.

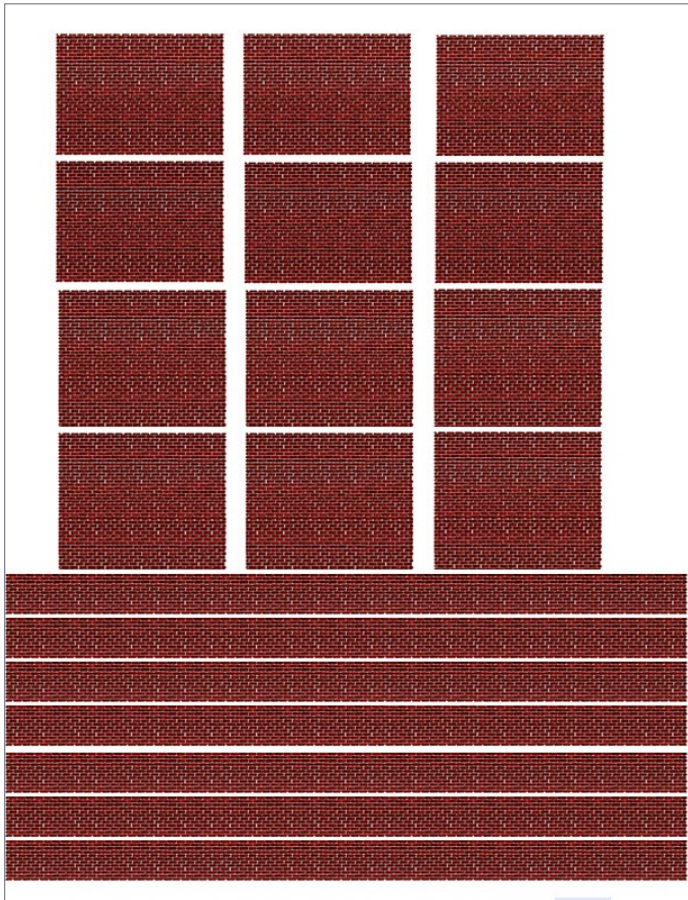


15. The raw walls of a factory await modification.

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I will over-spray the structure to seal everything. Individual details will be painted and added; the structure will be weathered before using it on the layout. I will share the results with you when it is complete.

This close-up [19] shows the effectiveness of adding window prints to a structure. Judge for yourself how this looks. Personally, I like it and will continue using this method. It is simple and saves lots of tedious work.



16. Brick panel inserts.

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I placed the unfinished structure on the layout. With some added detail, weathering, weeds, and other scenery, I think this will make a great scene and customer for the railroad.

I hope this month's "Limited Modeler" column has encouraged you to use digital photography for your model railroad. I'll share completed photos sometime down the road. Feel free to post your comments and questions on the *MRH* Forum. I will do my best to reply.



17. Windows ready to print.



18. The brick paper panels have been installed on the newer factory section. The printout of windows is ready to be trimmed and installed.

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WE CONTINUE TO BE SURPRISED BY HOW MANY MODELERS ARE NOT AWARE OF RE – SO SPREAD THE GOOD WORD ABOUT MRH-RUNNING EXTRA!



19. The window prints are trimmed to size and glued over the window casting.



20. With the new window and brick panels installed, Jim placed the factory onto the layout to see how it fits the space. ✓

Building a *See-through Industry*



TONY THOMPSON *adds a different detail
at the edge of his layout ...*

The completed "see-through" packing house installed on the layout, behind the clear acrylic plastic protector. The company sign is behind the plastic. Parts of my layout town of Ballard are visible behind Western Packing, including the depot at right center.

GETTING REAL

column



RATE THIS ARTICLE

MRH Running Extra | August 2019

WHAT'S A SEE-THROUGH INDUSTRY? THE TERM

could apply to lots of possible model industries, but what I am writing about here is an industry at the front or aisle-edge of a layout. Such an industry can be imagined to be as large as you like, because practically all its parts are envisioned as “in the aisle,” and only the “edge” of the industry is modeled. This could be a solid edge, but I want to address the ways to make it an edge that you would see through, looking through the doors or windows of the structure.

This is not a new idea. There was, to choose one example, an interesting article in *Model Railroader*, way back in 1993, entitled “Build a see-through freight house,” by John McKeeman (see Bibliography). Others have done the same over the years. It’s kind of like a building flat, except at the front edge of the layout instead of against the backdrop. Model structures like this are sometimes called “fascia flats” to describe their location, though my project is a flat that can be seen through.

Building this flat as a front-wall-only design exploits the idea of an industrial structure with no footprint on the layout other than its outer wall but gives up the impact of a full industrial structure. Its scenic interest stems from the see-through character, in addition, of course, to any car loading taking place there.

► MODELING REAL RAILROADS AND WHAT THEY DO

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This article is about the process of designing and building such a model for my layout.

PLANNING THE SPOT

One decision to make is the length of this industry along the layout edge [1], which might be the length of a loading dock, or the length of a boundary fence, or some other indicator of the business size. My model will represent a packing house, so the length is set by the length of the loading dock for refrigerator cars. That in turn depends on how many cars I want to be able to load at once. My layout is set in the transition era, so the dominant reefer is a 40-foot, ice-cooled car. The dock length need not be a multiple of 40 feet (for nominally 40-foot reefers), because the whole car length need not fit alongside the dock. Workmen loading cars only need access to the car doors.



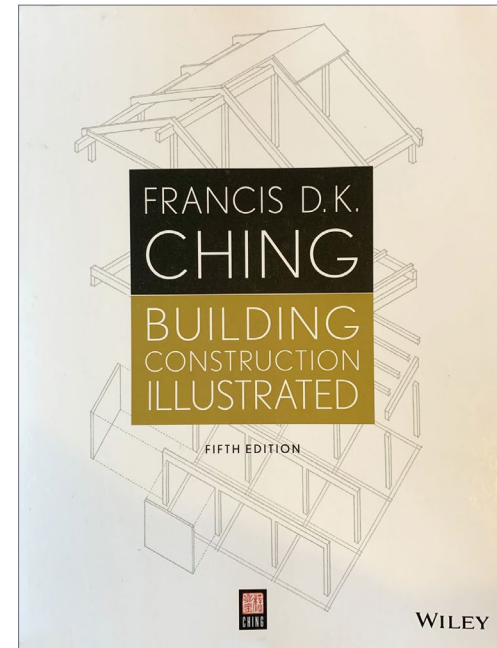
1. Plan view of part of my layout town of Ballard, California, with the layout edge being the dark space at the bottom of the photo. The triangular space alongside (below) the refrigerator cars in this view is a candidate site for a see-through industry.

A model located at the layout edge may need protection from wayward hands and limbs. If the loading dock or building edge is very sturdy, no protection may be needed. But if you build anything that can be easily damaged by careless elbows, some kind of protector such as a sheet of clear plastic, can be attached to the layout edge, to separate operators from the building.

Naturally, the length and height of this plastic sheet depends on choices for the building or structure to be built. This could be the length of the loading dock but may relate to some other structural size. I began by sketching possible buildings for my packing house. I decided almost at once that I wanted to have open loading doors from the interior of the packing house, onto the loading dock; the see-through feature of my model. The building need not match the exact loading dock length, which could be longer or shorter than the building length, but I decided to make it at least close to the building length.

I wanted to be able to load three reefers at once. For nominally 40-foot long refrigerator cars, the coupled length for HO models is almost 45 scale feet, so a three-car platform might imply a length of 135 scale feet. But since only the car doors need to line up with the dock, a platform of 94 scale feet will extend beyond the car doors of the end cars on both ends of a three-car string, even though car ends will “hang out” at each end. For HO scale, 94 feet is close to 13 actual inches.

The 13-inch dimension set the overall scale of my project. Since the outer wall of this structure faces into the layout and cannot be seen from that side, there was no need to think much about the exterior. In fact, I only need to create the inside of a wall (facing toward the layout aisle) and add a dock outside.



2. Cover of most recent edition of Frank Ching's outstanding book on building construction.



One could model smooth interior walls, as if they were sheathed or plastered, but it would be more interesting to show open framing. I have seen several photos of prototype packing houses that had this kind of unfinished interior wall.

I realized I had to make these framing details correct on this foreground model. I found a superb book on construction details, *Building Construction Illustrated*, by architect Francis D.K. Ching, originally from Van Nostrand Reinhold and now a Wiley book. Shown in [2] is the current Fifth edition cover.

The background drawing on the cover [2] illustrates the kind of material in the book. With this reference in hand, I felt confident I could build accurate framing, and could choose which of several styles of open framing to build.

I also wanted to have space for some of the inside floor of the structure, permitting stacks of shipping boxes and similar details. I could make up some HO scale packing box labels to enliven the boxes. Here is one of the vegetable labels used by the prototype Western Packing Company [3], which was located near the area I model. I chose this name for my model packing house.

Reduced to HO scale, I think these will look fine on boxes. This is not the only label used by Western Packing, but it is a colorful and appropriate one for a loading dock.

Having chosen the gross length of my packing house, I decided to start the project by obtaining a sturdy length of clear plastic to be the protector at the layout edge. As is true in many parts of the country, here on the West Coast we have large-scale dealers in plastic materials. They sell all kinds of plastic in sheets and other shapes (my purchases are listed in the appended Materials list).

I ordered a suitable piece of 1/4-inch-thick clear acrylic, about 4 x 14 inches in size, and edge polished, to provide plenty of space for the packing house, allowing for the width of the fascia alongside the future location of the packing house. The 14-inch length was chosen to be a little longer than the building itself.



3. One of several labels used by Western Packing Company, primarily shippers of row-crop vegetables.



4. Underside of the styrene loading dock, with 1/8-inch square styrene strip used to strengthen corners. Splice plates of scrap styrene can also be seen. At the left end is the wide corner of the building, to fit the triangular footprint [1].

With a size chosen, plenty of space on the relevant spur track, and an idea of what I want to build, along with that critical piece of clear plastic, I was ready to go ahead with this project.

CONSTRUCTION BEGINS: THE LOADING DOCK

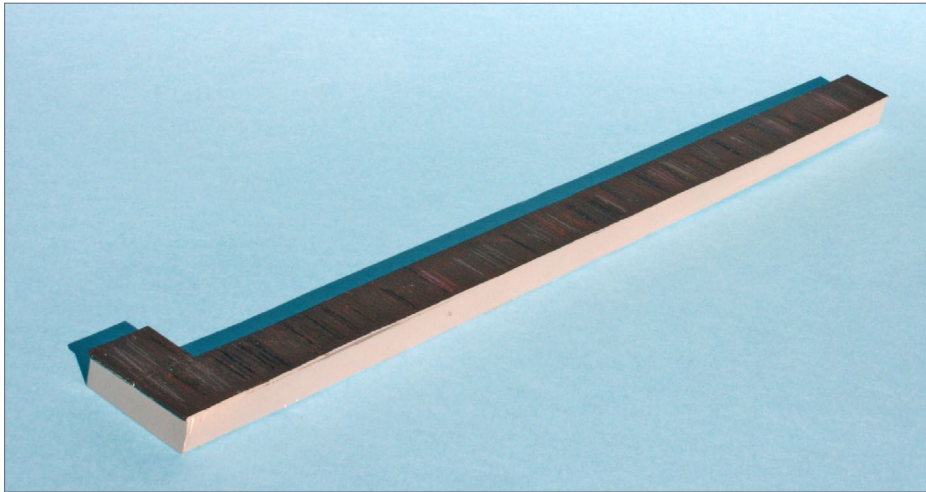
I began with the loading platform that will extend along the track, minimum length 94 scale feet. I chose a nominal eight-inch-wide plank size for the loading dock surface. Nominal eight-inch lumber is a little over seven inches wide, or about 0.080 inches in HO scale. I represented this with Evergreen V-grooved sheet styrene of 0.080-inch groove spacing (see Materials list). This sheet is 0.040 inches thick, a good sturdy thickness, but there is a small complication with using sheet like this.

This kind of Evergreen product has the grooves running parallel to the long dimension of the sheet, whereas I want the dock planks to run the short way across the dock. The width of the sheet is only six inches, so I spliced together the desired length of dock, 14 inches, in three pieces.

My dock is about five and a half scale feet wide. This is on the narrow side if cargoes had to be transported along the dock length. Because my plan has three loading doors from the building onto the dock, little lengthwise transport along the dock would be necessary. Hand trucks were the primary means of moving loads like crates of produce in the transition era, and they could easily be moved on this platform width.

Most loading docks are close to three feet above the ground, as that is the height of the floor in most house cars for freight. I made the front part from fairly thick styrene for solidity. Some time back I bought from my plastics dealer, a 4 x 4-foot sheet of 1/16-inch styrene (at a fraction of the cost of this much Evergreen, and with the further advantage that large pieces can be cut from it). I have used it for many projects beyond structures, such as roads on the layout.

For the loading dock, I simply cut a long strip of the sheet, three scale feet wide, to act as the vertical sides of my dock. I glued this



5. The exterior of the loading dock, painted to represent a concrete foundation and wood-planked top surface.



6. The loading dock in temporary use as a mock-up of the packing house, permitting reefers to be switched to the industry and spotted at the dock (compare [1]). Note the car doors line up within the dock length. The paper sign helped operators find the otherwise anonymous industry. At right background is another packing house, Guadalupe Fruit Company.

to the top surface of the dock, using 1/8-inch square styrene strip to help square up the joint. This method of construction should be evident in [4] showing the inside of the constructed dock.

Note there is a “return” angled piece at the left end of the dock [5]. This encloses the building’s wide end, as dictated by the triangular footprint [1]. The dock surface is simply painted a dark brown “wood” color, and the sides a conventional “concrete” color. The dock will not be very visible in the final arrangement.

While other parts of the project were being designed and built, this dock served as the industry for reefer loading, with the addition of a simple paper label [6].

BUILDING THE WALL

My main structural part of this building, the wall facing the loading dock, is a 1/16-inch thick styrene sheet. As the length of the

dock inside that corner return is 13 actual inches (around 94 feet in HO scale), I cut a piece to that length and 2.5 inches tall; corresponding to the rise from the ground to the roof eave.

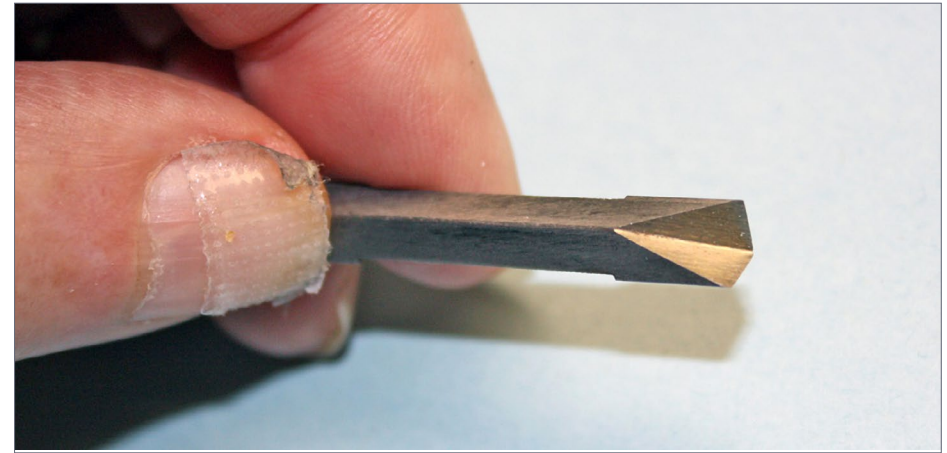
The first task is to lay out the door openings. Care at this point helps to avoid problems later. I had the saying drilled into me as a boy, “measure twice, cut once.” An advantage to a wall piece separate from the dock is that all the framing work can be done with the wall flat on the workbench, easing the fussy job of fitting and gluing all the framing strips.

The wall thickness strengthens an otherwise somewhat “flimsy” single-wall structure. A possible drawback to its thickness could be the difficulty in cutting out the door openings, if only using a hobby knife. But there is a simple way to cut openings like these with the use of a “corner chisel.” It is easy to use and makes a nice, square corner cut. A hobby knife can be used to connect the corner cuts. The chisel I used is listed in the project materials, and it is shown in [7]. All this tool requires is a light tap with a small hammer to ensure square cut corners in styrene.

The door openings were carefully laid out and the first opening cut [8] worked well, as I’ve had experience using the corner chisel. All three doors were cut the same way. I cleaned up the rough door openings with various files, making sure that they were square and that tops and bottoms of openings were aligned.

ADDING THE FLOOR

The next step was to begin laying out the interior arrangements. The plan was to construct a floor, using the same V-grooved styrene sheet as the loading dock, and attach it to the inside of the wall below the door openings. The framing could then be added to the styrene wall.



7. The corner chisel I used to cut door openings, an easy solution to one of the potentially challenging parts of this project using thick styrene walls.

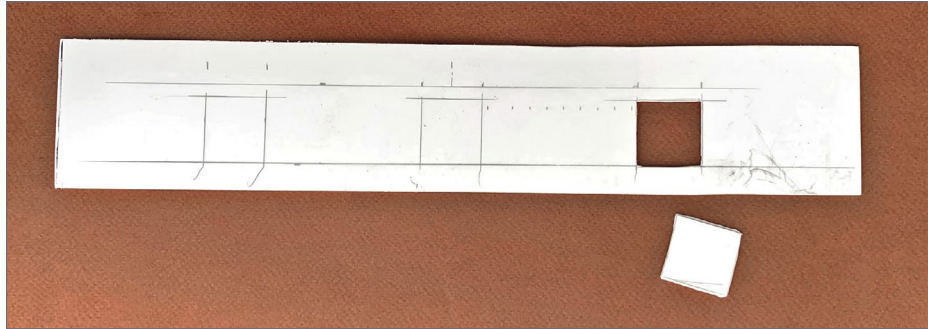
I did a trial arrangement of the wall with door openings to make sure it looked the way I wanted, and to see if visiting operators understood and used it correctly. I simply taped the wall to the loading dock [9]. This worked well in an operating session.

A concern was how well an operator would be able to read car numbers. The door openings are not large enough for that purpose. I decided the roof wouldn’t have too much overhang, so it would be possible to look over the wall and see down far enough to read car numbers. That turned out to work all right [10].

The floor was cut to fit inside the wall and at the angle desired, from nearly zero width at the left edge, to about an inch at the right edge, fitting the site [1]. For this application, the Evergreen sheet has the V-grooves running appropriately the long way of the floor, for floor joists perpendicular to the front wall. The 1/8-inch square strip was again used to attach the floor to the wall, aligned with the door openings.

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The last part of the wall structure was to add the end wall on the wide end, which required choosing the angle of the pitched roof. I chose a low-pitched roof with a 1:4 slope. This angle was cut at



8. The styrene rectangle of the 1/16-inch building wall, with doors laid out. The lower horizontal line is the height of the loading dock, which will be outside the building. The first door has been cut, but the opening remains to be cleaned up with files.



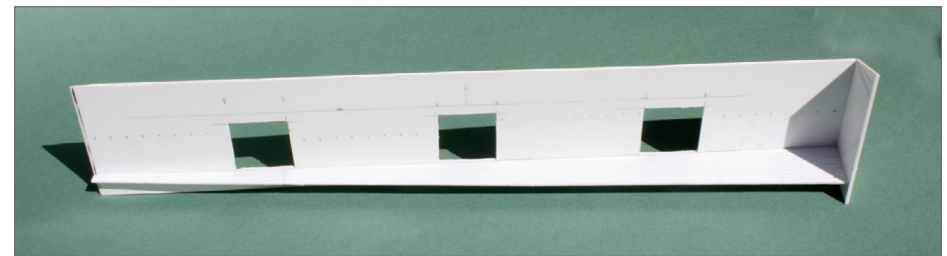
9. Here the wall with door openings is set up for an operating session, to see how this works for visiting operators. Here is another illustration why my building has a tapered floor: the track is at an angle to the edge of the layout, and the building is being constructed parallel to the track.

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the top of the side piece, again cut from the 1/16-inch sheet, and glued along the edge [11]. The basic wall was now ready for framing to be added.



10. It proved practical to be able to look over the wall to read car numbers on the spur track. This is essential in switching operations.



11. The floor, made from V-grooved sheet, has been added to the wall, supported by 1/8-inch square styrene strip under the floor (visible in later photos). The end wall of 1/16-inch sheet is also attached. This completes the basic wall prior to framing.

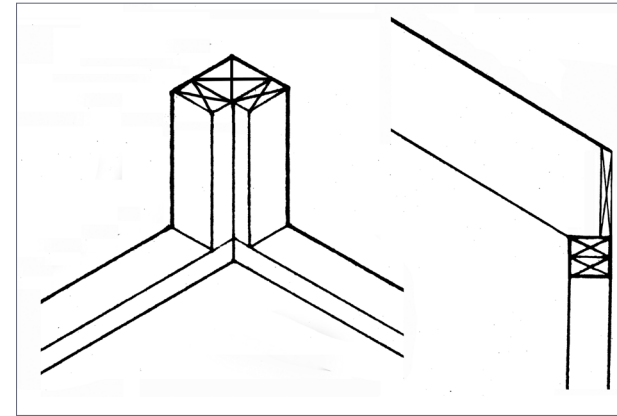
FRAMING IT UP

Traditionally the framing would use 2 x 4-inch studs, doubling them where appropriate, and one can do that in model form. Just as is done in prototype framing, sometimes a 4 x 4-inch timber can be used instead of doubled 2 x 4s. Those who understand framing may wish to skim the following descriptions. Those who want to model something similar, may wish to read Ching's book carefully.

The first step is the door framing. A stud member that supports the door lintel is called a trimmer. My doors are seven scale feet wide and thus have double 2 x 12-inch members for the lintel, which is supported by double trimmers, that is, two 2 x 4s, or by single 4 x 4s. As soon as these parts are in place, the 2 x 4 sole plate can be attached along the entire lengths of wall between the trimmers at each door.

The next step might seem to be installation of the jack studs. These parallel the trimmers, outside of the lintels, and extend up to the top plate. That would be followed by adding all the studs along the width of the wall. But something else must be solved first. The roof of this building will have open rafters, and the rafters should rest on the top plate. They extend outside the wall to whatever extent there is an overhang to the roof, and then blocking between them fills in the openings above the top plate [12]. The model could be constructed literally this way, with styrene pieces filling each opening between rafters; but since this model will not be visible from the track side, there is no reason to model the rafter ends beyond the wall, nor any reason to fill the openings individually. Instead, the inside surface of the wall can represent that filler material.

So, the next step is to set the height of the top plate, which will be a doubled pair of 2 x 4s. The top plate must be installed before doing any of the vertical studs. The top plate needs to be the right distance below the top of the wall, for a rafter that is notched to



12. Sketches of framing details, adapted from Ching's book. Left: corner framing, with 2 x 4 sole plates and 2 x 4 corner studs, surrounding 4 x 4 corner post. Right: framing for flush roof, with

2 x 4 top plates atop stud wall, rafter resting on top plate, and non-structural fill piece between rafters. Outer wall and roofing not shown.

give a bearing surface on the top plate, to just reach the roof. We modelers are building this upside down, compared to how a carpenter would think about this.

Notched rafters must have the depth of the rafter above the notch equal to the required depth for strength, since the notch effectively removes part of the depth. My assumption of an approximate building size led to the selection of 2 x 12 rafters, which when notched would be the equivalent of a 2 x 10 rafter. That essentially makes the spacing of the top plate below the top of the wall, 10 inches.

I used a 4 x 4 to represent the doubled top plate, and luckily the Evergreen material is 14 actual inches long, allowing a single length of material to model the entire top plate of the long wall. The same is then added to the short wall. [13] shows the modeled wall at this point.

Now I added the corner treatments [12]. The ordinary method here is to use 2 x 4s in a way that permits subsequent interior wall

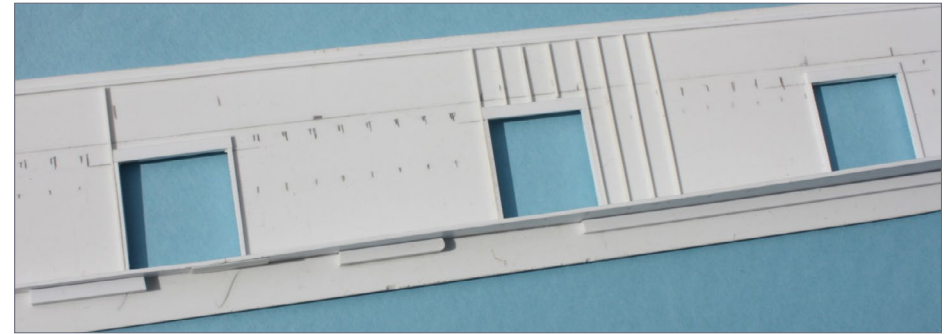
finishing materials to be attached conveniently, usually a pair of 2 x 4s, or a 4 x 4, in the corner, and a 2 x 4 on each side of it. For simplicity in building, I used a 4 x 4.

Next comes the tedious process of adding eight studs to each between-door space, along with the jack studs alongside each doorframe. Using a tool to make identical cuts, such as a “Chopper” (see Tool list), obviously is a big help here.

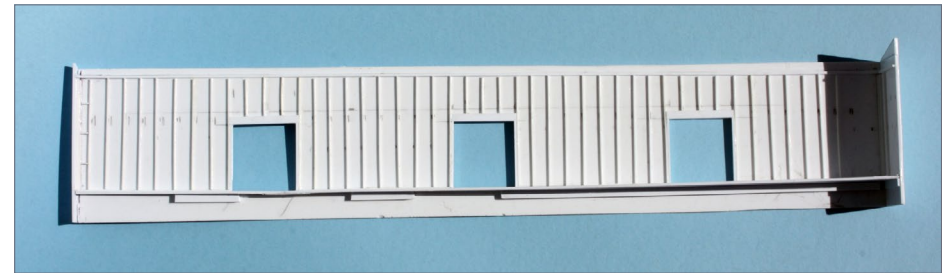
It is important to work slowly and carefully through this process. Use a square continually, to ensure that all studs are square and parallel. I made pencil marks to locate these [13], and you can see small revisions where I went back and re-measured to make sure the 24-inch spacing was consistent. Then stud installation could begin [14].



13. This photo looks down along the wall, with stud spacings marked, to the floor at mid-structure. Door trimmers and lintels are in place, as is the 2 x 4 sole plate at the base of the wall. The 4 x 4 top plate, representing doubled 2 x 4s, has been installed near the top of the wall. Rafters will rest on this.



14. The interior wall with the first scale 2 x 4-inch studs being added to the completed door framing. The 1/8-inch square styrene floor supports are visible here.



15. The interior wall surface with all studs installed. The next steps are to install the roof and its rafters, and then begin installation of the floor joists.

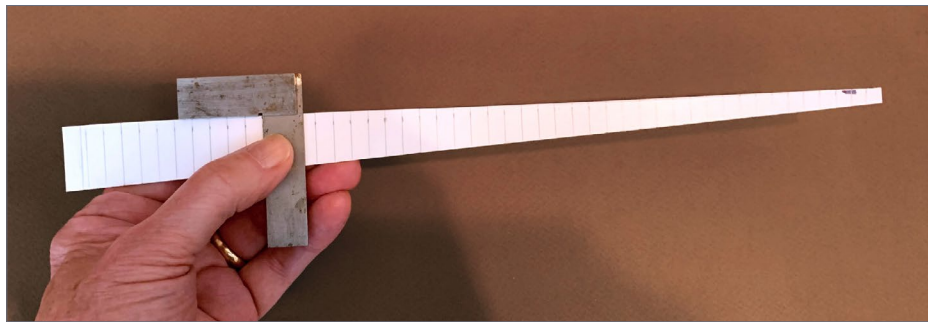
In residential construction, 16-inch stud spacing is commonplace, but in many circumstances shown in Ching's book, 24-inch stud spacings can be used. I chose that spacing for this building.

I installed a handful of studs at a time, then stepped away for a while. This may be a personal thing, but I find I am more patient and careful at the beginning of a fussy task like this, than after working at it for a time. Obviously, your mileage may vary. Eventually, more than 50 studs had all been attached [15].

ROOF AND RAFTERS

The preparation of the roof begins by laying out its shape. I simply set the structure so far, as shown in [15], upside down on a long piece of the 1/16-inch styrene sheet and drew lines for what is needed. The roof will receive rafters underneath. It is best to lay out the locations for these at this point [16]. The rafters also are to be spaced at 24 inches, a common spacing.

A drawing to show the cross-section of this kind of roof and rafter construction is in [12]. The roof here is flush with the wall. This is not an uncommon design, and the reason in the present case is evident in [10], that anyone switching this packing house will need to be able to see car numbers alongside the loading dock. In the prototype, it might be more likely to build an overhanging roof, to provide some shelter for the loading dock. For practical modeling reasons I chose to make this roof flush.



16. Here's the raw piece of styrene sheet for the roof, with lines already marked for the location of rafters. The marked lines would be much more difficult to lay out once the roof is attached to the structure. A small machinist's square was used to make sure these lines are perpendicular to the building wall (the upper edge in this view will be attached to the top of the wall).

As mentioned above, consulting the roof design tables in Ching's book indicated that a 2 x 12-inch rafter would be suitable for the building size that I imagine, given the 24-inch spacing of the rafters. With the perpendicular lines already marked, as shown in [16], it was quick and easy to apply the rafters.

The problem, however, lay with my choice of a tapered model structure to match the available footprint on the layout for this packing house. It will look good when completed, but in the meantime the construction required each rafter to be separately fit for length.



17. Here are the first rafters being installed, after the roof is attached to the walls. The rafters must fit the roof angle as they meet the wall and have a slight relief as they rest on the wall's top plate (compare the rafter and wall drawing in [12]).

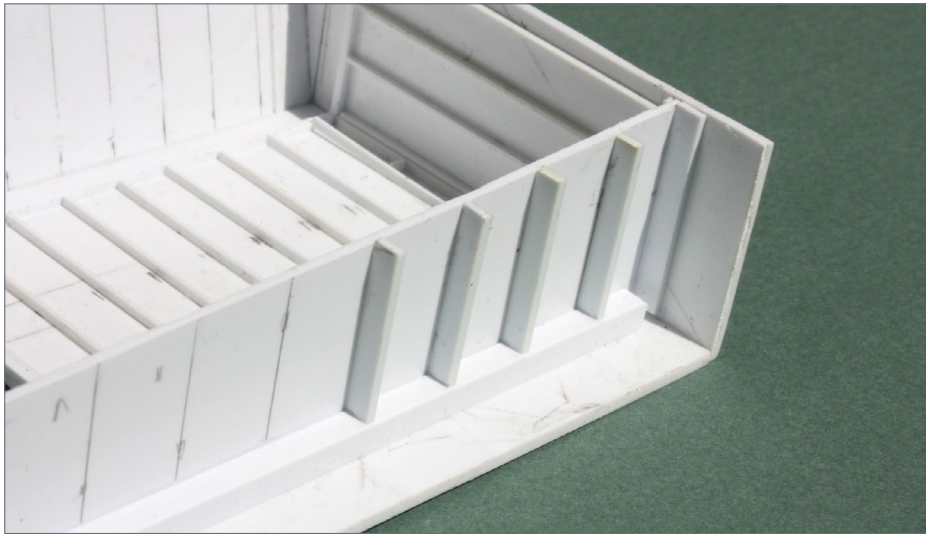


18. All rafters installed. With the help of the pre-drawn location lines (visible in [17]), the installation went smoothly.

In addition, the inner or wall end of each rafter had to be cut to match the roof angle, and give a small relief underneath, as can be seen in [12], in accord with the rafters resting on the top plate of the wall. The result in the model installation can be seen in [17]. Patience was the main skill needed to complete installation of all the rafters [18].

FLOOR JOISTS

I already mentioned the floor attachment, and the 1/8-inch square styrene supports underneath are evident in [14, 15]. These are not prototypical but will be invisible under the building when it is installed, and the floor joists will tend to hide them anyway. After consulting tabular information in Ching's book, I chose scale 4



19. The first floor joists installed. As mentioned, the 1/8-inch square styrene strips supporting the floor will not be visible at the layout viewing angle and after painting this area a dark color. Here again, the locating lines drawn with a small square were a big help in locating the joists.

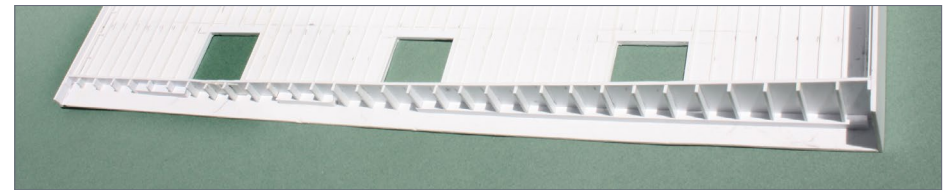
x 12-inch joists, spaced at 30 inches. This kind of floor design is closer to plank and beam than to conventional floor joists.

As with the roof framing, the fitting of each individual joist to correct length of the tapered model structure was a tedious project. But these pieces at least did not have to be trimmed to the roof angle, as I did the rafters. The first floor joists are shown as installed in [19]. Some adjustments were needed for joists abutting or not abutting the 1/8-inch square support strips, and under the splice where the two parts of the floor were connected, but these installed easier than the rafters. The completed floor area is shown as [20].

DOORS

Buildings like this one usually have sliding doors for access to the outside loading platform. Photos show that the doors may be located inside the building in some cases, or on the outside in other cases. I debated which to model and decided to show the doors mostly or entirely open, thus it would be simpler to model them outside.

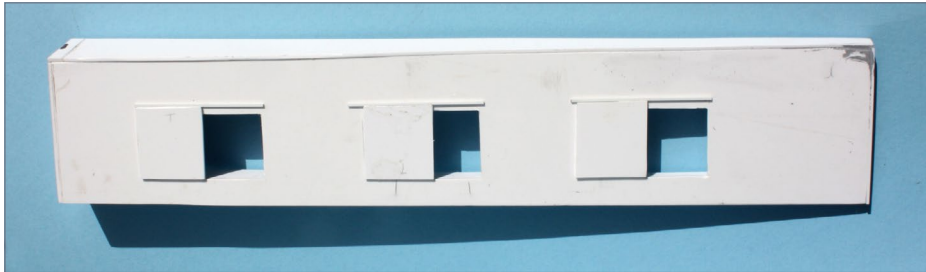
To maintain the original purpose of this structure, I needed to show the doors open. I decided to model one of them not quite open, permitting the viewer to see what the door looked like.



20. The completed floor joist installation is shown here. This part of the project went smoothly because although joists had to be individually cut for length, they did not have to be cut at an angle on the end to accommodate the roof angle, as was the case for rafters.

GETTING REAL | 23

For door material, I used the Evergreen 4080 V-groove sheet, and framed the visible door surface inside with scale 1 x 8-inch strip. I used scale 4 x 4-inch strip as a crude representation of the overhead



21. From outside the building, this is how the doors and their tracks would appear. In normal layout viewing, this perspective would be all but impossible to see. The center door is a little less open than the others.



22. An inside-wall close-up of the center door, at left, and the right-hand door, right, to show how the scale 1 x 8-inch framing of the center door face is just visible. The door handle has not yet been installed on the center door.

GETTING REAL | 24

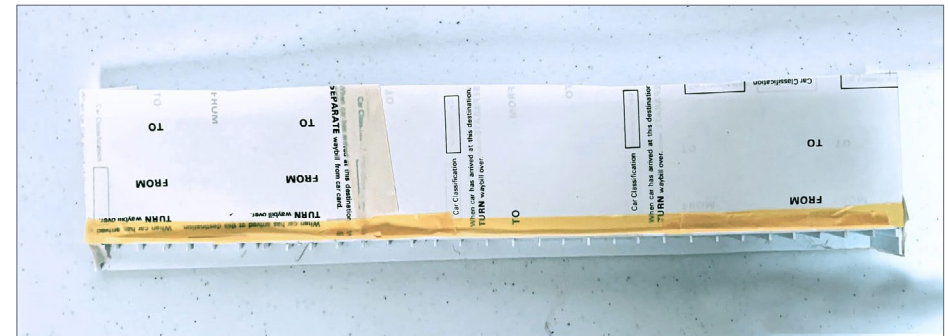
track for a top-supported door. The outside of the building faces into the layout and would be visible only with considerable effort. The photo of the exterior [21] would not usually be seen at all.

The interior view [22] shows the door opening at right with the door edge barely showing at its right edge, but the door at left is a little less open, so that the door framing and the V-groove planking is visible. I added a door handle with a conventional brass wire grab iron, as used for freight cars.

PAINTING

My plan for the color scheme here involves four colors. This structure is a good example of how we need to carefully plan the color application order. One could probably manage to mask for any sequence of colors, but it's worth considering how to do the easiest masking.

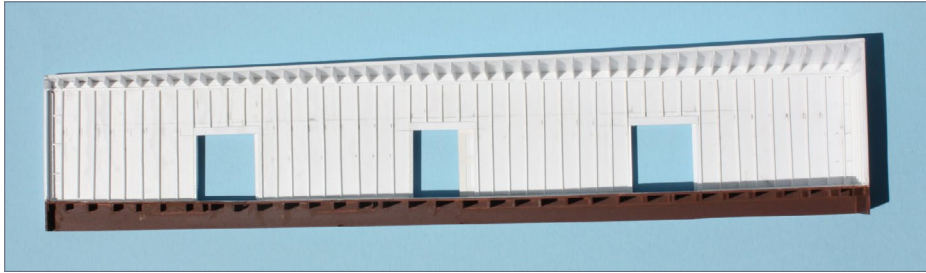
My scheme here was to use a dark brown color for the underfloor area, to make those details less visible. For the remainder of the



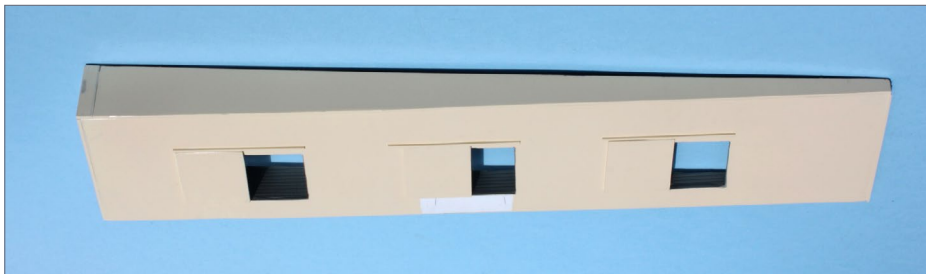
23. Some care in masking the structure body (to paint the underfloor) is helpful when later colors that are lighter are applied. Some wastepaper was used for major coverage. The yellow tape is the Tamiya product; I also used some drafting tape.

interior, I wanted to use a light gray, suitably grimy in areas, to match what I have seen in packing houses. I thought the floor should be a darker gray. Lastly, for the exterior, white was a very common color, but I wanted to use an off-white, perhaps an ivory tone instead.

I used paints I had on hand, though all of these are readily available in hobby stores (see Materials list). I rely on Tamiya masking tape because it's very flexible, adheres well, and has performed for me in the past. I began with the underfloor area. I masked the rest of the body with some scrap paper [23], so the areas that later would receive lighter colors didn't get painted brown.



24. The underfloor area and all joists, painted Tamiya "NATO Brown."



25. The ivory exterior wall color, also applied to ends and roof. The white patch under the center door is where the loading platform will be attached.

The underfloor area was painted using Tamiya "NATO Brown" [24]. This is a satisfactory dark color, as intended for this area. The color is also available in a bottle, making touch-ups of the sprayed color easy.

The exterior wall color was applied next. Some overspray might come through the door openings but would readily be covered by the interior color. I applied masking tape on the floor area at each door and sprayed Model Master "Light Ivory" color onto the exterior. Once painted, this was given an overspray of flat. The trackside wall, the end wall, and the roof were painted this color [25]. The roof will later be given a roll-roofing treatment, but this provides an undercoat.

My main interior color was Model Master "Light Sea Gray," for walls and roof. I masked the exterior completely, along with the underfloor area, and carefully masked door openings so that the gray color would not impinge on the edges of doors, which are entirely the exterior color [26].

Patient attention to coverage is essential for these steps because of all the interior framing and the resultant pockets where paint may



26. The "Light Sea Gray" color was spray-painted in the interior after masking all exterior surfaces, door edges, and the edge of the floor, to ensure the colors of those areas remained as originally painted.

not reach. This Model Master color is also available in a bottle, so touch-up is easy. I found a few places that needed attention.

With the three main colors applied, I brush painted the interior floor [27]. I chose a darker gray color than the interior walls,



27. I brush painted a darker gray color for the floor. The walls in this view look almost as dark as the floor, but a better indication of their color can be found in [26]. Any floor color that gets onto a wall area is easily touched up with the bottle paint of the same color. At this point, the roof is still “Light Ivory.”



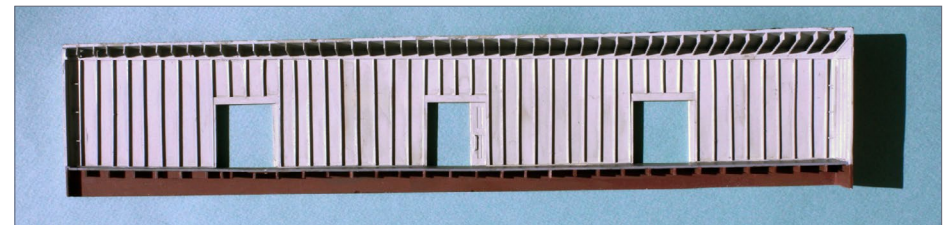
28. The exterior of the building after application of the roofing material, and weathering of roof and walls. This external wall is weathered even though it will not normally be visible on the layout, and it will receive a sign with the business name for anyone who manages to crane their neck into the layout to look.

Tamiya “Dark Sea Grey,” a color that looks good with the “Light Sea Grey” walls.

The last color application was for the roof covering. On several previous structures, I have used the technique where strips of tissue are wetted with the desired roof color paint, and this has worked well. For this roof, I wanted to represent dark green granules on asphalt rolled roofing. I chose the Tamiya “Deep Green” color. I only use a little paint to tack the tissue to the roof to hold it in place, then go back over the entire roof to ensure a uniform color [28].

My final step with the building colors was weathering. I especially wanted a weathered roof covering [28], and for the interior walls to look a little grimy. I used acrylic wash techniques that have been effective for me. An extended description of these is available online (see Bibliography). A sample of the result is shown in [29]. Note that the wall isn’t very dirty (it’s an interior wall, after all), but does look a little dingy, which was my goal.

The loading dock, previously painted and given some color variation of individual planks with Prismacolor artist’s pencils, was also given a wash of dingy gray-brown to blend everything together.

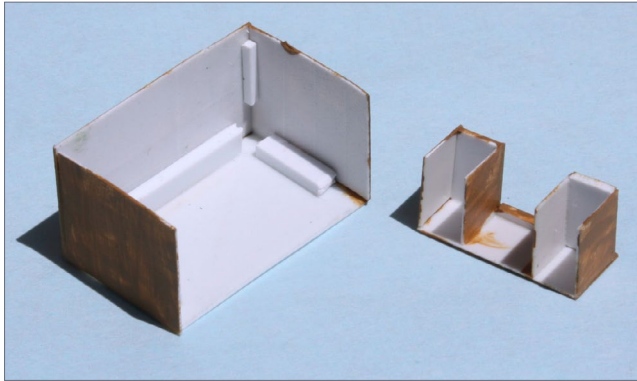


29. A view of the interior after an acrylic wash was applied to give a little “used” look to the interior.

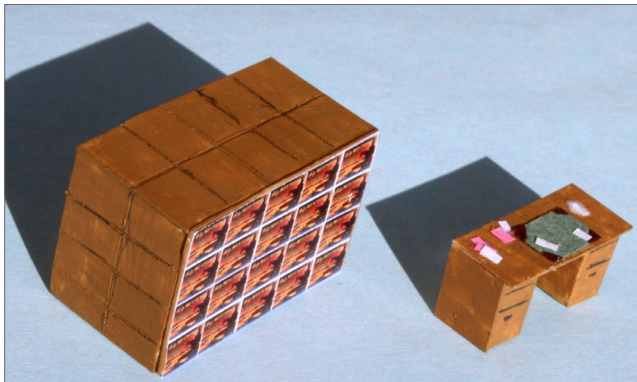
Every structure project is unique, but it's worth mentioning that this one, like many others, depends critically on the choices of edges and color boundaries. As mentioned, I spent some time working out a good sequence of masking and painting, and inevitably an amount of touching-up afterward with a brush, but the sequence of colors worked out well.

INTERIOR DETAILS

An interior portion of a structure like this can be detailed as much or as little as desired. I wanted to indicate activity in the building, and this part of the business is clearly the shipping area, with



30. The styrene boxes created to represent a stack of shipping crates (left) and a desk (right).



31. The completed stack of shipping crates, and the clerk's desk. These are the styrene constructions shown in [30].

a loading dock right outside. Packing boxes and some individual figures of workmen would be the starting points.

In addition, there would logically be a desk for the use of a clerk or foreman supervising loading, and there might be tools such as brooms or miscellaneous equipment. Lastly, there would likely be calendars, notices, signs, and other wall attachments.

I won't go into many specifics about most of these details, because anyone might choose quite different items. I also have a stash of "structure details" stored in cigar boxes, accumulated over some years. In many cases, these no longer have the original packaging and I couldn't provide specifics.

The essential interior detail is packing boxes, ready to load into reefers at the loading dock. My stacks of boxes are made of sheet styrene scribed to indicate individual boxes. I won't elaborate further because there is a four-part series of posts to my blog on packing boxes, labels, and modeling of them (see Bibliography). The photo [30] shows a styrene box for the stack of shipping



32. An example of produce being loaded, in this case oranges, with the use of a hand truck. This reefer has been pre-iced, because ice can be seen in the bunker. Note that most crates are on end, but a row of them on their sides is along the top of

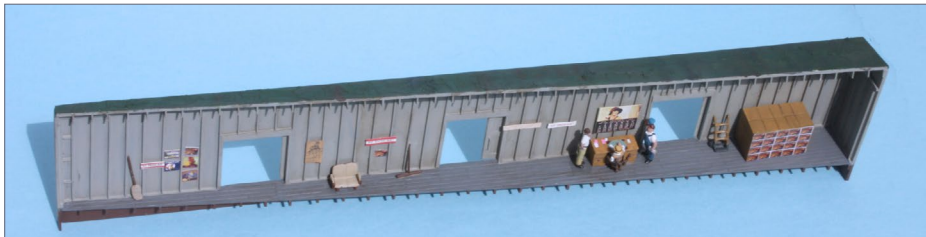
the load. Space must be left at the top for air circulation. *Sunkist photo, Rob Evans collection*

crates, and a similar approach to making a desk, using mostly 0.015" thick styrene sheet. Both are painted with Star Paints "Natural Wood" color.

I added a blotter to the top of the desk, along with some paperwork, including the pink color used for perishable documents. For the packing boxes, I added the printed-out HO labels for the



33. The interior as partly detailed. Signs and calendars have been added, along with a hand truck near the right-hand door, a couple of brooms, and some workmen gathered around the desk. Not all the details are glued in place, permitting rearrangement from time to time. Changes might include other stacks of shipping crates with different labels. Most packing houses used different labels for different kinds of produce or different grades of produce. Workmen have apparently tacked up some of the house's other labels near the left-hand door.



34. The same interior as shown in [33] but photographed from an angle similar to what layout visitors will see. This view also clarifies the relationship of some of the details.

box ends. These distinctive labels are the most important part of the boxes, and I simply made HO scale-sized versions of the "Big Western" label shown in [3]. The scribed lines on the sides and top of the box stack were emphasized with a very sharp pencil to suggest individual packing boxes [31].

A key point related to these produce boxes is that in the transition era a great deal of freight car loading was done manually. Hand trucks were commonly used and permitted a worker to wheel several crates into a car at once [32]. At least one hand truck, whether in use or leaning against the wall, had to be part of my packing house model.

I added a couple of "No Smoking" signs near the doors, a couple of wall calendars, and a pair of brooms leaned against the wall. A clerk is seated at the desk and a couple of workmen conferring with him completed the scene for now [33]. The elevation view in [33] may not clearly show the arrangement of parts, so a supplemental view is provided, from the higher-angle perspective that layout visitors will see [34]. Additional details may be added to this interior later.



35. The layout side of the packing house, with a sign added to identify the industry. This side would be difficult to see when the building is in place on the layout, but not impossible, so I felt it was useful to add the sign.

Finally, I added an exterior building sign to identify the business, though it would be difficult to see in the normal layout orientation. It's a paper sign, glued to styrene sheet and framed with scale 2 x 4-inch strips [35].

PROTECTING THE STRUCTURE

I mentioned in the introduction that a piece of clear acrylic plastic would be used on the aisle side of this model to protect it. I measured the height of the structure as it was being completed and made sure that my placement of the acrylic sheet would position it slightly higher than the top edge of the roof.

I had some wood screws on hand with bright nickel plating, which seemed like an attractive choice for attachment. I drilled clearance



holes through the plastic while it still had its protective paper in place, then peeled off that paper. Next, I drilled partway through the thickness at the diameter of the screw heads, so that they would be recessed when the sheet was attached.

Finally, before attaching the plastic sheet, I added a business name underneath the sheet for use as a label on the layout fascia, just beneath the structure location [cover]. The final arrangement reveals how little layout territory is consumed by this industry [36].

CONCLUDING REMARKS

Although I have described a specific project building, a see-through version of a packing house, I emphasize that similar techniques could be used for a wide variety of industries. The specific

techniques I chose, such as open framing, are only one option. Hopefully some of the problems solved in the design and construction of this building may inspire modelers.

This kind of industrial structure, deliberately chosen to be one that can be seen through, can be a very attractive option, not only for its space-saving attribute, but also as an interesting visual part of a layout. Switching crews at my town of Ballard have already enjoyed this one. ✓

36. This angled view shows how little of the layout space is used by this version of Western Packing, yet up to three reefers can be loaded here.

TOOLS AND MATERIALS LISTS

Tools list:

“Chopper,” NorthWest Short Line #49-04
 3/16-inch corner punch - Micro-Mark #82394, or equivalent corner chisel
 Tamiya Masking Tape - Hobby retailers

Materials list:

Evergreen no. 4080 sheet, 0.040-inch thick V-groove with 0.080-inch spacing
 Evergreen no. 8204, strip styrene, HO scale 2 x 4
 Evergreen no. 8404, strip styrene, HO scale 4 x 4
 Evergreen no. 8212, strip styrene, HO scale 2 x 12
 Evergreen no. 8412, strip styrene, HO scale 4 x 12
 Evergreen no. 186, strip styrene, 1/8-inch square
 Model Master no. 1926 paint, “Light Sea Gray,” FS 36307
 Model Master no. 2909 paint, “Light Ivory”
 Star Brand Paint, “Natural Wood,” STR-12
 Tamiya XF-26 paint, “Deep Green”
 Tamiya XF-54 paint, “Dark Sea Grey”
 Tamiya TS-62 paint, “NATO Brown”
 Tamiya XF-68 paint, “NATO Brown”
 TAP Plastics, acrylic plastic sheet, clear, 1/4-inch thick
 TAP Plastics, 4 x 4-foot styrene sheet, 1/16-inch thick



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John McKeeman, “Build a see-through freight house,” *Model Railroader*, August 1993, pg. 64.

Produce shipping boxes and labels, four-part series of blog posts, as follows:

modelingthesp.blogspot.com/2017/08/produce-shipping-boxes-in-ho-scale.html

modelingthesp.blogspot.com/2017/08/produce-shipping-boxes-part-2.html

modelingthesp.blogspot.com/2017/08/produce-shipping-boxes-part-3.html

modelingthesp.blogspot.com/2017/10/produce-shipping-boxes-part-4.html

Tamiya products, blog post at: modelingthesp.blogspot.com/2018/08/a-shout-out-for-tamiya-products.html

Weathering, blog Reference Pages, as follows:

modelingthesp.blogspot.com/p/a-few-years-ago-richard-hendrickson-and.html

modelingthesp.blogspot.com/p/weathering-with-acrylic-washes-specific.html

(Left) An eastbound creeps over the High Bridge with a string of covered hoppers. The prototype's 10mph slow order over the bridge adds to the drama as trains pass through this scene.

Applying that thinking to our layouts, if you were to poll railfans and modelers who were familiar with your prototype on what best epitomized it, what would that likely be?

The line you model might feature Appalachian mountain country or barren desert, but in spite of what views are most common, you will likely find one signature scene that stands out from them all and sticks in your brain as an icon of the entire railroad.

Finding and modeling that scene can be a key part of capturing your prototype's essence and portraying it in a recognizable way to your operators and other guests.

FINDING MY SIGNATURE SCENE

I model the western-most 50 miles of the Iowa Interstate's (IAIS) Subdivision 4, what the IAIS calls the "West End," set in May 2005. While rolling farm country, small towns with grain elevators, and beautifully restored depots dominate the landscape, I think most people who've railfanned the line best remember one particular scene on the east edge of Council Bluffs, Iowa, featuring what the IAIS calls the "High Bridge."

The High Bridge, coming in around 70 feet at its tallest point over Little Mosquito Creek, is not particularly "high" by many standards. But it does make a memorable impression for the way it can surprise you as you're following the rail line. From the most common viewing vantage points, the IAIS line passes through relatively flat Iowa farmland with little fanfare.



Identifying and developing a signature scene

Running Extra | August 2019



RATE THIS ARTICLE

JOE ATKINSON builds a signature scene on his Iowa Interstate Subdivision 4 ...

WHEN WE THINK OF A FAVORITE MOVIE, WHAT ABOUT it comes to mind first? A memorable piece of cinema may have had two hours of great action or big laughs, but there's usually one standout scene that's cemented in our minds and serves to symbolize the entire experience.

DEVELOPING A SIGNATURE SCENE | 3

There are other bridges, but the most noteworthy, such as the large six-span deck plate girder structure over the East Nishnabotna River, remain largely hidden from public view.

The High Bridge, therefore, makes a statement as it suddenly pops out of the trees, in plain sight of parallel Interstate 80. Spanning the creek valley and the original route of US Hwy 6 (now McPherson Ave), it seems to ask I-80 travelers, “So do you still think Iowa is flat?”

HISTORY

While the Iowa Interstate is known for operating the ex-Rock Island (RI) mainline across Iowa and Illinois, this portion of IAIS’s Subdivision 4 was originally built by the Chicago Great Western (CGW).



1. Satellite view of the “High Bridge.” *Courtesy of Bing Maps*

DEVELOPING A SIGNATURE SCENE | 4



2. In a scene that might be more reminiscent of the Appalachians than Iowa, an eastbound IAIS extra crosses the High Bridge on June 5, 2006. Clean power and picturesque scenes are common hallmarks of the Iowa Interstate. *Erik Rasmussen photo*

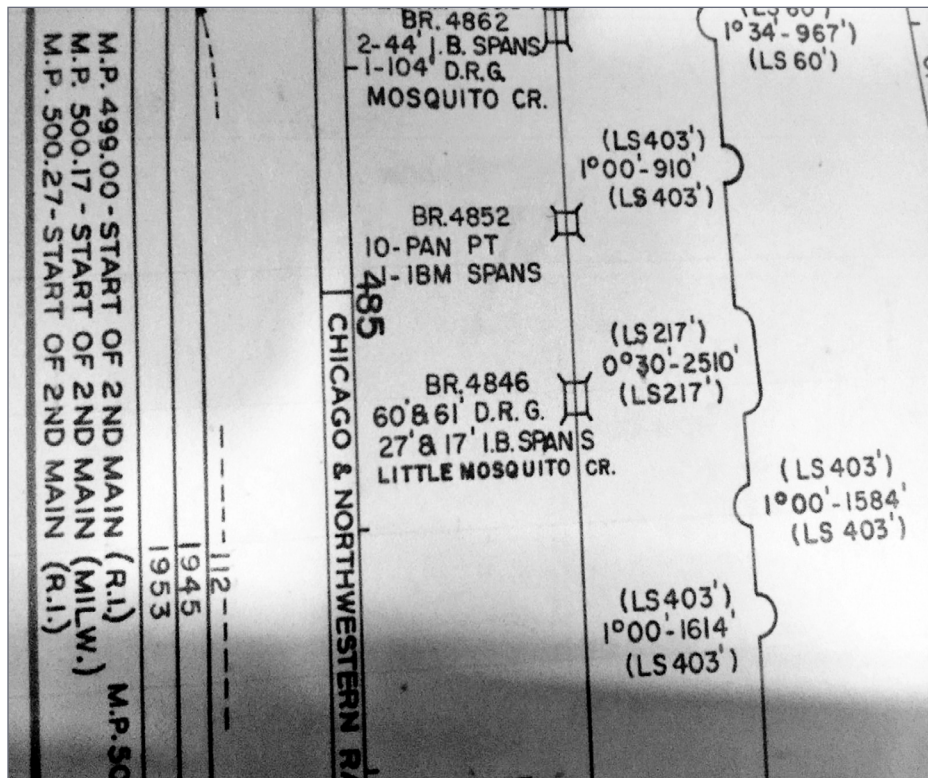
As part of a 1953 realignment called the Atlantic Cutoff, the RI gained trackage rights over the CGW from Peter (just east of McClelland) to Rigg (just east of Bluffs Yard in Council Bluffs).

Sometime after the CGW merged into the Chicago & North Western (CNW), the CNW abandoned its former CGW line to Council Bluffs, leaving the RI, and later the IAIS, as the sole operator of that Peter-Rigg segment.

In late 2013, the IAIS began significant updates to the High Bridge, replacing the pile trestle approaches with steel trestles

supporting precast concrete decks, adding walkways, and painting over graffiti.

These changes significantly improved the bridge's usefulness and safety, but in my view, took away some of the charm that made it so interesting. Fortunately, since my layout is set in May 2005, I can ignore those updates.



3. Rock Island track chart showing details of Bridge 4846, what current owner Iowa Interstate refers to as the "High Bridge". Of note is the "Chicago & North Western" reference, an interesting clue to the line's varied history.

MODELING THE BRIDGE

For me, choosing to model the High Bridge as my signature scene came easy. Actually modeling it, however, was another matter.

This is my first layout to get much beyond the benchwork phase, and while I've finally started to get over my long-standing fear of building bridges in the last few years, none that I'd finished to date were nearly as involved as this one.

But after working on the layout for 16+ years, I had come down to one last stretch of basic scenery to complete, and the High Bridge formed the centerpiece. Time to push ahead!

First, I had to decide whether to model all segments of the prototype bridge. The bridge has a sizable overall length – 169' for the two approaches plus 165' for the steel viaduct, for a total of 334', or 46" in HO. Could I do without the timber approaches, eliminate one of the towers, or otherwise trim things down?

It didn't take long to determine that each component played a key part in the overall look of this bridge, so I really could not compress the overall makeup of the structure.

As for the length of individual components, since everything in our scale model worlds is compressed, I've never gone to great lengths to ensure the exact scale fidelity of my bridges. If I can replicate the general look of the prototype with commercial kits, available structural components, and some kitbashing, I'm usually good with that approach.

Even with the High Bridge being my signature scene, I didn't tackle it much differently in that regard. I've never enjoyed gathering dimensions in the field for a structure, and I don't know anyone who bases their enjoyment of a layout on how it stacks up with a scale rule.

So if I can eyeball things to create a model that looks like the prototype to me, I'm happy to do so.

PUTTING TOGETHER THE BRIDGE SCENE

The High Bridge stands as such a landmark on the IAIS that I wanted to get as close to the prototype as commercial models would allow. But I didn't feel it was critical to match the prototype's dimensions exactly.

As we contemplate signature scenes, I think we need to keep in mind that, even though these act as a focal point on our layouts, it's important to maintain consistency and balance in the selective compression decisions we make.

If you've compressed every other scene, but you go out of your way to ensure that your signature scene is 100% to scale, it may look out of place.

I kitbashed Micro Engineering (ME) steel viaduct towers and modified 50' deck plate girders for the span between towers. I used Evergreen and Plastruct I-beam components for the tower spans, and kitbashed Grand Central Gems wood pile trestles for the approaches. I'll go into specific changes made to each component below.

The ME 50' deck plate girders come about 10' short of the length of their prototypes. I didn't feel that would significantly impact the look of the structure, so I used them largely as-is.

One modification I did make was to trim the west (right) end of the western-most girder to represent the slightly rounded ends commonly seen on a through-plate girder bridge. This configuration exists because following a derailment on this bridge in the 1970s, the Rock Island, true to its thrifty nature,



4. Micro Engineering bridge flex track resting on top of original spline and rail in order to form a template curve, with steel components of the bridge temporarily tacked together in the foreground.

replaced that span with second-hand through-plate girder examples, shimming to compensate for the rounded corners!

I cut the tower deck girders from Evergreen #279 3/8" I-beam material. Both those girders and the adjacent timber stringers on the approaches are supported on the ends by a combination of the laterally placed I-beams provided in the ME kit and Plastruct #90515 3/16" I-beam material.

I individually kitbashed the towers to represent the unique aspects of each prototype tower. To match the prototype's I-beam legs without affecting the structural integrity of the bridge, rather than replacing the legs with actual I-beam material, I simply covered the open lattice of the kit's legs with 0.010" styrene.

DEVELOPING A SIGNATURE SCENE | 9

The east (left) tower closely matched the 27' height of the ME towers, so I built it largely as-is, but with some added vertical bracing to match the prototype. For the west tower I modified it to match the prototype's more truncated 17' height.

I shortened both structures vertically, with the third (bottom) story removed completely on the outward legs, but only shortened approximately 50% on the inward legs that extend farther down into the creek bed. I also shortened by one story a third steel leg, on the west side of McPherson Ave.

The High Bridge (both prototype and model) sits on a curve. Because the final assembly of the components of the steel portion of the bridge would take place on my workbench, I had to take care to join the segments to one another accurately. Fortunately, Micro Engineering bridge flex track made a perfect template since, once curved, it holds its shape [4].

Before removing the track and Homasote spline I'd previously constructed through this scene, I simply laid the ME flex track over the existing rail and adjusted it until it matched the curve exactly.

I then used the ME flex track as a template to transfer that curve to the final bridge assembly at my workbench [5].

With the steel trestle components assembled, I set the bridge in place. First, I added bracing to the Homasote spline roadbed beyond the cut marks to keep it from accidentally shifting later when cut. Then I cut away the roadbed being replaced by the bridge. Finally, I cut and removed both rails [6].

I then taped myself and the workspace adjacent to the bridge scene inside a plastic drop cloth "cocoon" in order to limit Homasote dust, and cut the splines on both ends. At that time I also cut away a portion of the plywood near the creek bed in order to allow a deeper channel.

DEVELOPING A SIGNATURE SCENE | 10



5. Bridge components resting on top of the ME flex track used as a curve template. Final assembly of the steel trestle components was done in this manner, ensuring that the bridge's curvature would match the existing track exactly.

I wasn't sure if my cocoon idea would work, but it was very successful in confining the mess.

With the Homasote out, I was finally free to set the bridge in place, if only temporarily [7].

DEPARTMENT OF CORRECTIONS

This is the first layout on which I've progressed much past the point of benchwork, and I've made my share of rookie

DEVELOPING A SIGNATURE SCENE | 11

mistakes. For example, when hanging the backdrops, I neglected to consider that they'd need to extend lower in bridge scenes such as this. Oops!

As a result, each time I build a bridge, I need to extend the backdrop downward. I did this using Gorilla Glue to attach Masonite splice plates on the back of the existing backdrop, then gluing a Masonite extension to the splice plates.



6. View of the High Bridge scene just prior to the removal of the Homasote splines. Rails have been cut, un-spiked, and removed.

DEVELOPING A SIGNATURE SCENE | 12



7. High Bridge temporarily set in place. With this project stretching out over many months, moments like this – a glimpse of what was to come - provided big motivation to keep pressing forward.

Once everything was dry, I treated the resulting seam much like a drywall seam, taping and mudding the joint, then wet-sanding, priming, and painting [8].

SCENERY AND ABUTMENTS

With the backdrop fix behind me, the time had come to start building scenery. First I added pink insulation boards to build up the landscape [9].

The High Bridge crossing of Little Mosquito Creek is a bit unusual because the creek no longer has an open channel. In

DEVELOPING A SIGNATURE SCENE | 13

1989, it was enclosed, entering a concrete culvert just east of McPherson Ave. It now passes underground beneath the roadway and High Bridge, and then exits just north of the bridge.

I modeled the culvert at the creek's exit point using 0.040" styrene. Once that was in place, I smoothed and formed the insulation with a Surform tool, cleaned up the mess, and applied "Ground Goop" (papier-mâché Elmer's glue, brown latex paint, water, and Lysol) in preparation for scenery [10].

I painted the creek bed with a medium olive-colored acrylic mixture. Once that was dry, I applied Mod Podge for the water, then cut and painted 0.040" styrene for McPherson Ave. I applied highway striping using yellow and white paint pens.



8. Completed backdrop changes. I've only set the backdrop photos and bridge temporarily in place, but the scene feels like it's starting to come to life.

DEVELOPING A SIGNATURE SCENE | 14



9. Pink insulation boards used to build up the basic landforms around the bridge.

At this point, I also painted and weathered the bridge. This included some light graffiti for which the High Bridge has long been known by locals. For final weathering I applied oils and PanPastels.

Next up was the addition of timber abutments [11].

I weathered McPherson Ave. [12] and affixed the backdrop photos with adhesive caulk.

Applying static grass always transforms a scene for me, and this was no exception. I used a mixture of Silflor 4mm and 6mm in the Late Summer and Autumn colors. After the first pass, I hit the area randomly with hairspray and did a second application to create patchy taller grass [13].

DEVELOPING A SIGNATURE SCENE | 15

Next, I added some black polyfill clumps, let them dry, pulled the excess poly out to form “branches,” and then hit them with hairspray and leaf flake. I also permanently set the steel portion of the bridge in place [14].



10. Just like that, things were starting to come together. I added, shaped, and painted land forms. Then I worked on Mosquito Creek and added the culvert. I painted and striped the road, painted and weathered the bridge, and added some light graffiti to match the prototype. I’m not normally a fan of graffiti, but the tags on the High Bridge have been around for decades, and they’re so well-known to locals that this signature scene must have them.

DEVELOPING A SIGNATURE SCENE | 16

APPROACHES

The approaches were built from Grand Central Gems (GCG) wood pile trestles, shortened vertically.



11. Timber abutment on the east approach to the bridge. Both abutments were built with spare timbers from the unused portions of the Grand Central Gems pile trestles.

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DEVELOPING A SIGNATURE SCENE | 17

While I minimized compression of the steel portions of the bridge, I took a much more liberal course with the approaches. The prototype trestles stand mostly hidden by thick vegetation in my era, and I didn't want the bridge and its associated speed restriction to eat up too much of the open running between adjacent towns, since McClelland, Iowa is just a few feet to the left. As important as the High Bridge is as a scenic element, it's still just one component of the IAIS's route from Council Bluffs to McClelland.



12. I weathered McPherson Ave. with PanPastels and fashioned shoulders from sifted dirt mixed with Woodland Scenics light gray ballast. Backdrop photos are in place.

DEVELOPING A SIGNATURE SCENE | 18

With about 12' to represent that entire run, I had room to model the bridge full-size, and originally planned to do so. However, I didn't want even my signature scene to overwhelm my recreation of the area as a whole.

After a lot of consideration, I concluded that the approaches would be the ideal target for selective compression. I modeled the prototype's six pile bents on the west end with four of the



13. Application of static grass has begun. It's obvious from this photo that I'm not a perfectionist, but I've learned that there's no sense in wasting time on items that are only going to be covered up by later phases of scenery.

DEVELOPING A SIGNATURE SCENE | 19

GCG components, and I represented the five prototype bents on the east end with just three.

I'm hoping these shorter approaches still suggest the presence of more behind trees that were added later. Along with spacing the bents more closely, these changes allowed me to compress the total approach length of 169' on the prototype to 68' on the model and still look "prototypically correct" for this signature scene.

I topped the approaches with a four timber stringers (beams) [15]. I also added X-bracing between trestles to match the



14. This is the first image of the bridge after being permanently in place, and with foliage added.

DEVELOPING A SIGNATURE SCENE | 20

prototype. Like the abutments mentioned previously, I salvaged all the additional timber from the surplus GCG trestles.

I also added a second coat of Mod Podge in Little Mosquito Creek, and a bit more greenery on the hillsides.

OVER THE FINISH LINE

Finally, I cut the rails back farther on the splines to allow the bridge flex track rails to extend onto the splines and ensure smooth transitions.



15. A view of the east approach, built with modified Grand Central Gems pile trestles and four timber stringers.

DEVELOPING A SIGNATURE SCENE | 21

I added bridge track, bridge guardrails, and guard timbers (all included with the ME bridge flex track), weathered the ties and timbers with PanPastels, and wired and tested the track. I also touched up the fascia at this point.



16. A view of the bridge with approaches now in place and additional foliage nearby.

DEVELOPING A SIGNATURE SCENE | 22

This scene demanded a *lot* of trees, and time came to finally add them. I use SuperTrees exclusively, flocked with a variety of leaf flake and ground foam. I did my best to replicate the placement and density around the bridge and creek bed.

For the last step, I added highway guardrails along McPherson Ave. I used Pikestuff kits for the rails themselves, but my prototype has treated wood guardrail posts rather than the steel I-beam posts included in the Pikestuff kit, so I built those and the accompanying offset blocks from wooden matchsticks weathered with PanPastels.

I limited my signage to the barricade stripes at the foot of the rightmost steel trestle bent, the speed limit sign facing away from the camera, and the reflector posts spaced along the lefthand guardrail.

With that, my layout's signature scene came to life!

CLOSING THOUGHTS

Like everything on the layout, my modeling of the High Bridge involved compromises, and I'm sure it wouldn't fare well if you took a scale rule to it. My modifications compressed the bridge's total length from 334' on the prototype to 214' on the model.



17. A west-bound crosses the High Bridge, nearing Council Bluffs yard limits. A short distance ahead on the far right is the IAIS's bridge over the BNSF's Bayard branch.

While that's a significant reduction, I limited the compromises almost entirely to the approach areas hidden behind trees on the prototype, so I was happy with the result. It accomplished my goal of giving *the feel* of visiting and railfanning the prototype. That's about the best I can hope for from anything in this hobby!

While it's a great sense of accomplishment to have my signature scene behind me, the enjoyment is only beginning. Just as shooting trains on the prototype bridge was always a major highlight of a railfanning trip for me, I now get that same enjoyment while operating over my model of the bridge.

One of the things I've always liked about the prototype High Bridge has been that trains must crawl over it due to a permanent 10mph slow order between there and Bluffs Yard to the west (around the corner to the right on my layout).

There's something about the slow speed that adds drama to watching a train roll over it, and it's been a highlight of this hobby to see that come to life on my layout. I hope this little adventure encourages you to tackle your own signature scenes. ✓

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JOE ATKINSON



Joe Atkinson got into the hobby at about the age of 9 or 10, spurred by a combination of the prototype yard he passed every day on his newspaper route and a Tyco train set he received for Christmas. Aside from a short time he spent in N scale in his younger years – where he enjoyed bending his own grab irons for those tiny diesels – the rest of his journey has been in HO.

Much of his earliest work was freelance, and later proto-free-lance, before jumping into prototype modeling in 2000 after developing an interest in the Iowa Interstate.

Since that time, Joe's hobby passion has centered around all aspects of recreating the IAIS's West End. Most recently he's developed an interest in rolling stock weathering, and the use of PanPastels has allowed him to weather more than 10% of his roster in July alone.

Joe manages a support team for a global electronic payments software provider. He and wife Kim have two grown children and one granddaughter.

Joe's other interests include spending time with family, travel, and playing with his Golden Retrievers. ■





MRH Running Extra | August 2019

JACK BURGESS looks at another worthwhile tool: disc sanders ...

BACK IN THE LATE 1960S AFTER I HAD DECIDED to model the Yosemite Valley Railroad, I somehow discovered that a hobby shop owner in nearby Oakland, California was offering free, monthly, after-hours “clinics” at his hobby shop. There was one clinic for each of the 12 months and then they would start over. That hobby shop owner was Russ Simpson.

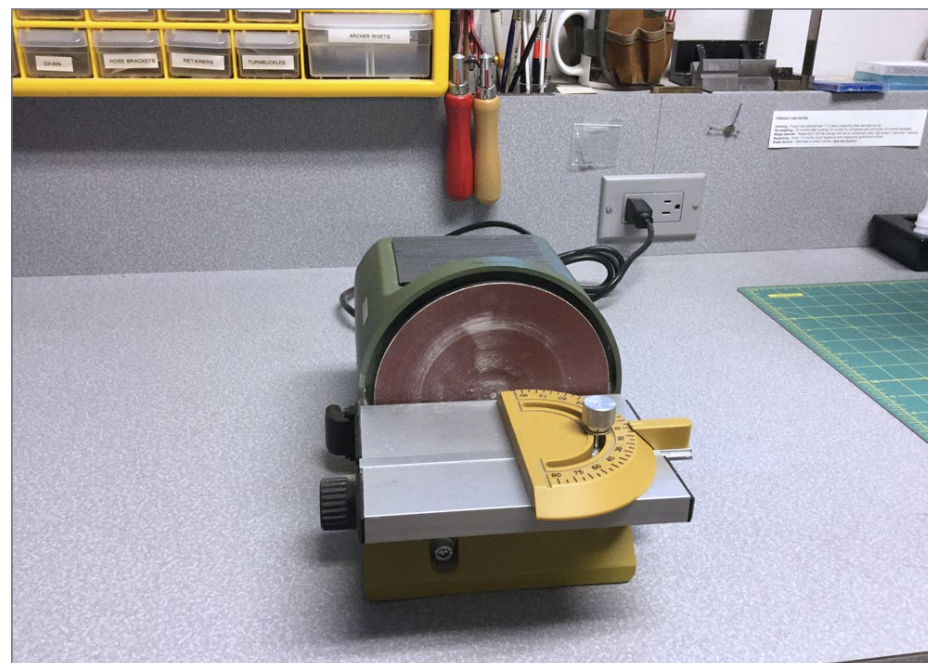
Mainline modelers probably don’t recognize the name, but narrow gauge modelers certainly will. Russ was an expert on the narrow gauge West Side Lumber Company. Once I decided to model a prototype railroad in the late 1960s, I considered modeling the WSLC since there was a lot of narrow gauge modeling in the San Francisco Bay Area at the time. But I soon realized that I could never gain all of the knowledge and historical information that Russ had, so I eventually decided to model the Yosemite Valley Railroad. Russ was a very skilled On3 modeler who had also worked in Hollywood as a professional model builder for the movie industry.

I attended those monthly clinics for an entire year. The subjects ranged from working with styrene and airbrushing models to weathering models and constructing your own turnouts. The latter was especially interesting since Russ sold all of the components a modeler would need to build their own turnouts but

★★★★★
RATE THIS ARTICLE

he didn’t use any jigs in fabricating the components. Instead, he shared with us a way to grind a rail to build an accurate set of points, then make and solder the wing rails to the frog. Building those components required a belt sander and Russ had constructed his own belt sander.

That was 50 years ago and I don’t now remember how I acquired one of Russ’s belt sanders, but I do remember using it to construct all of my hand laid turnouts ... all 65 of them. I seem to recall that Russ sold it to me for maybe \$25.



1. The Proxxon 37060 disc sander measures about 12" from front to back and is 7" wide and 7" high.

It was very basic machine...it consisted of a common 120 volt, 1725 rpm electric motor driving a large-diameter rubber-tired pulley and a small rubber-tired idler wheel with a 1-inch-wide sanding belt. The design included a horizontal plate and backing plate just shy of the sanding belt so that one could hold a piece of rail up against the sanding belt to grind a set of points or stock rails.

If you wanted to hand lay track, like I wanted to at the time, a power sander was essential. Maybe Russ took pity on me and realized both my limited funds for such a power tool and my determination to hand lay all of my track. It had a very significant impact on my track work for the next 20 years. His other clinics still influence my modeling today.

MY NEXT SANDER

Years later, I gave this homemade belt sander to friend and purchased a Craftsman combination belt and disc sander. That was a large piece of equipment and I used it for a number of years. But it was vastly oversize for my needs and so I eventually moved it to my backyard shed for use in full-sized projects. It was replaced by a small 5" disc sander purchased from Micro-Mark. That disc sander worked well, but the motor was unbalanced and it tended to "walk" across the workbench when trying to sand things. Changing the sanding disc involved disassembling the table and supporting rails so I didn't change the sanding disc very often. I eventually gave it to a modeling friend and bought another, much better disc sander.

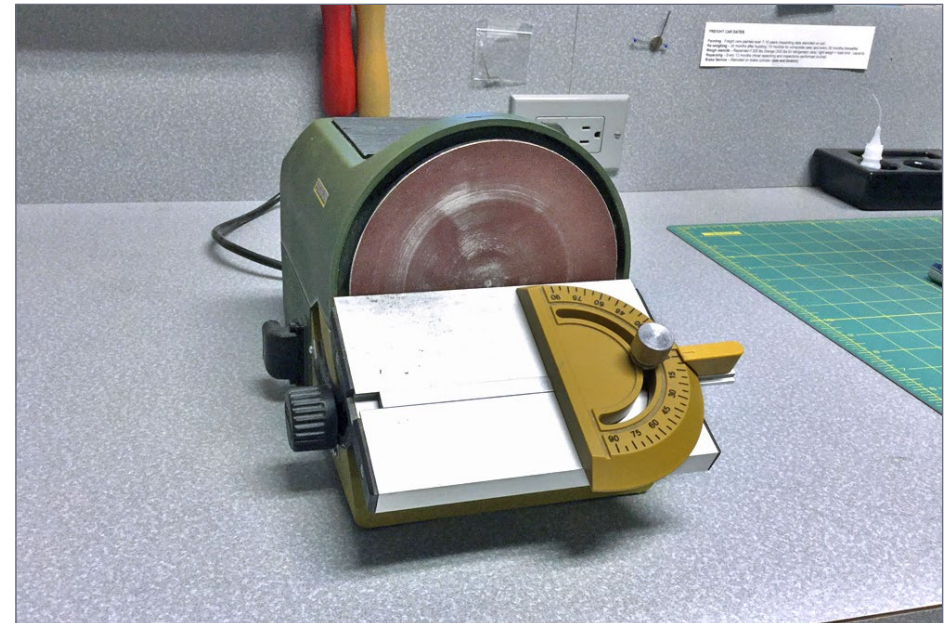
MY CURRENT SANDER

That previous sander was replaced by a Proxxon 37060 disc sander from Model Expo which was manufactured in the European country of Luxembourg. [1] At \$270 each (\$35 less through Amazon at the time of this writing), this is not an

inexpensive disc sander. However, it is very heavy and has a balanced DC motor which will not "walk" across your workbench.

The aluminum table is adjustable from 50° downward and 10° upward and has a miter gauge. [2] There are replaceable sanding discs which can be easily changed out by removing a single bolt in the front of the sander. This allows the entire table to be slid forward and removed to easily replace the sanding disc. [3]

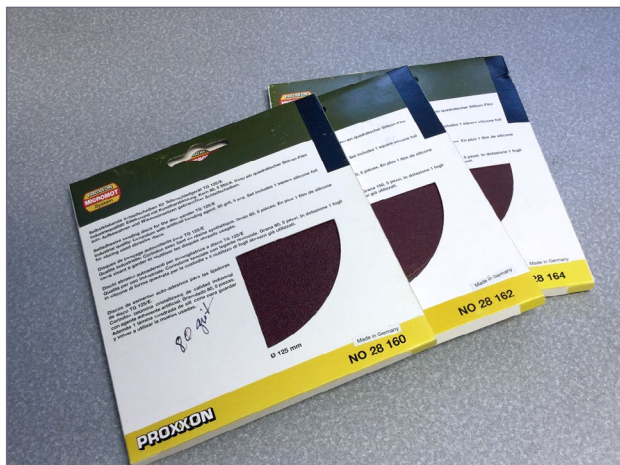
The sander comes with two sanding discs in each of the available grits: 80 grit, 150 grit, and 240 grit. [4] The sanding discs have a repositionable adhesive so you can swap out and reinstall used discs during a project if desired. This is a significant feature. I bought an extra package of 240 grit discs when I purchased the



2. The sander with the aluminum table dipped downward for making angled cuts.



3. Removing a single bolt allows the entire table to be removed to change the sanding disc.



4. Here is my collection of sanding discs. The grit of each disc is buried in the small text on each package, hence the need to write the grit on each package. For most projects, I use a 240 grit sanding disc.

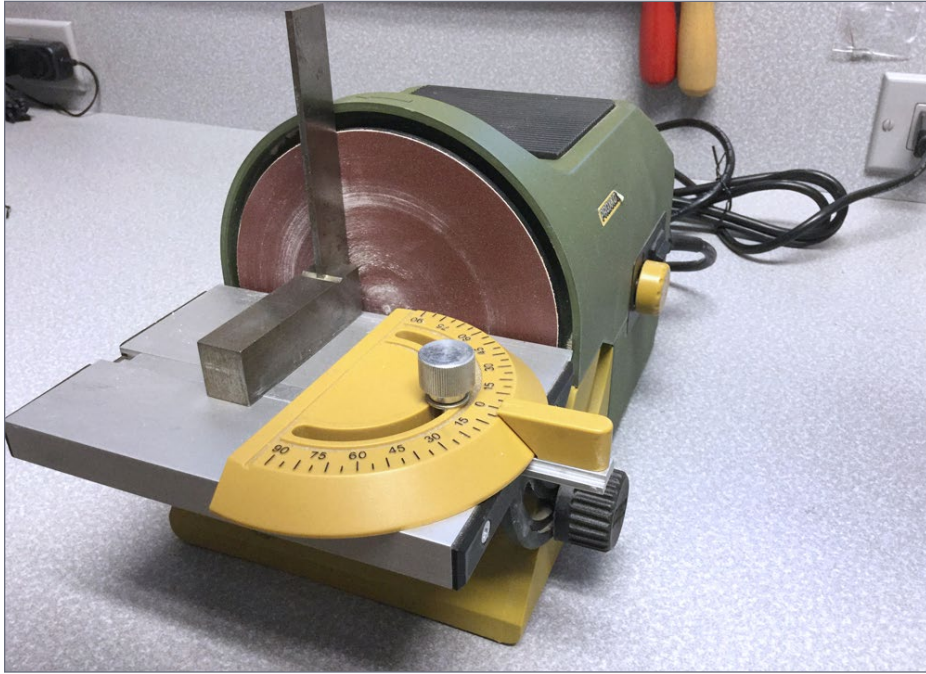


5. While I use a drafting triangle to ensure that the miter gauge is at right angles to the sander disc, a square could be used.

sander just so I would not be concerned about throwing away a disc that wasn't quite at the end of its life.

I always check to make sure that the miter gauge is square with the grinding disc after replacing the sanding disc. [5] I also check that the table is square with the sander. [6] While the miter gauge has 5 degree markings, I will set the miter gauge with a drafting triangle or angle protractor if I want a specific angle.

The disc sander has a built-in variable speed control. I turn the speed up for sanding or grinding metal items [7 and 8] and turn it down when sanding styrene. Although I don't use it, there is an adapter to connect a shop vacuum to the sander if desired.



6. A square is an easy way to make sure that the table is square to the sander disc.



7. I often first rough-cut a piece of tubing or other material I need for a project. I then square one end and then square the other end to the desired length.



8. Here I have ground the rough end to be square with the miter gauge.

WHAT CAN YOU DO WITH A DISC SANDER?

I started out making turnout components with my first sander, but I found many other uses early on. I find that I use my disc sander quite a bit. The remaining photos and captions show some of those tasks. ✓

Disclaimer: I love good tools and don't hesitate to invest in them.

Editorial note: It's come to our attention that MRH Advertiser Fast Tracks has just added the "Ultimation" sander to their product line:

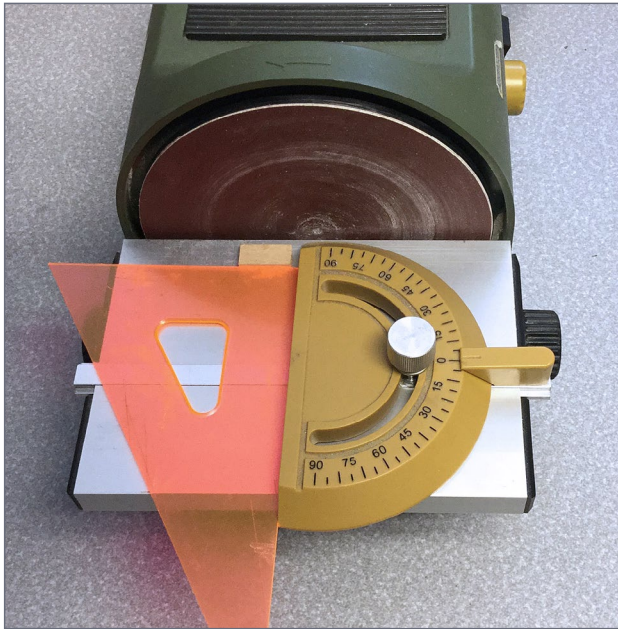
www.handlaidtrack.com/ult-sa



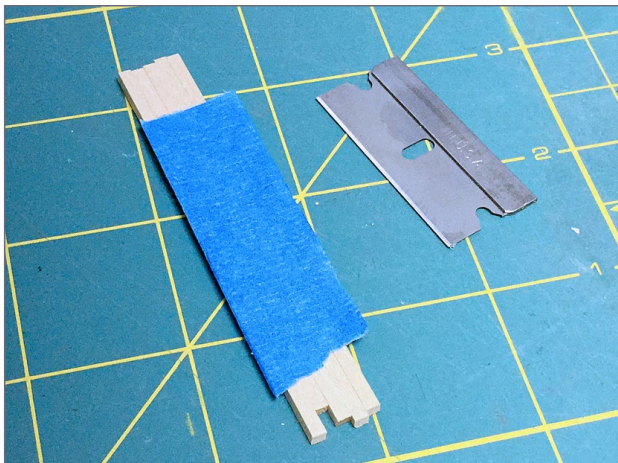
This sander uses less aggressive hand-crank action for very precise sanding control.

See the following pictures





9. Instead of just squaring the end of a piece of material, I sometimes need to reduce the width. Here I am using a drawing triangle (a piece of styrene with square corners will also work) to hold that piece of basswood up to the sanding disc to narrow it.



10. I learned this trick decades ago and have used it hundreds of times. If you need several pieces of stripwood to be the same exact length, first cut them all slightly longer than needed. Then hold them tightly together and apply a piece of painter's masking tape. Then flip them over and use an X-Acto knife to slice away the excess tape.

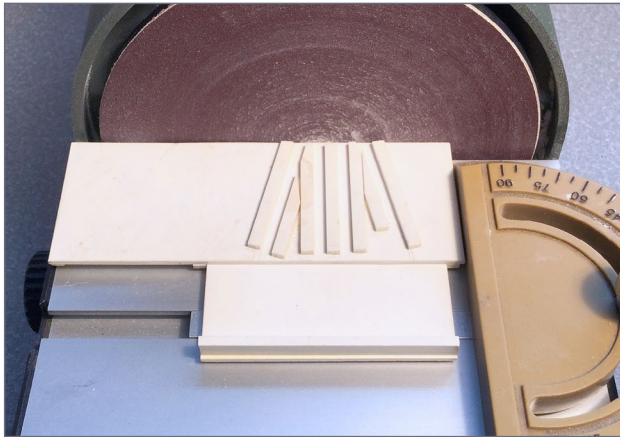
10. I learned this trick decades ago and have used it hundreds of times. If you need several pieces of stripwood to be the same exact length, first cut them all slightly longer than needed. Then hold them tightly



11. Sand one end so that all of the pieces are flush with each other.



12. Then turn the piece end-for-end and sand that end up to the mark for the correct length.



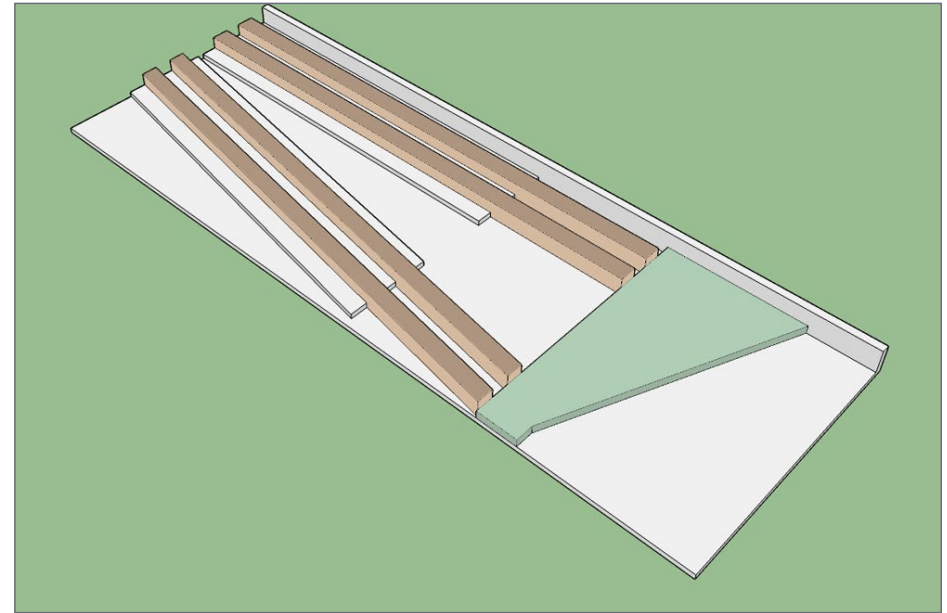
13. I have 10 wood trestles on my layout which are supported by 31 trestle framed bents. A framed trestle has a cap on the top of the bents (the vertical members) and a sill on the bottom. Some of those bents are on an

angle to the cap and sill. The problem is how to cut the vertical bents and the angled bents to the same length so that they all fit between the cap and sill. This was my first jig that I built to solve this problem. The bents were inserted between the spacers and one end sanded with the correct angle (or square to the side). The bents were re-inserted, turning them end-for-end. The jig includes a "drawer" visible in the photo. That drawer includes a vertical stop. After reinserting the bents, the vertical stop on the drawer was pushed up to the bents and all were then pushed up to the disc sander and sanded so that all were exactly the same length.

This jig worked well but I needed multiple "drawers" to make taller framed bents. A better idea was needed.

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14. This is a 3D graphic of a more updated version of that sanding jig I built for a Proto:48 diorama. The wood bents are shown as brown and the spacers are white. There is a "fence" along the right side of the jig. The green item is a movable square. With the over-length bents laid between the spacers, they are "pushed" via the movable square up to the sander disc. Then they are turned end-for-end (just like in photos 11/12) and then pushed toward the sander disc until they are all the same length.



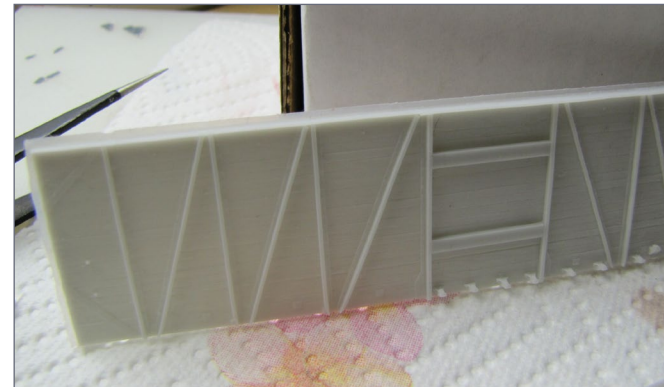


- You can have a freight car that is unique to a railroad
- Your model railroad can reflect reality better
- You have the satisfaction of building a model versus buying a ready-to-run car
- A resin model maybe the only way to get a freight car for “your” prototype railroad

I’ll roll through assembly steps for an HO scale Sunshine Models Missouri Pacific single-sheathed boxcar kit. These are no longer produced but can be found on the secondary market. My techniques can be applied to similar kits with flat component castings.

PARTS PREP

I begin by removing the flash around the parts using a file and straight-edge razor blade.



1. Nearly all resin kit parts have flash to remove. You can see it along the upper portion of this car side and in the left corner.



Building your first resin boxcar model

MRH Running Extra | August 2019

CHARLIE DUCKWORTH shares basic steps to build distinctive models ...

I RECENTLY FOUND A WEBSITE LISTING VARIOUS steam-era freight car models. When the author came to one of the current resin company kits, he noted “...the models look detailed, but I’ve never built a resin kit.” This inspired me to share my kit-building experiences with a larger audience who might want to build these models.

Why build a resin freight car kit?



2. (Top) Here's the back side of the piece in [1]. The thin flash on the long left edge is excess that seeped over the mold.



3. (Middle) I use 320-grit wet/dry sandpaper on a flat surface to sand the parts. Slide the resin part until the flash is paper-thin and easily removed. Don't daydream or you might take off too much material. Check your work periodically and change the part orientation to remove material evenly.



4. (Bottom) I use a new X-Acto #11 blade to remove flash off the ends.

LEGO BLOCKS

Plastic Lego blocks and shapes have been in the model railroad news recently as people build working railroad models with the components. The original blocks were wood shapes made in a carpenter's woodshop. Plastic bricks were introduced in 1958 and have been inspiring creativity since. How many of us recall building Lego structures to use with our Matchbox or Hot Wheels collections?

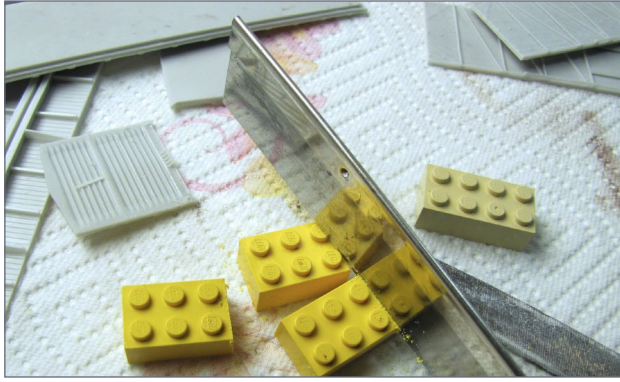
Several modelers are using Lego components to create fine models. Lego blocks can be assembled to create a dam around a master part. The Lego dam holds the liquid rubber material in place as it sets up. After removing the mold, the blocks can be reused for another project.

Charlie's use of Lego blocks in building a resin box car kit ensures parts assembly at almost right angles. The plastic bricks can be cut with a razor saw to fit inside freight cars, structures, and other applications. The block face offers a larger glue surface to keep parts together.

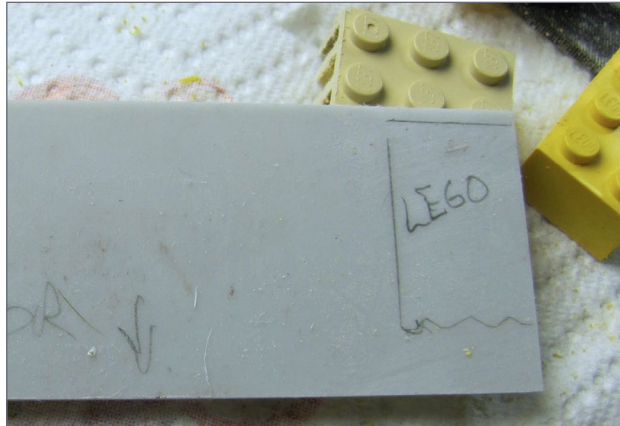
According to the Lego website, the name is derived from the Danish "leg godt," which translates as "play well." These toy blocks can be used as tools so we can play well with our model railroads. ■



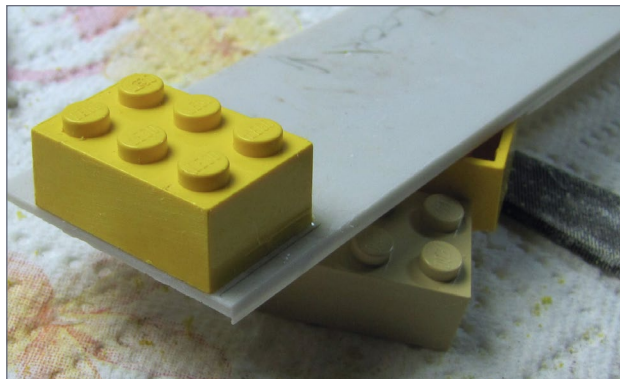
INTERIOR CORNER REINFORCEMENT



5. (Top) "Borrow" Lego blocks from your kids or buy a box at a garage sale. I measure and cut the Legos so they don't block the roof or floor from sitting properly on the car body.



6. (Middle) Mark the inside of the sides to glue the Lego blocks. I also mark the floor location as a reference.



7. (Bottom) Place the side and Lego on a flat surface and use cyanoacrylate (CA) to glue the Lego flush with the end of the sides.



8. I repeat the process with the remaining three ends of the car side parts. The blocks ensure a square fit for the end pieces and increase the attachment area.

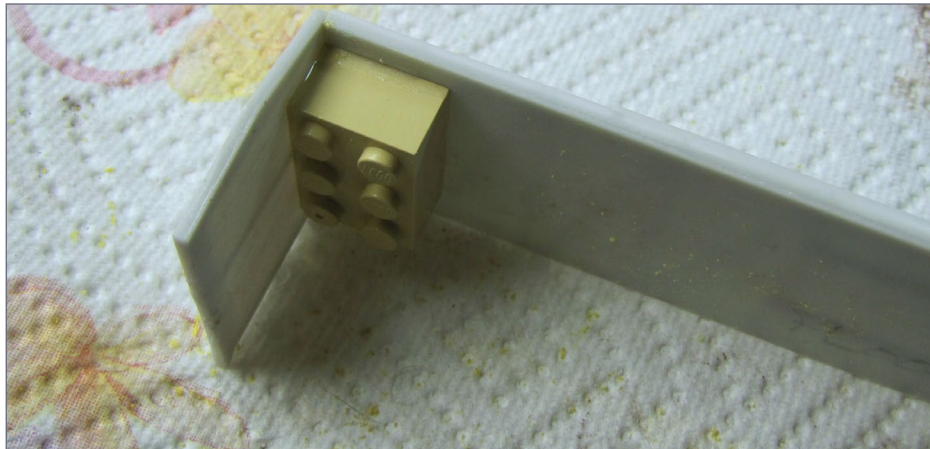


9. After the glue dries, I lightly sand the ends to ensure everything is perfectly flat.



10. The car side end and block face are lined up.

ASSEMBLING THE BOX



11. I position the end casting straight and flush with the car side. CA is applied to the top, side, and bottom of the Lego block on the end casting.



12. Repeating this step for the other three corners brings the car body together.

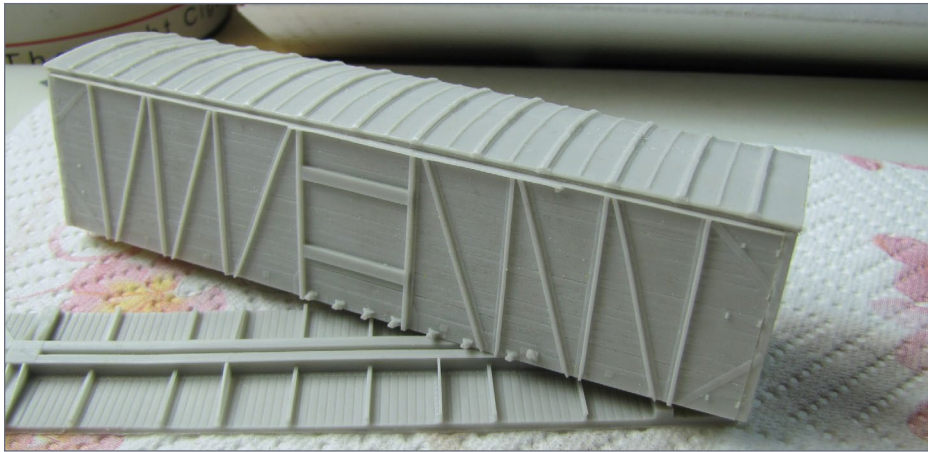


13. The four sides assemble quickly.

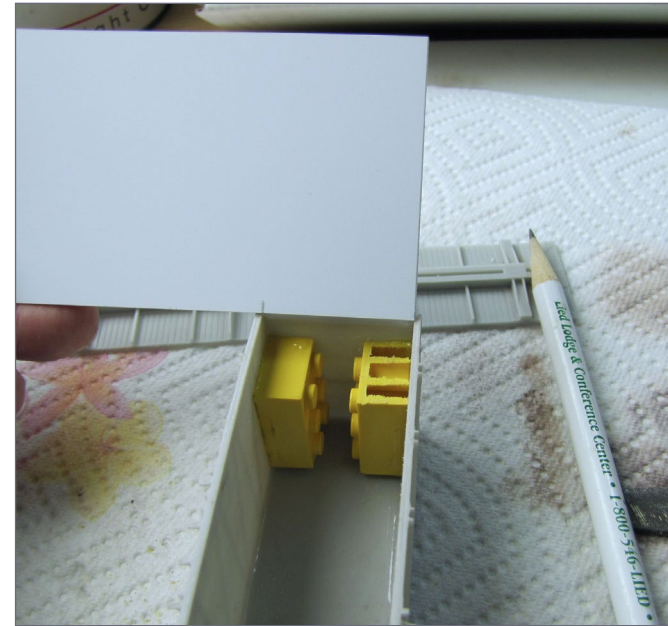
INSTALLING THE ROOF



14. Test-fit the roof casting and remove material with a file so the roof sits flat on top of the car sides. Sometimes I need to file the tops of the peaked ends for the roof to sit properly.



15. Once the roof casting fits, I glue the roof to the top of the sides and ends applying CA from the inside of the car body. At this point, you'll find the car body is very strong. Using the Lego blocks in the corners keeps these at a 90-degree angle.



16. With some kits, you may see the car side castings bowing in or out. I cut a couple of 0.040" thick Evergreen styrene pieces as bulkheads to correct the bowing. I use the end width as a guide to cut the styrene. Cut these pieces slightly shorter than

the car sides, then glue them at intervals toward the center of the car body.

UNDERFRAME

If the underframe fits perfectly "out of the box" then you aren't building a resin kit. Don't be surprised if the underframe casting does not fit well. I usually need to sand the underframe ends or sides to fit the car body. In some cases, the underframe is too narrow. I've used Evergreen 1" x 6" HO strips to fill gaps along the sides or ends of the resin floor.

Don't glue the underframe in place yet. Holes need to be drilled and tapped for trucks and couplers. Drill holes in the underframe casting before installing the car weight.



17. Test-fit the underframe casting in the car body, but do not glue it in place yet.

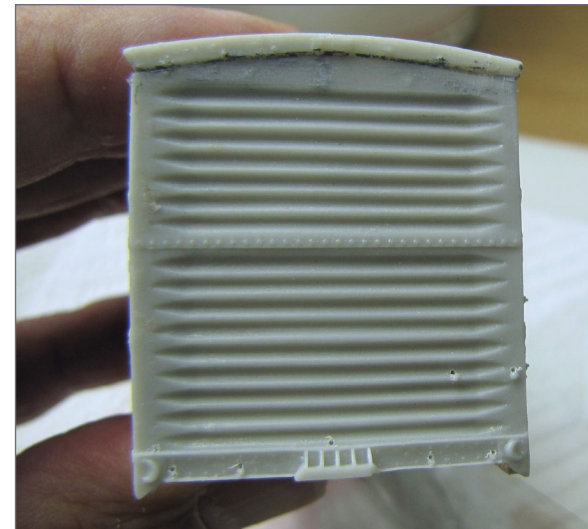


18. I use acrylic Liquid Nails to install the car weight. You don't want the weight to loosen after the car is finished. Whatever adhesive you use, allow time for it to dry before sealing it inside the car. After the weight is in place, add the brake components to the underframe. Once these details are installed, the underframe is ready for the paint booth.

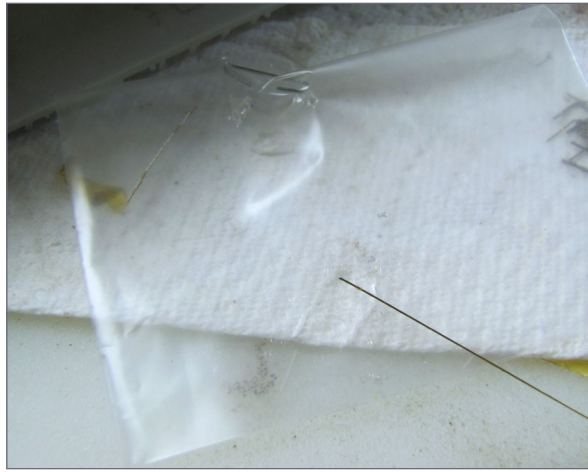
FILLING GAPS



19. You may find minor gaps between the roof and side castings, or the roof and ends. I apply Tamiya putty with a toothpick to fill the gaps.



20. I found a couple of gaps on this model. Here's a look at the car end after I sanded the putty and drilled #78 holes for the hand grabs and cut levers.



21. I use a small plastic parts bag as a glue palette. A few drops of thin CA will last awhile on the plastic. I use a short length of 0.010" or 0.015" brass wire to transfer small amounts of CA to attachment points on the car body.



22. For this kit, three grab irons are installed on the car end – two along the sill and one on the right side. Ladders will be installed at the corners later.



23. Before adding the remaining details, I test run the car to see if height or truck clearance adjustments are needed.



24. Test-fit the running board casting. I mark the center line of the roof with a pencil before attaching the running board. Center the casting end-to-end before gluing it in place.



25. Add the remaining details to the model: ladders, brake hardware, and support pieces. Note I penciled a "B" on the end of the car so there's no mistaking the brake hardware end.

FILLING GAPS



26. Airbrush the car body with your favorite paint. The underframe is easier to paint as a separate piece. It can be installed after the paint dries thoroughly on it and the car body.

I use reference photos when applying the decals. After the decals are dry, I weather the car to my tastes and seal the work with a light coat of Dullcote. It's always a joy putting a new car into service. ✓

CHARLIE DUCKWORTH



Charlie Duckworth retired from Union Pacific. He started with the Missouri Pacific in 1974, and then with the Union Pacific in 1982 after the merger, a total of 38 years. Charlie has written articles for *Mainline Modeler*, *Model Railroader*, *Model Railroad Hobbyist*, and the Resin Car Works blog.

He models the Missouri Pacific Bagnell branch, circa 1954, in HO scale. The point-to-point, multi-level layout covers the branch from the MP yards at Jefferson City, Missouri to the Rock Island crossing at Eldon, Missouri. Charlie started the layout in early 2005 and held his first official operating session later later that year. ■

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The Internet

For model railroaders:2



MRH Running Extra | August 2019

THE MRH STAFF continues showing you how to get more hobby value online and spend less time doing it ...

IN THE FIRST PART OF THIS ARTICLE (JUNE issue of *Running Extra*), we showed you the basics of getting online and using the internet more efficiently. This time we're going to show you more power-user tricks like better downloading, the power of bookmarking, making it easier to remember passwords, and how to whitelist an email address so emails from the MRH Store or other hobby websites don't go to spam.

Let's get right to it!

BETTER DOWNLOADING

The hypertext protocol (http) on which the internet is built uses very lightweight fire-and-forget type connections to make things a



lot more efficient. Most browsers also have a basic more persistent connection for file downloading, but there's a lot more that can be done with file downloads to make them easier. Unfortunately most browsers don't implement these extra download-ease-of-use features such as restarting a failed download where it left off, or multi-threading for optimum speed.

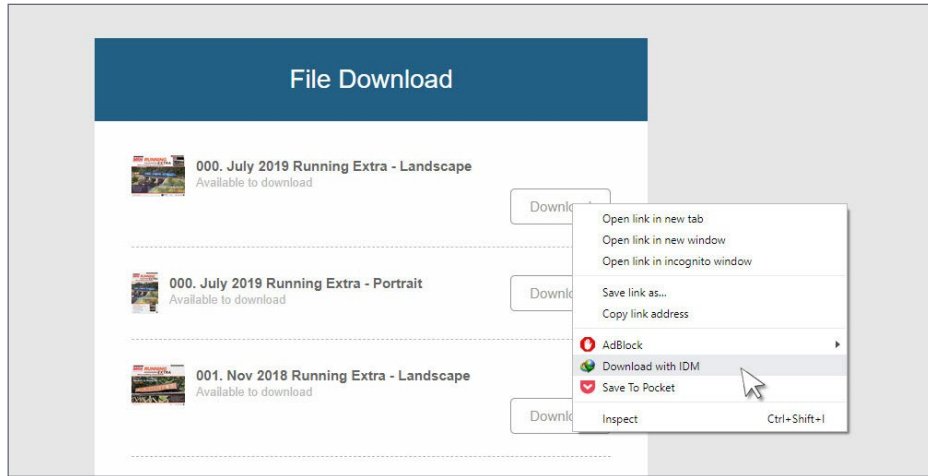
In other words, large files downloads in a web browser can sometimes be a real pain. They can be unreliable, slow, and just plain frustrating to do. But there is a great solution most folks don't know about: using an internet download manager!

An internet download manager (IDM) is a dream-come-true tool to manage and schedule web downloads. It uses your full bandwidth for the downloads, making them faster. It has recovery and resume capabilities to restore an interrupted download due to lost connection, network issues, or power outages.

As an added bonus, an IDM also allows you to schedule large downloads to happen later while you are away from your computer, such as when you're sleeping!

Internet download managers:

- IDM's for PC: beebom.com/best-download-managers-for-windows
Recommended: **Internet Download Manager**
- IDM's for Mac: techwiser.com/best-download-managers-for-mac
Recommended: **Folx**
- IDM's for Linux: itsfoss.com/4-best-download-managers-for-linux
Recommended: **XDM**



1. This is my *Running Extra* issue download page, and I have right clicked on the download button to reveal the drop down context menu. Once you have installed an internet download manager, it typically includes a browser extension that allows you to right click (ctrl+click on Macs) to get **Download with IDM** as an option on any download button or link. This gives you the speed-enhancing and restart benefits of using the download manager. Very cool!

To get the most features, we recommend you go ahead and purchase a non-free version. They're typically \$20-\$30 and worth every penny!

The download managers include a browser extension for most browsers as well, allowing you to choose the manager to do the download. By using selecting the download manager option from inside your browser, you get a faster download, and if it fails partway through, you can restart it where you left off [1].

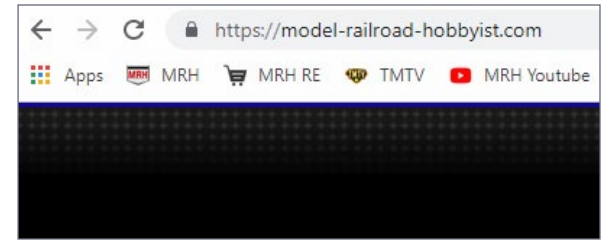
Once you use a download manager, you will wonder where it's been all your life. You won't want to do downloads the old way any longer – using an internet download manager is just *so much* more convenient.

POWER OF BOOKMARKING

Do you have websites you like to visit frequently? Did you know you can make a bookmark or favorite for those sites, so they're just one click away?

Imagine having buttons at the top of your browser with your favorite sites listed like this:

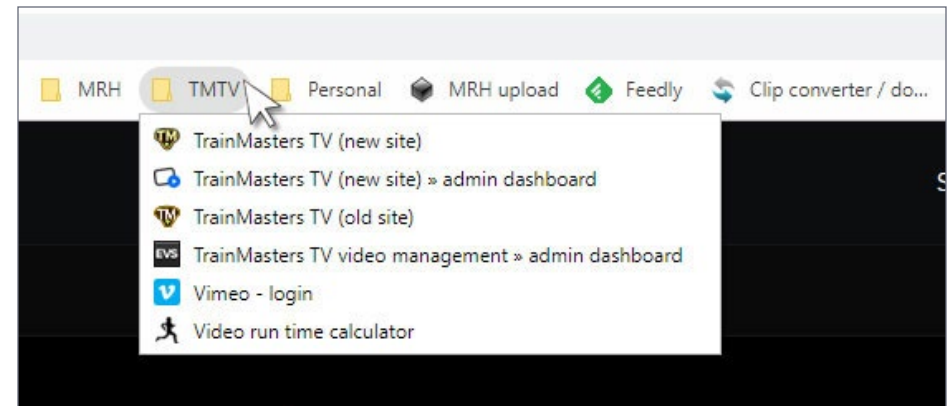
Then all you need to do is click the website button and shazam! You're on the site just like that.



If you get a lot of bookmarks, things can get unwieldy, however. The secret is to use

2. With bookmarking, you can add buttons to the top of your browser, giving you handy one-click access to your favorite website URLs.

folders on the bookmark bar. For example, since I also help manage TrainMasters TV, my browser bookmark bar has a lot of links to TMTV pages for various tasks [3].



3. If you get a lot of bookmarks, you can organize them into folders on the bookmark bar like shown here.

The specifics of creating, managing, and using bookmarks varies slightly between different browsers, so here's some short (~3 minute) how-to videos you can watch. Just pick the browser you're interested in:

Managing bookmarks in Chrome:

<https://youtu.be/UhZKffAcGAA>

Managing bookmarks in Firefox:

<https://youtu.be/sXoKSD8QJEA>

Managing bookmarks (aka, favorites) in MS Edge:

<https://youtu.be/mOfCFHcSZYM>

Managing bookmarks in Safari:

<https://youtu.be/dvjJjFqL7w0>

Learning how to create, organize, and use bookmarks is an excellent time investment because they'll ultimately save you loads of time later on. You'll wonder how you ever got along without browser bookmarks before!

MAKING IT EASIER TO REMEMBER PASSWORDS

Many model railroading forums, online hobby stores, as well as banking sites and the like want you to create a user account and think up a password. Our memory just can't keep up with dozens and dozens of unique passwords.

Some folks have the bright idea to use the simplest possible passwords, things that are easy to remember, like "12345678" or "password." Others memorize one superbly random password and then use it for everything.



4. This video discusses why you need a password manager and gives some examples. Don't be sorry later!

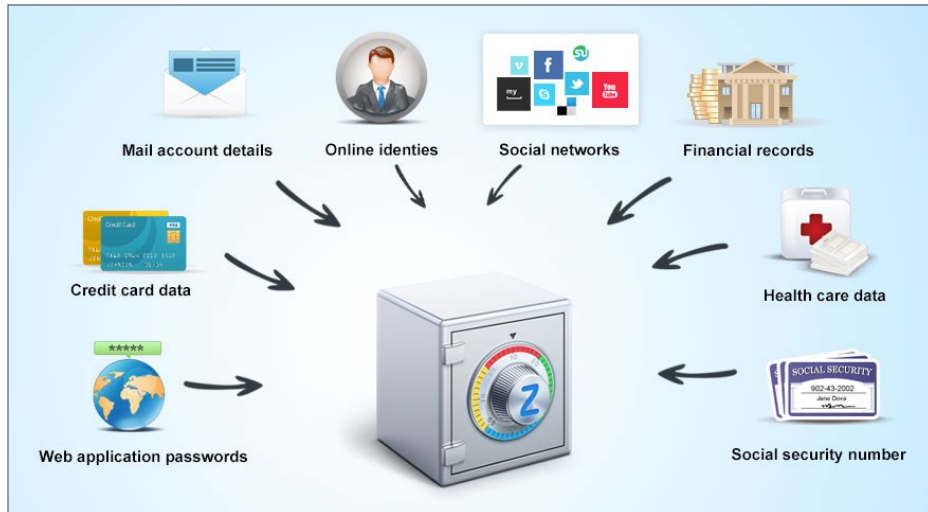
Either path is likely to make you the latest victim of identity theft and are very bad ideas.

The answer is to have strong, impossible to guess, unique passwords on each site and to use a *password manager*.

With a password manager you don't have to remember that strong, unique password for every website. The password manager takes care of that, and even helps you come up with impossible-to-guess random passwords.

Many of these password managers cost money, although you can use some of them for free if you accept certain limitations. Whether free or paid, a password manager is something *everybody needs*.

Most web browsers offer some rudimentary password management. (This where your passwords are stored when Chrome or



5. A digital password vault application can be used to store and secure a lot of things besides just passwords. Really, any sensitive data can be stored inside and kept secure, as this diagram illustrates. You can also store hobby item inventory records as well so they're stored in an offsite digital vault that will survive any calamity that might damage or destroy your collection.

Firefox ask if you'd like to save a password.) While this is better than reusing the same password everywhere, browser-based password managers are limited.

A good password manager stores, generates, and updates passwords for you with the press of a button. If you're willing to spend a few dollars, a password manager can sync your passwords across all your devices. Here's how they work.

Only one password to remember: To access all your passwords you only have to remember one password, which the password manager uses to unlock the vault containing your all your actual passwords. Only needing to remember one password is great, but it means there's a lot riding on that one password.

Ideally, we recommend using a passphrase that's meaningful to you only. For instance, as a writer I think of the totally overused phrase, "It was a dark and stormy night" to open a story. But I like to say it like Yoda would, just to mix things up, so here's how I might get a good passphrase out of this:

A Stormy & Dark Night, It Was!

Notice, I added a couple special characters (& and !), added punctuation (comma), and capitalized each word. This would make a great master passphrase. Now before you get all excited, this is *not* my password vault passphrase, but this is the principle I used in making my master passphrase. So you get the idea.

Here are four password managers that come highly recommended: wired.com/story/best-password-managers

We're using Dashlane here at the MRH offices and recommend it.

So please use a password manager – it's the prudent thing to do if you do anything of significance on the internet.

WHITELISTING IMPORTANT EMAIL ADDRESSES

Have you ever been expecting an important email only to have it not show up? And then later when you check your spam or junk folder, that important email *is in there?*

The answer is to **whitelist** the sender's email address. To whitelist is the opposite of to blacklist – it just means you add the email to your approved senders list. This tells your email reader program that you know this sender and *you trust them*.

Whitelisting an email address keeps emails from this contact at the top of your inbox and out of the spam or junk folder.



6. This video discusses how to whitelist email addresses. A link to a document explaining how to do it in many email programs is included.

Whitelisting an email address is easy, just add the email to your contacts list. Almost all email reader apps (also called “email clients”) will deliver email sent to you from a contact.

If you’re expecting an email and you’ve not seen it, then check your spam and/or junk mail folder to see if it’s in there. If you do find it in there, make sure you add the from email address to your contacts so any further emails will get delivered to your inbox as expected.

Whitelisting common MRH email addresses: Okay, let’s make this really practical. If you want to see the emails we typically send and not have them go to spam, here’s some important email addresses we use that you can add to your contacts:

news@mrhmag.com - Weekly MRH tips, product news, and special sales events.

store@mrhmag.com - MRH Store emails, order confirmations and download links.

news@trainmasters.tv - TrainMasters TV news, new video updates, various announcements, and special sales events.

site-manager@trainmasters.tv - Replies to TMTV support requests and asking for help with your membership.

noreply@sendowl.com - From email address for all *Running Extra* email and download reminders. (SendOwl is the web pay-wall distributor we use for making *Running Extra* available to those who purchase issues or subscribe.)

FINAL THOUGHTS

Hopefully these tips will help you get more out of your time online. Ideally, you will need to spend less time online and have more time for modeling, and have more to show from both your time online and your time in the layout room and at the workbench.

We’ll do one more installment of this series specifically discussing tips and tricks with the MRH website, MRH Store, and TrainMasters TV.

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THE AH-HAH MOMENT

column



MRH Running Extra | August 2019

JOE FUGATE: SOME COOL SUPERGLUE DISCOVERIES ...

★★★★★
RATE THIS ARTICLE

ONE OF THE PROBLEMS WITH SUPERGLUE IS THAT IT dries hard and brittle, which often may not be the best kind of joint. Such joints don't stand up well to sheer forces, breaking off easily.

Did you know you can now get *flexible* superglue (aka, CA) ... *Ah-hah!* (It's also called "rubber-toughened" CA if you're searching for it online.) On the right are links to this new flexible CA on Amazon: both a thin and medium-thick variety. I keep both on hand.

As a bonus, flexible CA is several times *stronger* than regular CA. It's great stuff – so great in fact that flexible CA has become my go-to CA glue – it has replaced regular CA for me.

Did you know you can make a very useful putty from superglue and talcum powder? Check out the video at the right for more. When you use the flexible superglue, the resulting putty has a little give to it and it's not so rock hard, unlike what the video mentioned. Once again, the flexible CA is better, I think.

And for an interesting twist, add a drop of water to the putty mix to get an even more rubber-like CA putty!

One other clever trick I've discovered: sand some plastic that's the color of your model to get plastic dust and then make a CA putty you can apply that matches the color of your plastic model!

So try out flexible CA and some of the cool things you can do with it! ☑

THE AH-HAH MOMENT | 2

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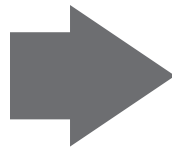
Shop now

1. Here are links to this flexible superglue on Amazon. This has become my go-to superglue and has replaced regular superglue for me.



2. Here's a cool superglue trick: making a strong putty using CA and talcum powder. Flexible CA works even better for this application!

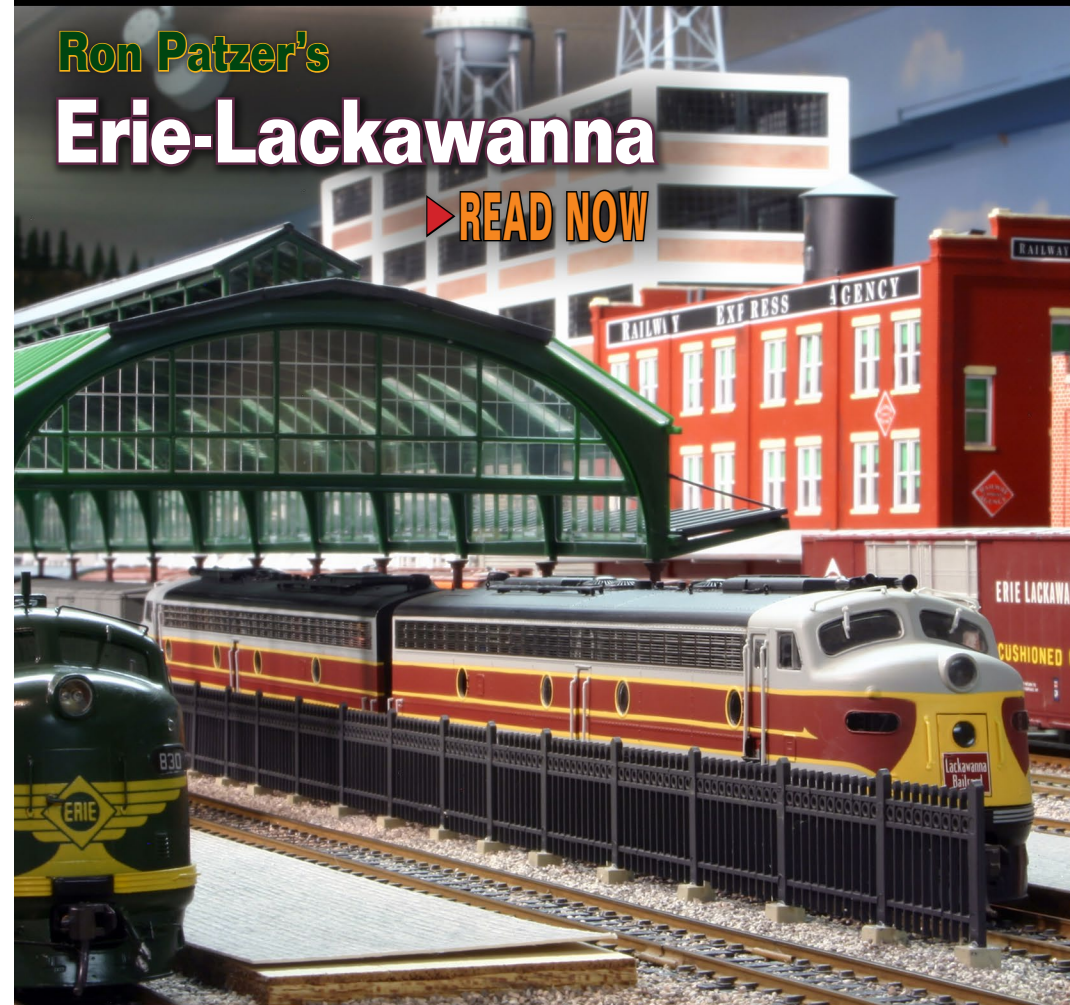
Here are all the pages
from the August issue of
*Model Railroad
Hobbyist* magazine
as well!



ALSO:

- Visiting Joe Atkinson's IAIS
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... and more inside!



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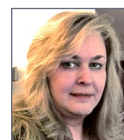
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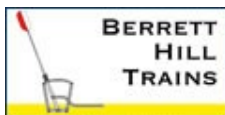
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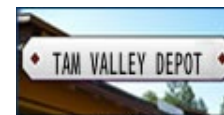
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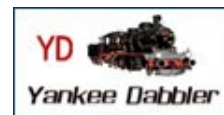
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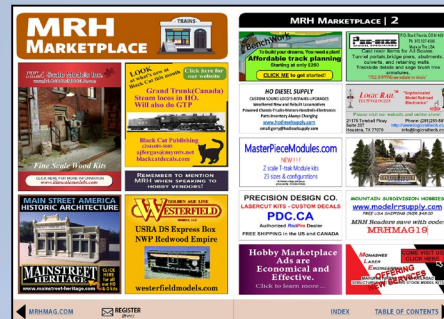
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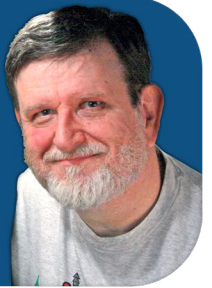


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Scene and photography by Ken J Johnson
Preproduction model shown



PUBLISHER'S MUSINGS



Model Railroad Hobbyist | August 2019

JOE FUGATE: LAYOUT DESIGN WITH THE SHADOWBOX LOOK ...

★★★★★
RATE THIS ARTICLE

MY SISKIYOU LINE 1 HAD ONE FEATURE I REALLY LOVED about it: the shadowbox look. Below is an example from the Coos Bay Branch on my old Siskiyou Line 1 layout [1].

As I begin the process of building TOMA¹ modules for the Siskiyou Line 2 (SL2), I'm experimenting to see if I can adapt a shadowbox

1 TOMA stands for The "One Module" Approach. For more on this method of building a home layout see the August 2017 MRH: mrhmag.com/magazine/toma-bibliography



1. The "shadowbox look" of my Siskiyou Line 1 as seen at Tenmile Creek on my Coos Bay branch (now dismantled).

PUBLISHER'S MUSINGS | 2

configuration for the module sections [2].

Recent discussions regarding my shadowbox approach for SL2 have lead me to wonder – how often are modelers using the shadowbox configuration for their layouts?

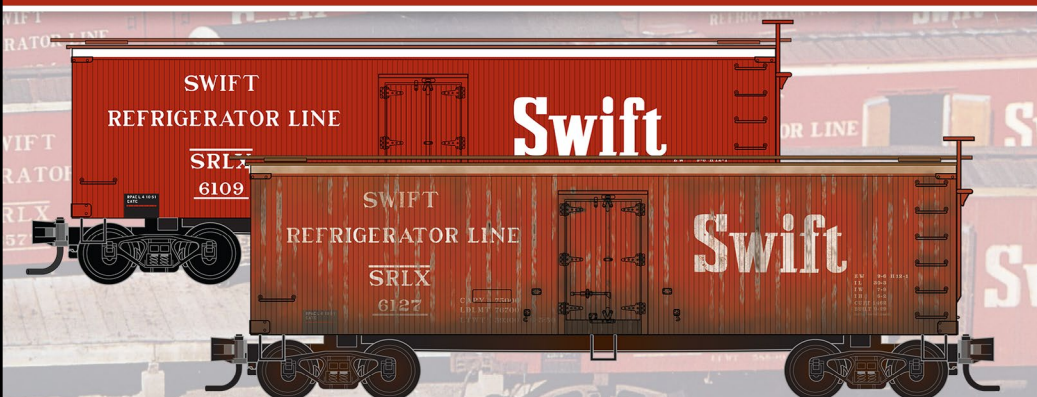
Granted, the shadowbox approach isn't one the majority of modelers take. But maybe if the shadowbox approach was better known, more modelers would opt for it. As I did some looking around, it appears the shadowbox approach may be catching on.



2. Experimental shadowbox module section of Siskiyou Line 2.

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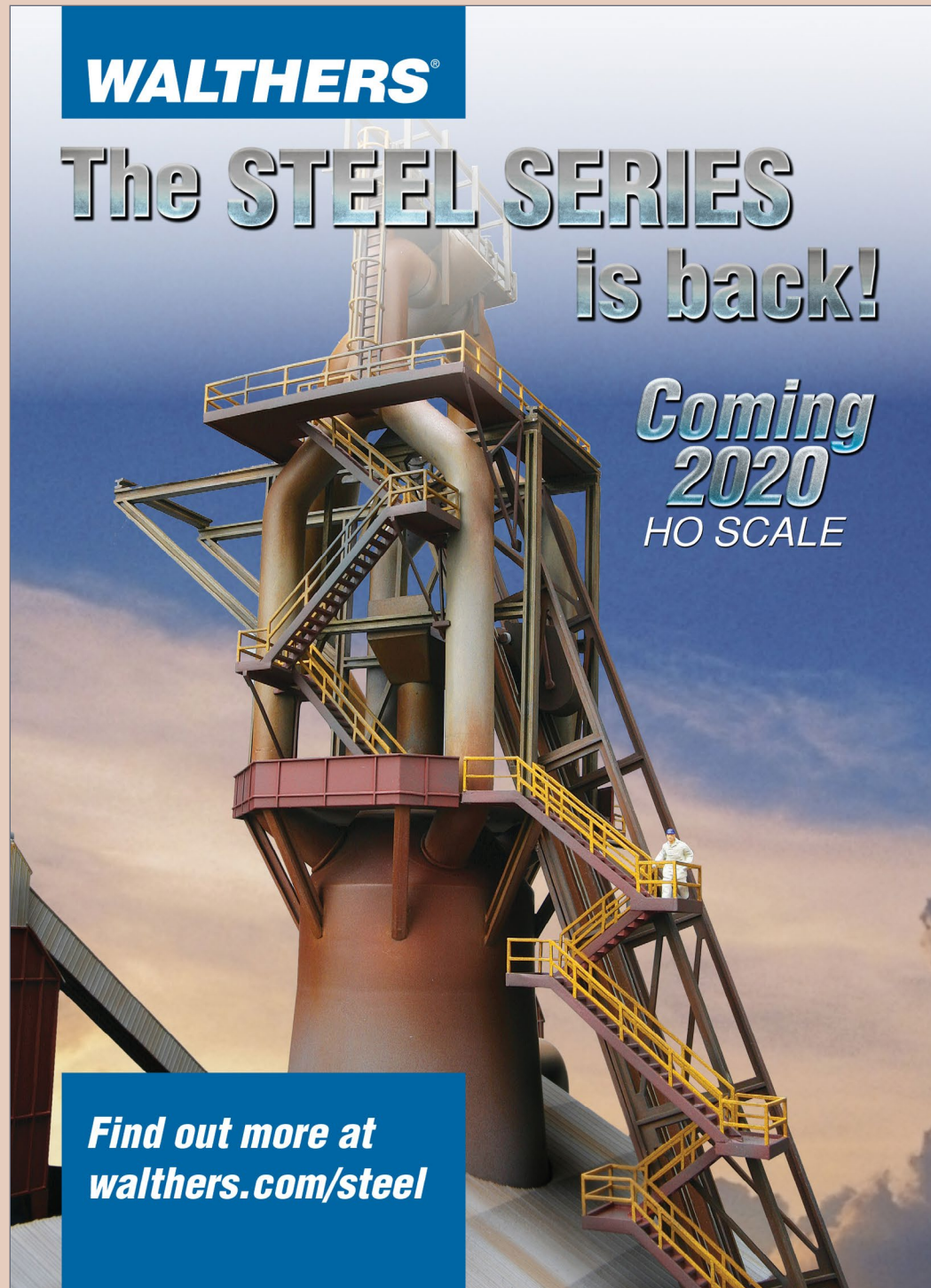
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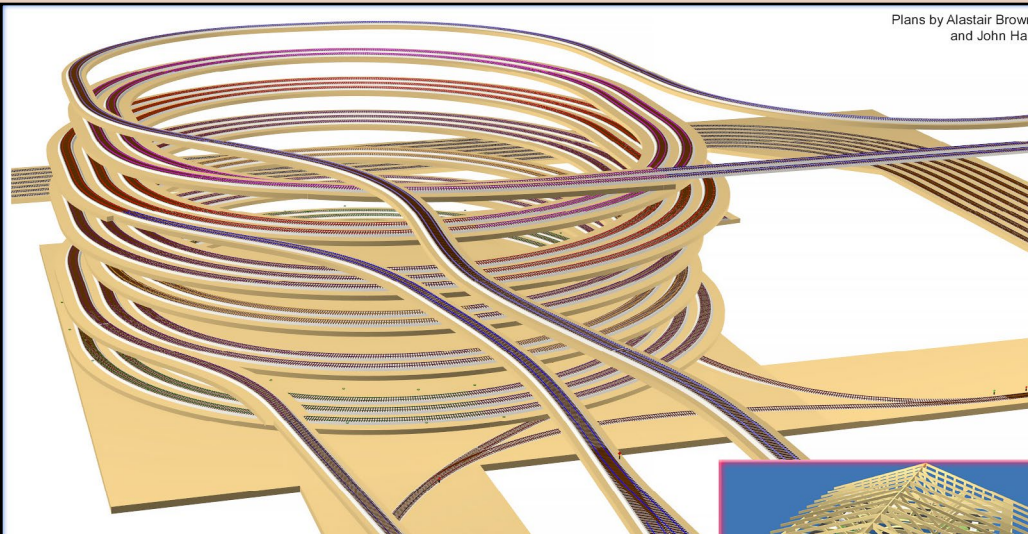
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PUBLISHER'S MUSINGS | 3

For starters, elsewhere in this month's *MRH*, Timothy Dudley in his "Creative layout downsizing" article goes with a shadowbox configuration for his new smaller layout [3].

Next, I googled "shadowbox model railroad" and dozens of example images came up.

The shadowbox approach to doing a layout does appear to be a coming thing. Some may be concerned the "low headroom" limits your ability to work on the layout, but I've not found that to be the case. In fact, with a shadowbox modular layout section, it's easy to rotate it as needed to work on it from any direction.



3. *MRH* author Timothy Dudley's downsized shadowbox layout.



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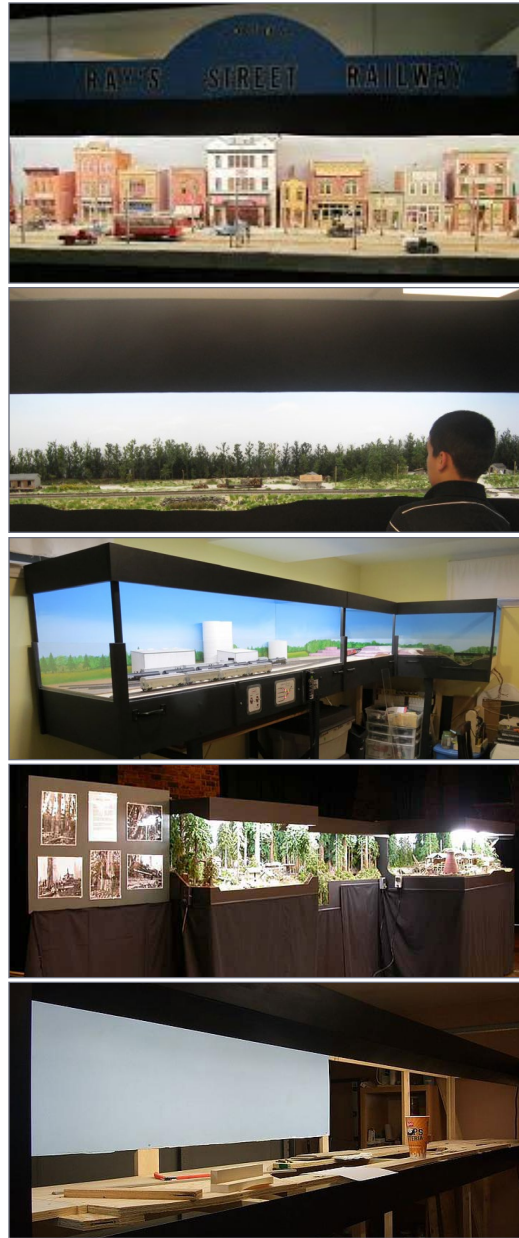
On this page, I'm showing a number of the shadowbox layout images I found in a Google search [4]. I found dozens more besides these.

So what constitutes a shadowbox configuration?

In the purest sense, a shadowbox has a valance that does not connect to the ceiling. The photos in [4] all fit this description, so they're a true shadowbox, and that's what I generally mean when I say "shadowbox configuration."

Sometimes though, you can also use a shadowbox look with the valance attached to the ceiling. I did just that on my Siskiyou Line 1 in a number of cases.

For a ceiling-attached valance to qualify as a "shadowbox" you need to use an extra deep valance of at least 9 inches or more. In my case I often used a depth of at least 18 inches down from the ceiling as you can see in some of my shadowbox photos on the next page.



↑4. Just a few of the shadowbox layout examples I found online.

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You can see in photos [5] and [6] how using the extra-tall valance creates a deliberate shadowbox look to the layout.

These also qualify as “shadowbox” layouts even though the valance is attached to the ceiling.

On a TOMA module, as mentioned, the shadowbox configuration uses a “c” shaped cross member to add the valance to the module section. It also makes it easy to attach a back-drop to the module section.

On my Siskiyou Line 2 shadowbox benchwork, I’m extending the valance out another two inches beyond the fascia so any trains along the front of the layout remain fully lit.

Along the bottom front of the valance, I’m attaching a triangular piece of wood and then running strip lighting LEDs the length of the module section. This gives me very nice, even lighting. I’m using 3000K color temperature strips, which to me looks like sunlight on a warm summer day, and gives me an even, brightly lit scene that’s very attractive [7].



5. On my old Siskiyou Line 1, I also had areas where I deliberately dropped the valance up to 18 inches from the ceiling to create a shadowbox look as shown here.



6. Here’s another layout photo I found online that’s attaching the valance to the ceiling but uses the extra-tall valance to deliberately get a shadowbox look to the layout.

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PUBLISHER'S MUSINGS | 6

I think there's a lot to be said about the shadowbox look. To me it creates an elegant, museum-like look to your layout. And it gets the lighting down close so you need less wattage to have easy-to-see brightly lit layout scenes.

More on ad blockers

Last month I discussed ad blockers, and the concern that blocking ads puts the MRH ad-supported business model at risk.

Well, I have some good news to report! After studying the



7. On my new SL2 TOMA modules, I'm using 3000K LED strip lighting, which I think looks great.

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PUBLISHER'S MUSINGS | 7

problem we found a solution. As of the July issue, ad links no longer get blocked. You can click them and they will open up a browser tab no problem!

Without getting too deep into the technical details, suffice it to say ordinary content links in the magazine text (such as to extra materials online) don't get blocked. So all we had to do was to figure out how to make ad links look like article text content links instead.

Just as the July issue was getting finalized, we changed all the ad links in the issue to use the new formatting and they're now no longer blocked. Successful ad clicks have gone up significantly, so it works. That's one for the MRH free-to-readers ad-supported business model! ☒



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LAST ISSUE'S RATINGS

The three top-rated articles in the [July 2019 issue](#) of *Model Railroad Hobbyist* are:

4.8 Rob Spangler's Western Pacific 8th Sub

4.6 July 2019 news

4.5 First Look: East Coast crossing circuit

Issue overall: **4.3**

Please rate the articles! Click the reader comments button on each article and select the star rating you think each article deserves. We depend on these ratings to help us determine which articles to publish, so your rating matters! ■

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Model Railroad Hobbyist | August 2019 #114

compiled by JOE FUGATE

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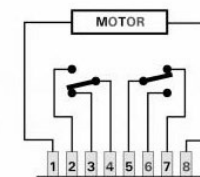
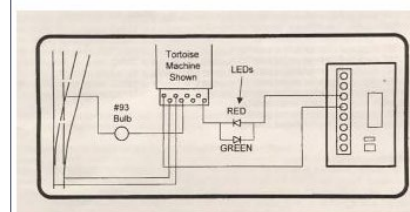
Wire a Tortoise (am I making this too hard?)

Mon, 2019-07-22 22:26 — NeilEr Track and electrical/DCC Trackwork DCC - Electrical

I pre-wires a few Tortoise machines to interface with a Switch-8 and, ultimately a button board as well as JMIRI interface. There are 8 connections on the machine so one set (outermost) is to connect to the Switch-8 and the inner set are two single pole double throw switch contacts. I figured that I only needed one of make/break to send to JMIRI so I picked up a 7 conductor cable at the big box.



As I wired these in place, it occurred to me that the frog power would come from the same DCC connection to the rails, right? So these three wires can remain "local" to the turnout and connected to the bus (I think). Here are a couple of pics for reference



Questions. The contacts for the frog polarity can just be connected to the bus, right?

Is the bulb a good idea or just a recommendation?

Anybody using JMIRI for the button's question - Will one leg of the other set of contacts be enough to tell JMIRI the switch position?

Lastly, I ordered some 3-wire 120V AC switching LEDs so that one route should show green when the other is red. Hope this works.

Thanks in advance!!!!

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DETAILS ON THE MRH
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1. MRH forum member NeilEr revisits Tortoise wiring with some great questions. The discussion that ensues brings up some excellent considerations using wiring tricks we now have available in 2019.

► MRH'S MONTHLY GREAT MODELER POSTS

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Caught the Big Boy coming into west Chicago yesterday boy is she(he?) a beauty

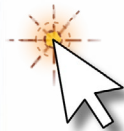
Sat, 2019-07-27 09:57 — trainmaster247

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DETAILS ON THE MRH
WEBSITE ...**



more pictures and video to come later. I had the perfect spot right on the middle platform that it came by.

2. If you're a fan of the newly operational UP Big Boy steamer, then check out **trainmaster247's** blog. He's drawn in some nice photos and videos of this impressive locomotive ...



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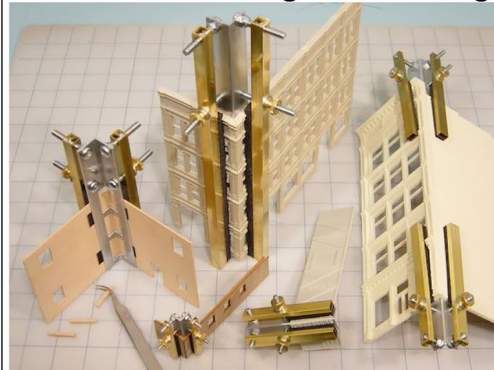


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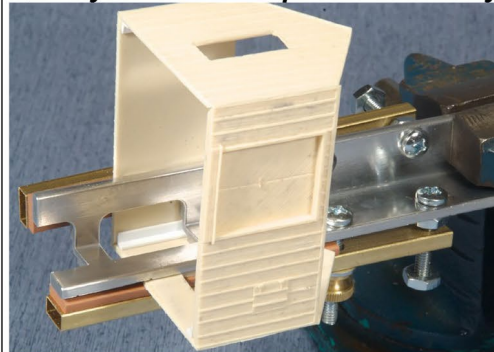


3. MRH forum regular *IAISfan* posted dozens of great photos of MOW cars including aerial views – priceless if you’re looking for reference photos on car weathering patterns ...

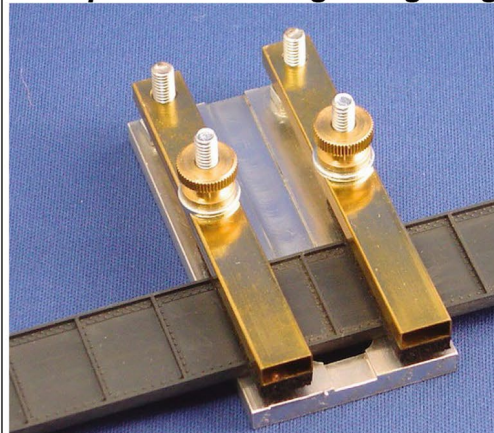
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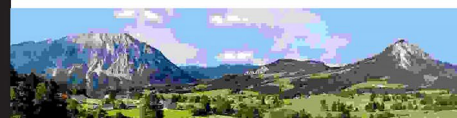


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Freight Cars for "Mortals"

Fri, 2013-06-14 07:56 — James Six Locos - Rolling stock (general)

This BLOG is the standards that I created for my freight car fleet. It is not about NMRA or anyone else's standards. Just mine. I am just sharing what I am doing. That said, everyone is invited to discuss and question what I am doing. You are also invited to tell us about your freight car standards.



James Six's blog 64049 reads not spam (1) mark as spam

Comments

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Glad you brought this topic back

Fri, 2013-06-14 07:58 — kcsphil1

I think fleet standards (for even small switching layouts) is an excellent idea. It not only helps create the look a modeler is aiming for - it can help create budget room too.

Philip H. Chief Everything Officer Baton Rouge Southern Railroad, Mount Rainier Div.

"You can't just 'Field of Dreams' it... not matter how James Earl Jones your voice is..." ~ my wife

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Thanks

Fri, 2013-06-14 08:51 — numbersmgr

4. This is an older thread by Jim Six but it was recently resurrected with fresh questions and discussion, so go check it out. This has some practical but still eye-popping modeling being discussed ...

Weekly Photo Fun Sun 28 Aug 8, 2019

Sun, 2019-07-28 07:42 — JC Shall Modeling general discussion Photo inspiration

It's another week ... post 'em if you got 'em

~Jack

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new

Waiting for rail traffic.....

Sun, 2019-07-28 12:22 — Free-Mo Tim



While waiting for the next train, I took a "background" pictures on Jerry Jordak's PC New Castle, PA railroad.

My blog: <https://model-railroad-hobbyist.com/node/21964>

My YouTube channel: <https://www.youtube.com/user/wfreemo2006>

5. The Weekly Photo Fun thread remains a favorite, with some great modeling and photography posted. Click this page and go have a look! ☑



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WHAT'S NEAT

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Model Railroad Hobbyist | August 2019 | #114

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"WHAT'S NEAT": ...



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- Artist Peat Wollaeger talks about "Eyez on Trains"
- See a museum layout for kids in Kirkwood, Missouri
- Hear about Joe Atkinson's HO Iowa Interstate Railroad
- Michelle Kempema visits the Trainland store in New York



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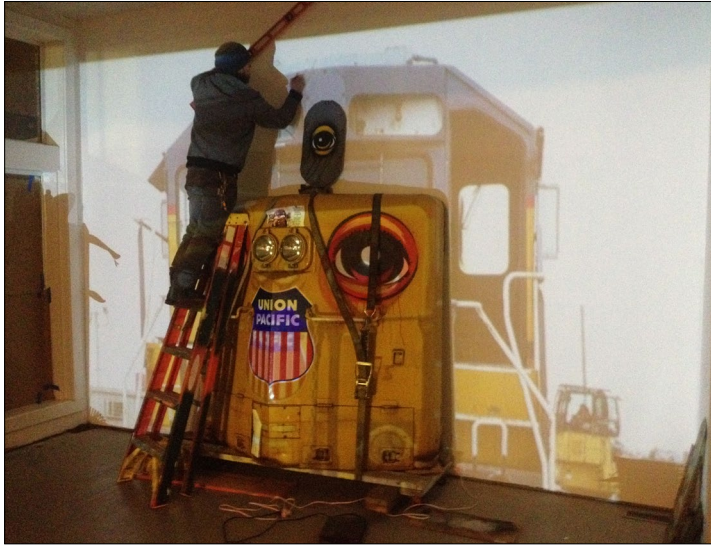


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Eyez on trains



1. (Left) Peat Wollaeger applies his stencil and graffiti artistry to scrapped parts from full-size locomotives.

Peat “Eyez” Wollaeger is an internationally known stenSOUL artist known for a signature eye. He puts it out on the streets to wake up the world. He started painting eyes on trains many years ago. A scrapper was following Peat on Instagram and he said, “Peat, would you like to come to my scrap yard? I’m scrapping full-size locomotives.”

To graffiti artists, to paint a full size locomotive is a dream. So Peat said “of course,” and it spawned his entire sequence of going to the scrap yard week after week and painting trains – and then essentially picking them up and using them as his canvas for an exhibition at a gallery in the St. Louis area.

Peat said the project came to him at the right time. “Most of these trains are being scrapped, they’re being melted down, they’ve traveled millions of miles across America and ultimately are worth more as scrap metal than as a train on the tracks. Part



2. A mural project in Indianapolis led Wollaeger to produce separate panels with a freight car theme.

of me doing the show is to save those trains and to also kind of be the mortician, you know, the mortician to the trains before they die to really just give them a face and identity. Just to give them their final farewell.”

The show at Hoffman LaChance Gallery was a year and a half in the making, with a lot of just figuring out how to get from A to Z. A friend of Peat’s named Eddie Bauer went and picked up a loco nose from the scrap yard, brought it to his art studio and then brought that nose from the studio into the gallery. That was quite an undertaking!



Also see the new “What’s neat this week” weekly video podcast!

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JOE FUGATE shares some little-known expert superglue tricks that may surprise you.

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3. Even small parts of locomotives are big and heavy, and take special handling to go from scrap yard to studio to gallery.

He also created a massive mural in Indianapolis. The only stipulation was that the sponsors wanted a mural with positive messages.

“So I get to this wall and I’m looking at it and it’s this really, it’s really wide and short and there’s 40 of them all separated,” Peat explained. “And I’m like, man, those sure look like box cars. So each logo on the train, which I have carried over now to my show, has positive messages. Like instead of the Frisco logo, it says ‘for-give’ and it’s the biggest mural now in Indianapolis. If you want to see that, the hashtag is #MononLoveTrain.”

Before this project, Peat “never really got into the model world. One thing I wanted to show is a miniature version of the scrap

yard. So I’ve been going to all these train shows, been meeting all the foamers.”

The key people for this show, who were the drive and the motivation for it were Nick Pistone, who owns the scrap yard. Peat’s friend Irene who was part of it from the beginning. She insisted they check out the scrap yard and was the drive to getting the whole train thing going. The third is Eddie Bauer, a longtime friend, who moved the loco from yard to studio to gallery. Then there’s his assistant Cam, a neighborhood fellow who’s been there a lot. The last person was Will Remell, a very great artist who helped figure out how to get it all done.

“It’s been an amazing opportunity. I don’t think I’d ever have something like this fall in my lap again, Peat said. “You never know. But it’s just like one of the scenarios where I’ve got to see this through. So if you know anybody who wants a special train display in their city, this could be a pretty impressive show. Let’s take this train display back to the cities. The display has already traveled to one. It could be pretty awesome.”

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August 2019 show

Joe Atkinson's Iowa Interstate



4. Iowa Interstate's mid-American vibe looked like a model-able proposition to Joe Atkinson.

Modeling a nearby prototype let Joe Atkinson photograph and measure signature scenes and structures. A long-time modeler who started with N scale and Tyco models, he first got interested in the Union Pacific but then was drawn to the Iowa Interstate's lineup of older diesels.

"I thought I could have the best of both worlds with more variety," Joe says. "I have a nice mix of older power and that's really



DEVELOPING A SIGNATURE SCENE
JOE ATKINSON shows how he selected and developed this signature scene on his Iowa Interstate Railroad.

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In **MRH** **RUNNING**
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5. Atkinson tested his skills on small bridges before taking on a large one.

how it started out. The fact that the Iowa Interstate has a ton of super friendly employees means that there's a lot of great information available and that certainly encouraged me in that direction as well."

Most of the track on his railroad is hand-laid. "I'd say maybe 85 - 90%. The only exceptions were areas where the track was deeper into a scene. I wasn't able to lean in far enough to be able to eyeball it and handlay."

Operations are easy to model. Once trains reach Council Bluffs, they are broken down and would serve the local customers. They make interchange moves with the UP and BNSF before they turn around and build the outbound eastbound train that evening.

One of his special interests is building bridges, and it has caused some anxiety. "It really scared me for a number of years. The idea



6. Switch locks can be unlocked with a modified uncoupling tool.

of cutting my main line and just everything involved with that in order to build a bridge. But I just worked my way around the room. I started with the most simple examples of bridges on the prototype and worked my way up. This last one took me a long time, but it's just one of those things where no one step was particularly complicated. It was just a matter of stringing all those steps together and pushing through."

Joe was an early adopter of the ProtoThrottle from Iowa Scaled Engineering: "The good folks at Iowa Scaled Engineering were kind enough to let me beta test the ProtoThrottle. I have just had a blast with it. Honestly, I would say it is right up there with introduction of sound itself as far as the impact it has had on my enjoyment of hobby, of layout operations, and just the hobby in general. I think it has been a complete game changer for me.



7. Rolling hills with frequent creeks and tree lines bring out the Iowa scenery.

"I think the very first time I picked it up, I was operating with it for about 20 minutes and when I went back and did something with my old knob throttle and it just felt so wrong. It was that much of a major shift in my mindset in such a short time."

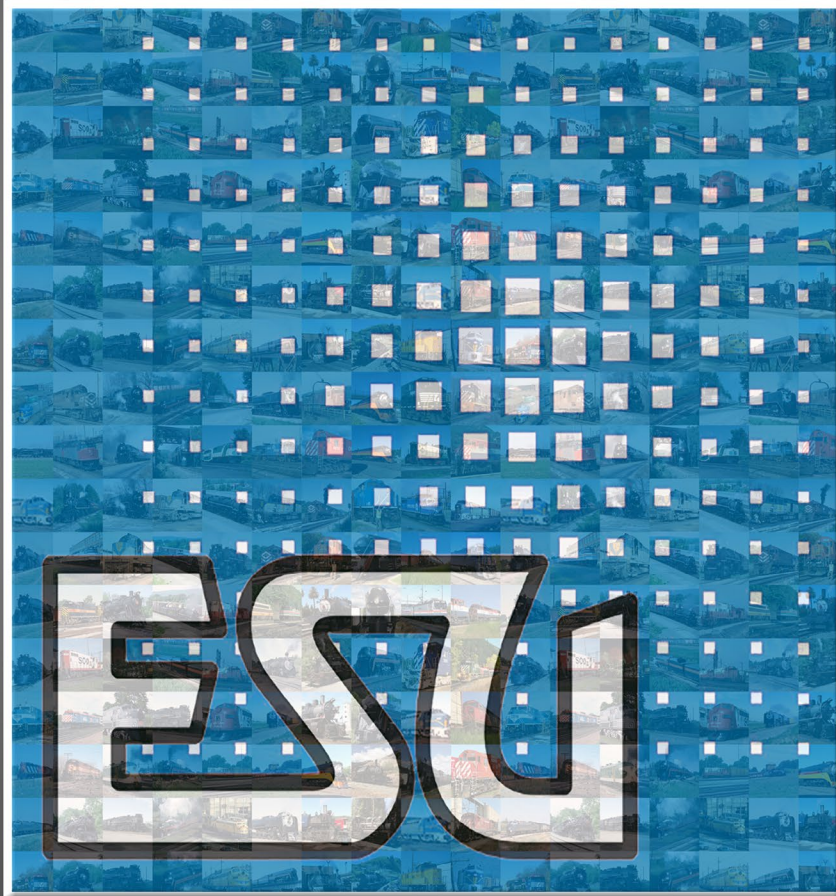
"I operated with really high momentum and braking and things like that before the ProtoThrottle but this has just made it that much more enjoyable. The shift to thinking in actual notches, just like the prototype engineers, it's been surprising to me just how much that has helped draw me into the prototype world and in my thinking as I operate."

Part of his goal has been to incorporate the day-to-day work of a crew on a regional railroad.

"I decided to finally jump in and add locks to all of my main line turnouts just as the prototype does. I'd been seeing people for

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WHAT'S NEAT | 10

many years, Lance Mindheim, James McNab, and others who had been using switch locks. I hesitated because I thought the work of actually unlocking the turnout would be kind of cumbersome when I'm operating alone. But once I actually dove in and tried it, I thought that much like the ProtoThrottle, the use of the locks actually added a lot to operations and really brought my thinking into the prototype world."

The Magic House



8. The double deck railroad in The Magic House at the St. Louis Children's Museum is mounted low so all of the visitors can see what's going on.



Also see the new "What's neat
this week" weekly video podcast!



WHAT'S NEAT | 11

A special part of The Magic House in the St. Louis Children's Museum is a two-level HO layout built and donated by Bill Cansfield. It originally represented Colorado in the 1950s, but curator James Regier and his helpers have added the Kirkwood, Missouri, station and labeled some buildings to match St Louis area sites.

Bill kind of stumbled into the job. He was visiting with his daughter and had seen flyers in hobby shops asking for volunteers. By the time Bill reached them, the museum people had pretty much given up on volunteers and were ready to hire someone who would make a commitment to maintaining and improving the railroad.

The railroad fills a 16 by 20 foot space and runs seven days a week for as many as six hours a day. Bill fine-tuned the stock to NMRA standards for wheels and couplers and uses mostly Athearn locomotives because of their reliability. Special features added to the display, like whistle buttons, let children interact with the railroad.

The system also has top and bottom reversing loops that get connected by a spiral.



9. The railroad gives kids a sense of the open country traveled by railroads and the stations they serve.

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Trainland



10. Michelle Kempema and Ken Bianco Jr. talk about the Trainland store on Long Island and the Trainworld shop in Brooklyn.

Michelle Kempema took a look at the jam-packed Trainland retail store, a family business in Lynbrook on Long Island in New York. Ken Bianco Jr.'s grandfather started the business.

Ken's grandfather was a beautician who cut people's hair and went on these award shows. One year he got a train set for his kids and the train set actually became worth more than what he paid for it. So he took the train set away from them, sold it, got them another train set and the same thing happened.

So after that he started giving out free haircuts for trains -- bring in your old trains and we'll give you a free haircut. It started from his basement and then he opened up a shop. It has grown to become Trainworld, the mail order store, and now Trainland

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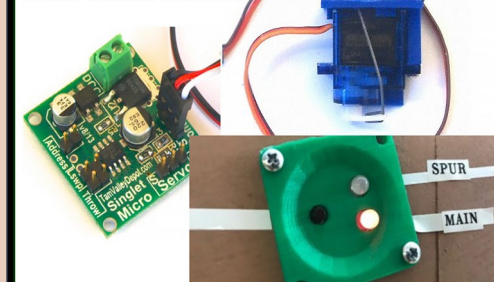
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WHAT'S NEAT | 13



11. Loaded shelves and operating displays help draw train shoppers into Trainland on Long Island.

retail stores. Ken, his dad, his cousin Anthony, and his cousin Phil are all involved. Mail-order has taken over and now internet orders dominate.

Layouts in the store let people see how all the parts in the different scales can go together. The best success is when the families and kids can be interactive," Ken says. "So they come into the shop and the kids are seeing trains and they want to grab it, they want to touch it. We let them use the remote controls. We have iPads. They can run them with their phones now. The technology has gotten so advanced and developed. Seeing a kid running the train back and forth is priceless."

"For the general public, when people come in and want a starter set, Lionel is by far is the name they know. The first thing they

WHAT'S NEAT | 14

say, "Oh my father had it when he was a kid!" Ken said. "So that's like the biggest recognition that we have. And, by far the general public coming in is Lionel's game.

Michelle reached the shop from Times Square via subway, the Long Island Railroad, and a short walk. If you want to visit this store, and you're anywhere near New York, it's an easy place to get to.

There's online ordering at www.trainworld.com. Trainland is at 293 Sunrise Hwy, Lynbrook, NY. See www.trainworld.com for times. ✓



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Writing for MRH

Model Railroad Hobbyist | August 2019 | #114



RATE THIS ARTICLE

MRH STAFF: The definitive guide to writing articles for publication ...

IF YOU'VE EVER THOUGHT ABOUT WRITING FOR MRH or any other hobby publication, here's the complete guide for budding authors.

What matters most

Before we delve into the details, let's talk general philosophy first.

WRITING FOR MRH | 2

Writing a good article on a model railroading topic isn't too hard as long as you keep in mind some things that publishers look for. We show you the ropes in this article.

We'll cut to the chase: photos make or break your article. If your photos are in focus, well lit, and fill the frame with the subject, you're already a leg up on most article submissions.

Think about it – we have copy editors on staff who can edit your text to make you sound good. As long as you can write a decent email or forum post, you likely have the needed text writing skills. Text editing in a word processor isn't that hard for us to do.

But photos are a different story. Poorly composed, poorly lit, or blurry photos can't be fixed. Photoshop and the like are great tools, but they can't save bad photos. Sorry.

These days, photos made by your smartphone or tablet can pass muster for publication – provided you review the photo by zooming in and checking the focus before you give it the thumbs up.

It's all too easy to look at a photo thumbnail, think “that looks great,” and then move on to taking a photo of the next step [1].

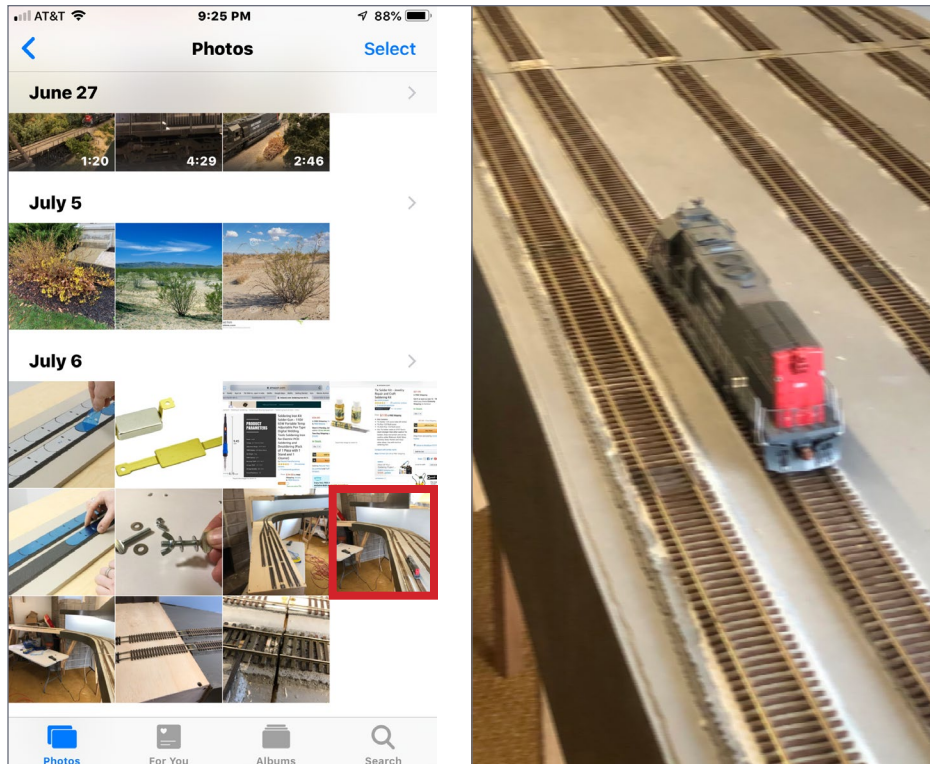
When you're all done and review the photos full-sized, you may find photos that looked decent as a thumbnail look blurry when viewed full screen! But it's too late now because the model is done and you can't go back and photograph that unpainted under-construction model again! Uh-oh ...

**Please click on
the ads in MRH!**

So, stop and zoom in on each photo as you go – if it's not in crisp focus, take another sharp photo of the step before moving on.

About the text

Even though photos matter the most in a submission, you can do things with your text to make publishing it as an article much easier.



1. This photo (outlined in red on the left) looks fine as a thumbnail on my phone. But when I select the photo and pinch zoom in to look at it closely (on the right), it's badly blurred and *unusable for publication*. Sadly, more than a few article submissions include blurry photos such as these because the modeler didn't stop and zoom in to check the focus!



J. Fugate

ARTICLES WE NEED

Now that we're publishing both MRH and Running Extra, we're consuming more articles than ever. We need more articles!

First, we can always use more articles on electrical topics, DCC, or scenery. To maintain balance in each issue, we aim to include something on at least one or more of those subject areas because they're extremely popular with our readers. Note we consider weathering articles to be "scenery" since that's more about putting the final finish on a model that's going into a scene.

Next, we need articles on kitbashing or detailing structures, rolling stock, and locos. We especially like these if they're steam era or in a scale besides HO.

We can also use articles on building bridges, tuning turnouts, and even topics like layout maintenance. Anything that's what we call "seldom covered in the trenches" how-to topics will be welcome as submissions.

We like articles of all lengths, but we especially like shorter stories that have a very specific focus and can be told in less than 800 words and six or seven images.

Readers *read our articles on a screen*, and there are some special considerations to make reading on a screen easier. The same ideas work in paper magazine articles too.

First, keep your paragraphs short. One to three sentences are ideal. Explain one idea or step, and move on to the next paragraph. Even single sentence paragraphs work fine. Don't be afraid to use them.

A single sentence paragraph adds punch to your article!

Second, use a conversational style for your writing. Write as if we're sitting across the table and you're telling us what you did. It's easier to read conversational prose on a screen.

“Use a conversational style for your writing. Write as if we’re sitting across the table and you’re telling us what you did.”

Watch out for the major enemy of conversational writing: the passive voice. Unfortunately, passive voice writing has been taught in school as sounding more “academic.” For how-to model railroading articles, passive writing makes it a lot harder to follow the steps.

What's an example of passive voice?

Passive: The man was bit by the dog.

Active: The dog bit the man.

One big problem with passive is it's easy to leave out the object doing the action, further obscuring what's going on.

Passive: The man was bit.

Who did the action? Ironically, passive writing is popular in business and government because it avoids calling out the one to blame for the action!

Writing in a conversational active voice works much better to create a little movie in your head of the action, making it far easier to follow. Passive voice, especially passive without the object doing the action, leaves a bit of a question mark. Don't use passive voice when writing for hobby publications!

The secret to writing in active voice is to make sure you name the one doing the action up front. Busting up complex passive voice sentences into more than one simple active voice sentence makes things a lot easier to follow.

Here's an example of passive writing from a recent article submission:

Additional bracing was added to the Homasote splines to ensure they retained their position on both ends once the portion being replaced by the bridge was cut away.

Here's our active voice rewrite:

First, I added additional bracing to the Homasote spline roadbed beyond the cut marks to keep it from accidentally shifting later when cut. Then I cut away the roadbed being replaced by the bridge.

Notice that our rewrite simplifies each step to create a little movie you can see in your head. That makes it easier for readers to follow the how-to process – and it's the active voice that helps you do that better.

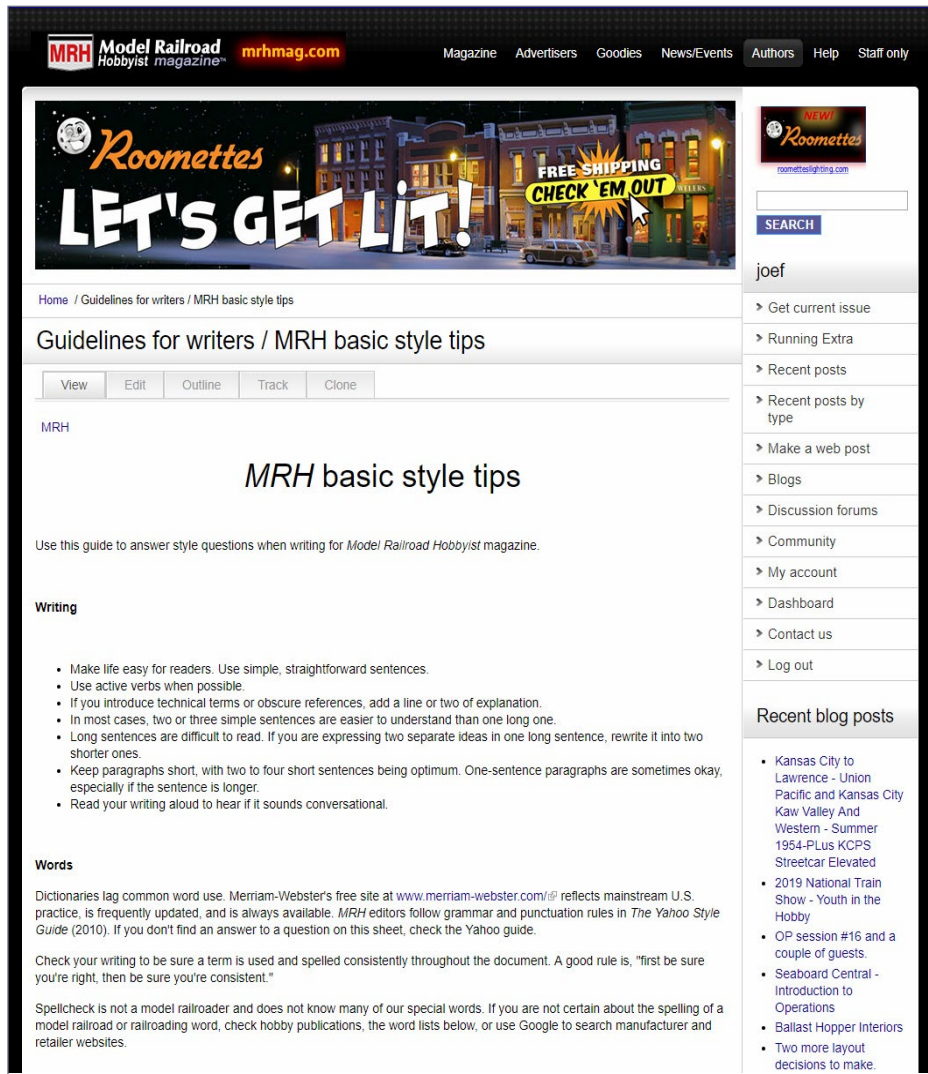
Why bother?

If our copy editors can make your text sound good, why bother with all this shorter paragraphs and active voice stuff?

One simple reason: payment.

Authors that submit articles that are ready to go and need little cleanup get top payment. If you make us work a lot harder to get your article ready to publish, then we will reduce your payment rate accordingly.

Remember, we're the customer in this transaction! You're selling your work to us, so in that sense you're no different than a plumber or a mechanic doing work for us. Quality work brings top dollar.



The screenshot shows the MRH website interface. At the top is a navigation bar with links: Home, Guidelines for writers / MRH basic style tips, Magazine, Advertisers, Goodies, News/Events, Authors, Help, Staff only. The main content area features a large banner for 'Roomettes' with the text 'LET'S GET LIT!' and 'FREE SHIPPING CHECK 'EM OUT'. Below the banner is a search bar and a list of recent posts. On the right side, there is a sidebar with a search bar and a list of recent blog posts. The main content area also includes a section for 'MRH basic style tips' with a list of writing guidelines and a section for 'Words' with a list of common words and their usage.

2. To assist you in writing an article, we provide these basic style tips. You can find this helpful guide, along with other author resources, under the Author's menu on the MRH web-site. We've also included this guide in this month's bonus downloads as part of the special Authors' package to go with this article.

If two articles on the same topic come in – one is ready to go and the other needs a lot of work to get it ready for publication – guess which one we will buy? Guess which one will get top dollar?

Always keep that in mind – we're the customer, and as the customer we appreciate a well assembled, spell-checked, and grammatically correct article. Plus, we're more likely to buy the work if it's been well done.

Like in any business transaction where you're looking to sell something to a customer, put your best foot forward and do your best work. You will be rewarded accordingly!

Consistency

If you can use consistent terminology in your writing, that's a big help and will tender you a more generous article payment.

For example, is it xacto or X-Acto? Is it dull coat, or Dullcote? And is it box car, or boxcar?

As an easy reference, we offer our free MRH Author's style guide: mrhmag.com/authors/style-guide-doc.

We are including the style tips as a part of the Author's bonus download package in this issue's bonus extras.

[Get the Authors' bonus extra now!](#)

Composing your article

Use a word processor such as Microsoft Word to compose your article. Free open source word processors such as Open Office or Libre Office work as well. Here are links to the free word processors we mentioned:

Open Office: openoffice.org

Libre Office: libreoffice.org ***editors' choice***

Write your article with simple single column formatting. Please don't try to get fancy with multiple columns or use clever formatting. Everything will have to be changed to fit on our pages.

Use the simple Arial type face for the title, authoring subtitle, and for any section headings. Use Arial bold for captions. Here is how we like to see the title and subtitle work:

Building a cool model

Joe Fugate constructs the coolest model ever ...

Give your article a simple title and make it bold, then put your name underneath to lead the subtitle in bold. Make the rest of your article subtitle non-bold.



J. Fugate

AVOID CLEVER TITLES

Please don't get clever or cute with your title or subtitle. For example, one author did an article for us on kitbashing some model cranes (the kind with a cab, boom, cables, and a hook) and animating them, but he titled it, "A flock of cranes." We changed it to "How to model working cranes" to make it easy for search engines to find.

Cute or clever titles can obscure the clear topic of an article for the search engines like Google. "A flock of cranes" will lead a lot of Audubon Society folks to this article – which is not what we want!

Use simple Times Roman for the body text.

Insert your images inline into your text where you feel they belong in the flow of the text, and put captions underneath using a bold font like Arial. See [3] for an example.

Number your captions like this: **1. Xxx** **2. Xxx** and so on. Refer to your captions in your text using brackets, like [1] or [2]. Also keep a separate full resolution copy of your image and name it p-01.jpg, p-02.jpg and so on.

When you're writing your text, remember to make good use of lists and subsection headings. This breaks up the text and makes it much easier to read.

For instance, here is a simplified example:

"I assembled all the parts I would need to build this model, such as the styrene sheet, styrene rod, pieces of wire, and cast parts from Details West."

Instead, use a list:

I assembled all the parts I would need to build this model:

- Styrene sheet
- Styrene rod
- Pieces of wire
- Cast parts from Details West

Bulleted or numbered lists are easier to read and they're easier to remember.

Adding frequent subsection titles helps break up the big gray wall of text and makes the article easier for readers to refer to later.

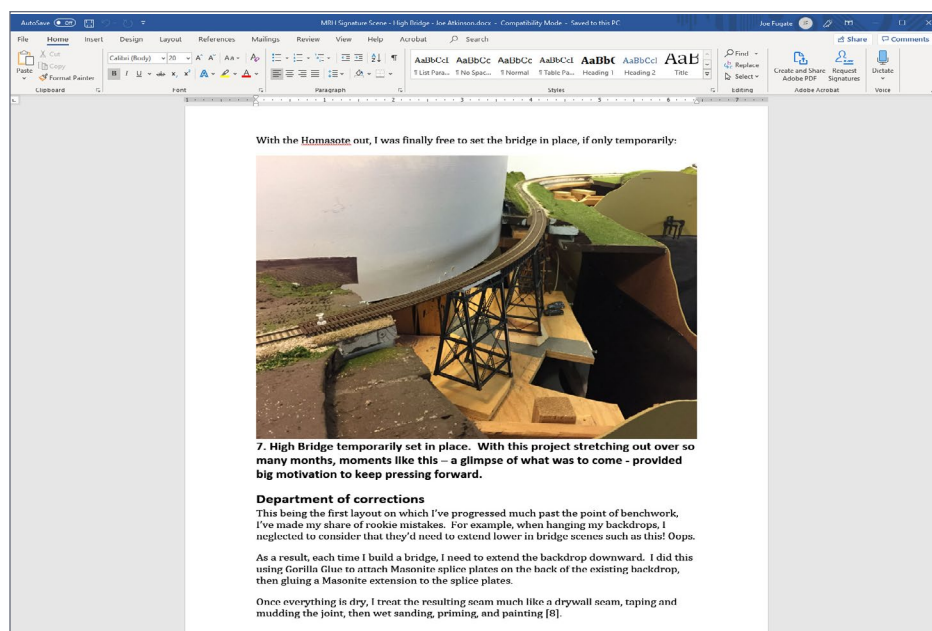


J. Brugger

A WORD ABOUT PICTURES

If you only use photos that you have taken yourself, everything is fine. If you are using photos someone else has taken, you must have their permission to use them in a publication.

If it is impossible to locate the photographer – say, for a photo taken decades ago – tell readers where you were able to find it by including your source in the photo credit. Search “copyright law” for more details.



3. Joe Atkinson submitted his “Signature scene” article (in the August issue of Running Extra) using a Microsoft Word format. He placed his images inline in the text with the captions below them as shown here. This is how we prefer you format your article: with the images included inline and the captions immediately following using a sans serif bold text like Arial.

Assembling your article for submission

Once you’ve written your article, it’s time to assemble all the pieces together and prepare it for submission.

First, make sure to include a short author’s biography and mug shot at the end of your article. For the bio, we prefer you write it in third person (as if someone other than you wrote it) and answer these questions:

- How did you get started in the hobby?
- Describe your journey in the hobby?
- What is your current hobby passion?
- Do you have a family, career, and other interests?

For each question, provide 1-3 sentences describing some details.

Next, put your full name, address, phone number and email address at the end of the document so you’re easy to contact with questions or to make payment. Believe it or not, we have articles in our collection that have *no name* on them anywhere. We can’t publish them because we don’t know who wrote them!

“Believe it or not, we have articles in our collection that have *no name* on them anywhere. We can’t publish them because we don’t know who wrote them!”

Include full resolution images separately as well: You included all your images inline in your text document, but those may not come across at full resolution. We prefer you also put all the original full-sized images (at least 3600 x 2400 pixels if possible) into a folder.

Name the folder Assets and put all your images and diagrams into that folder. Put the assets folder into another folder titled for your article.

Then include your saved article in .docx, .odt, or .pdf format as well in the article folder [4].

Finally, use a zip program to package the article folder, the assets subfolder, and all its contents into a single zip file you can upload.

If you don't know how to make a zip file, you can find step-by-step instructions here: [Windows](#) or [Mac](#). Zipping should be built into your computer. If you need a free zip utility that runs on Windows, Macs, and Linux machines, check out [Zipcreator](#).

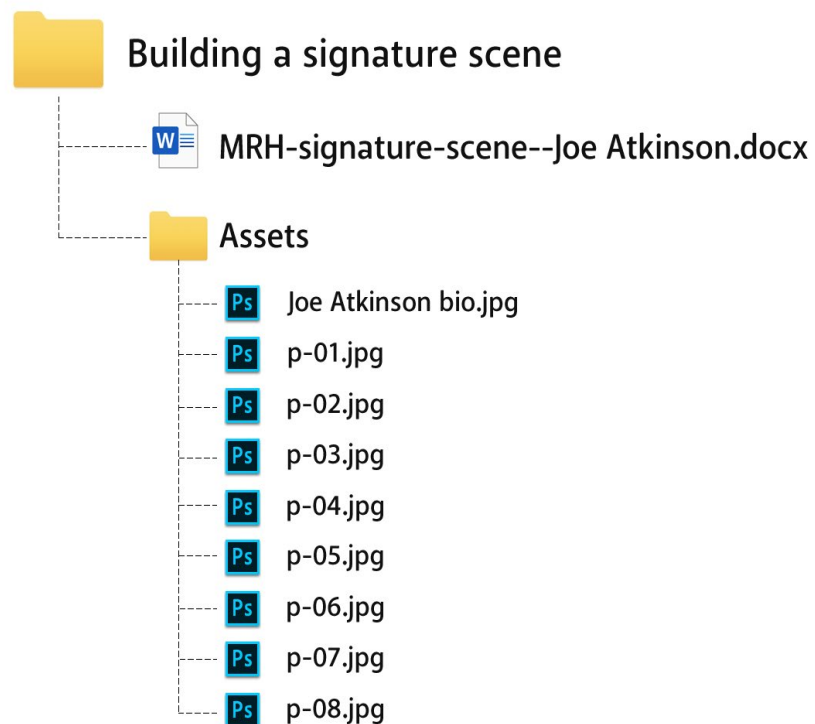
Submitting your article

Once you have packaged everything into a single zip file, then you need to submit your article. Articles with full resolution images in them can get large in a hurry, so you need to post your zip file on a file sharing service and then send us the share link.

Google Drive [google.com/drive] and Dropbox [dropbox.com] both provide free services you can use for this. You can also use WeTransfer [wetransfer.com] – it has the advantage that it's both free and ad hoc. WeTransfer autodeletes your files after 10 days or so, which means it doesn't use up much online storage space, unlike Google Drive or Dropbox.

Please don't sent article submissions to us via email unless we specifically tell you to. We vastly prefer you to use our article submission form. You can find our article submission form at [mrhmag.com/node/add/article]. On the form is a box for including the share link of your article on Google drive, Dropbox, or WeTransfer.

MRH article submission folder structure



4. Use this folder structure for your article submissions. Create a top-level folder named for your article, then within it put your article in docx, odt, or PDF format. Then add an Assets folder and put all your images and diagrams inside that folder. Note the images are also included inline in your article so we can see about where you expect them to come in the article text flow. Once you have everything assembled into this structure, then zip up the top level folder to create a single zip file you can upload and share with us.

This form also includes reminders of critical information we need such as a bio, mug shot, and a phone number in case our emails to you keep going to your spam folder.

Once your submission has been made, we will both get a link to it via email. We'll go download your submission, review it, and get back to you. If you don't hear from us within two weeks (it happens), then please email us for an update on your submission using editors@mrhmag.com.

Mailing your article to us (optional): If you have a slow web connection or you prefer to mail us your submission via "snail mail" (the Postal Service), you can do so. Go to Contact us and scroll down to our mailing address. For large files, put them on a CD or an inexpensive thumb drive and mail them to us.

What happens after submission

Once you have submitted your article to us using our submission form, you will get an acknowledgement email from us. Within a few weeks, if we feel your article needs more work or if we simply can't use it, we will send you an email telling you your article is not accepted and/or outlining the changes we need for it to finally get accepted. Otherwise, we automatically accept your article.

At any time, if you want to know the status of your article, don't hesitate to email editors@mrhmag.com to ask about what's happening with your article.

You generally won't hear much else from us until we schedule your article for publication. Because of issue balance needs, an article can take from 6 to 24 months before it gets scheduled for publication. Once your article gets scheduled for publication, then we will let you know about when it should appear. Note last-minute demands can delay your article by a month or two.



Building-a-signature-scene.zip

5. In the bonus downloads, we provide an actual submission package example using the *Signature scenes* article by Joe Atkinson. You can download it, unzip it, and see exactly what a good article submission looks like!

Once we paste up your article, we will send you a PDF proof of it for final review. And then you can enjoy seeing your article in the magazine and enjoy the limelight of posting authoritative comments on feedback from readers! ☒

Postscript: Depending on advertising cash flow, article payment can take from 45 – 90 days after publication. If you're wondering exactly when to expect payment, please ask – we're happy to tell you what your payment timing is.





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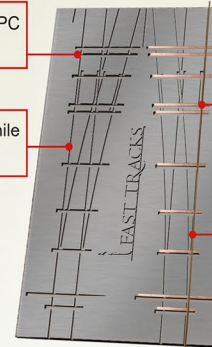
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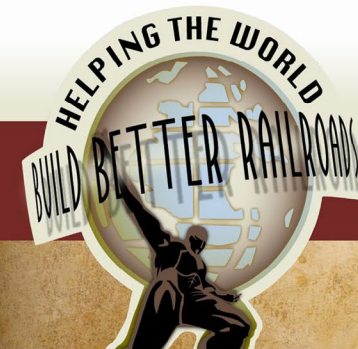
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Ron Patzer's Erie- Lackawanna Railroad

ROBERT SCHLEICHER VISITED THIS
PROTOTYPE-BASED LAYOUT SET IN THE EARLY
1970s ...



RATE THIS ARTICLE

1. This signature scene on Ron Patzer's Delaware, Lackawanna and Western Railroad is the Tunkhannock Viaduct, scratchbuilt from cardstock.



RATE THIS ARTICLE

RON PATZER'S LAYOUT INCORPORATED MAJOR portions of the original Erie Railroad and the Delaware, Lackawanna & Western Railroad that merged into the Erie-Lackawanna on October 17, 1960. On April 1, 1976 the Erie-Lackawanna disappeared under the Conrail blanket.

That got me excited about trains. "My dream was always to have a model railroad of sorts – it started out with me being able to



2. The Tunkhannock Viaduct greeted visitors to the layout and immediately set the northeastern Pennsylvania theme.



3. Oswego is in the foreground with the Binghamton yard and station in the far distance and the Susquehanna yard in the left middle distance.

build in this basement. This is the home where I grew up. So I've had trains in here literally my entire life."

Ron planned his 27 x 47-foot layout so the parallel Erie and DL&W main lines could be operated. It gave him the option of running "pure" Erie, "pure" DL&W trains, or later Erie-Lackawanna trains. Hidden reverse loops with four tracks at the Buffalo and Hoboken ends of the DL&W and at the Jersey City and Chicago ends of the Erie let Ron operate all the trains on both railroads' 1960 or earlier timetables.

The layout included reasonable compressions of the massive Susquehanna, Binghamton and Port Jervis yards with enough

“country” to feature both the spectacular Starrucca stone and Tunkhannock cast-concrete viaducts. He was also able to model the Pennsylvania Railroad’s Elmira branch line to the mines.

The benchwork was traditional open grid L-girder with ½-inch plywood subroadbed and Homasote roadbed supporting Atlas track, with Code 100 rail on the main lines and code 83 on the yards and sidings.

Why this railroad

Ron started as a Pennsy modeler but a visit to Steamtown in Scranton, Pennsylvania introduced him to the Erie-Lackawanna’s E-unit diesel in maroon and gray. He fell in love with those colors and discovered that the E-L routes were near his home so he joined the Erie-Lackawanna Historical Society.

Ron felt that there were just too many folks modeling the Pennsy but found room on his layout for a connecting Pennsylvania Railroad line to Elmira, New York. He recreated the Erie from Jersey City to Chicago, and the Lackawanna from Hoboken to Buffalo.

The two railroads ran side-by-side through Binghamton in the real world and on his layout.

For Ron, these scenes lay within 200 miles of his home. He chose 1971 because it allowed him the options of operating Erie, DL&W or E-L as well as Pennsy. Penn Central operated from 1968-1976.

He ran with what these real railroads did, using their timetables. Virtually all of the trains that operated in the area were recreated during a full operating session.

Ron included the Pennsylvania Railroad’s Elmira Branch for its coal traffic. In the real world, it ran from Williamsport, Pennsylvania to Elmira, New York, where the Erie and Lackawanna interchanged.



4. Scranton is located on its own peninsula

Design factors

The Erie and the Erie-Lackawanna were good customers for large box cars and oversize loads because the original railroad was built to 6-foot broad gauge and had generous clearances for hi-cube box cars a century later. The Erie was a preferred route for shipping large loads like transformers.

Three helixes on the layout brought the tracks up from the lower level to the upper level (see diagrams at end of story) where the tall Starrucca and Tunkhannock viaducts are located, and they add running time to help match the timetable.

The stone and brick mills and warehouses at Binghamton and the coal tipples on the Elmira Branch define the industries

that made the railroads successful. The Starrucca stone and Tunkhannock cast-concrete viaducts are unique to the Erie and the Lackawanna.

Locomotive roster

Ron bought what he could get. Fortunately, Atlas has made replicas of most of the E-L diesels in the proper paint schemes, including the Train Masters, C425 and C424s, and the road switchers. Proto has the E units.

Lackawanna 4-8-4s were called Poconos and have been offered in brass. Broadway Limited has offered replicas of the USRA Light 2-8-2. Bachmann Spectrum has the Erie 2-10-0 and Proto 2000 a replica of the 0-8-0.



5. Port Jervis yard sits on the left with Buck Horn mine on the Pennsylvania Railroad's Elmira line on the upper right.



6. The Starrucca Viaduct is in the far upper left with the Port Jervis yard throat in the lower right.



7. The Pennsylvania Railroad's Elmira line dominates this aisle with mines on the left and the right.

Freight car fleet

Oswego on Lake Ontario was a major port for ships carrying coal from Canada destined for the northeast. Jervis Point also had huge a coal-unloading facility so there is a need to have solid trains of hoppers running loaded east and empty west. Ron had two 55 car trains routed from docks to Chicago and south.

Note: After several years of enjoyment and with a house move looming, Ron dismantled his Erie-Lackawanna layout (which he called "My Stoney Creek railroad") late in 2016.



8. The Binghamton yard throat is in the far right. The track curving into the lower left corner is the beginning of Pennsy Elmira line. The single track leading into the tunnel at the left is the DL&W mainline that hugs the wall and eventually crosses the Delaware River bridge. The three tracks in the upper left are the Erie mainline heading for Susquehanna in the far upper right.



9. A train of solid reefers is inside the tunnel that leads to the Starrucca Viaduct on the Erie Railroad. The tracks on the upper right form the only duck-under on the layout; this supports the Erie and the DL&W lines heading for Susquehanna.



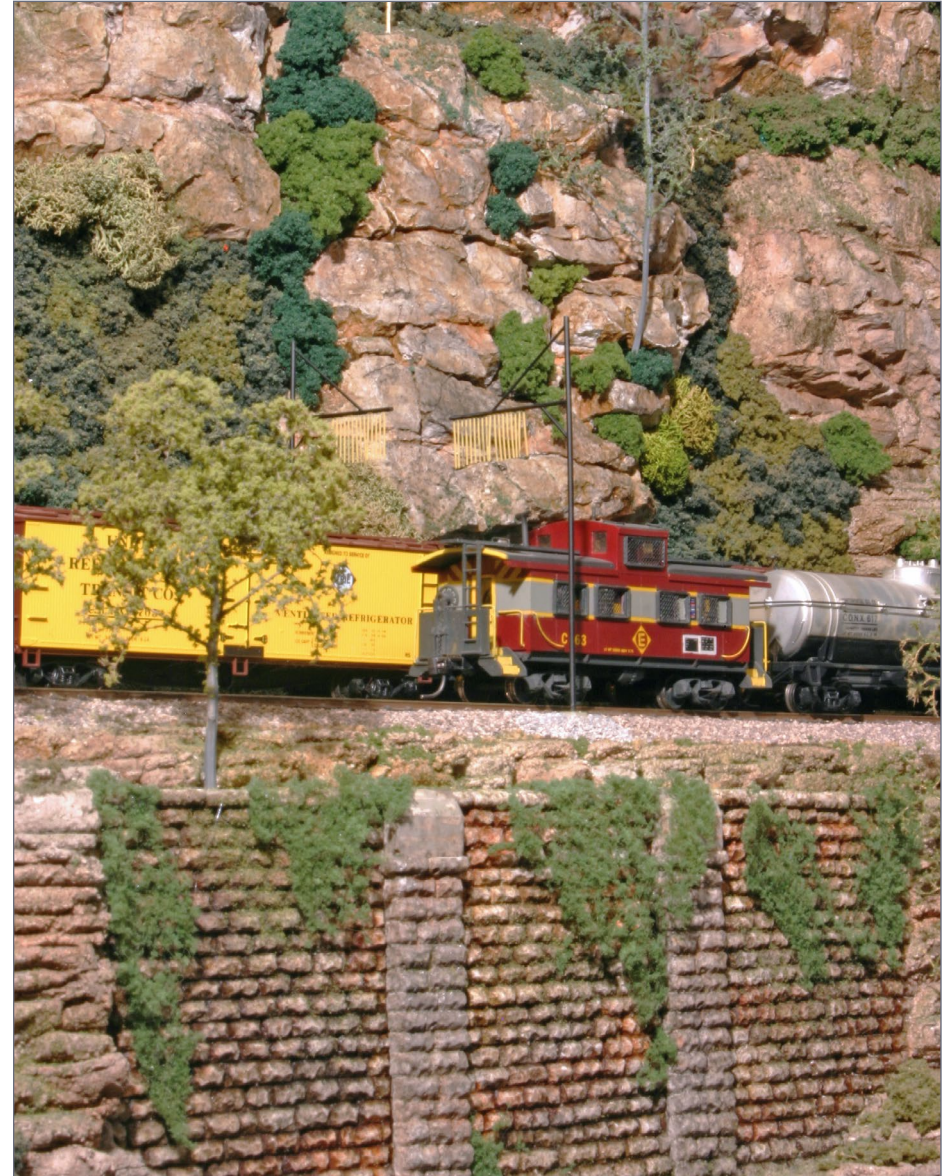
10. Ron modified the Walthers Cornerstone #3017 New River Mining kit for this model of the Buck Horn mine on his Pennsylvania Railroad Elmira line.



11. Ron paved the switchback road using Structolite plaster. For the ballast Ron mixed Woodland Scenics light and medium gray ballast to match that found on the prototype E-L main.



12. He scratchbuilt the culvert at the base of the Tunkhannock Viaduct from art board.



13. For this stone retaining wall Ron blended a Mountains-In-Minutes casting into the surrounding Hydrocal-soaked paper towel scenery.



14. Ron assembled the passenger shed at Binghamton from two Kibri number #965 Bonn Train Station kits. The industries in the background come mostly from Walthers Cornerstone kits.



15. For the icing facility at Bridgehampton Ron adapted a Walthers Cornerstone #3049 Ice House and Icing Platform kit.



16. The two deck truss bridges on the lower deck D&LW tracks below the Tunkhannock Viaduct are Central Valley kits.



17. Each locomotive matches a particular prototype with features like the antennae on each corner of these Atlas RS3 diesels.



18. The gravel quarry structures include a Walthers Cornerstone #3062 Glacier Gravel Company with an enclosed conveyor made from Plastruct styrene plastic tube.



19. The bridge over the Delaware River is a Lionel O scale model converted and weathered. The telephone wires are Easy-Line elastic cables from Berkshire Junction. The waterfall was modeled using aquarium filter floss coated with decoupage resin.

Resource Guide

Books:

“Erie Power, Steam and Diesel Locomotives of the Erie Railroad from 1840 to 1970,” by Fred Westing and Alvin F. Staufer

Morning Sun Books, www.morningsunbooks.com

Railroad Avenue Enterprises, P.O. Box 114, Flanders NJ, 07836

The Weekend Chief (see www.walthers.com)

Videos:

Green Frog Productions, www.greenfrog.com

Erie-Lackawanna websites:

erielackhs.org

NERAIL North American Railroad Photo Archive, naphotos.nerail.org

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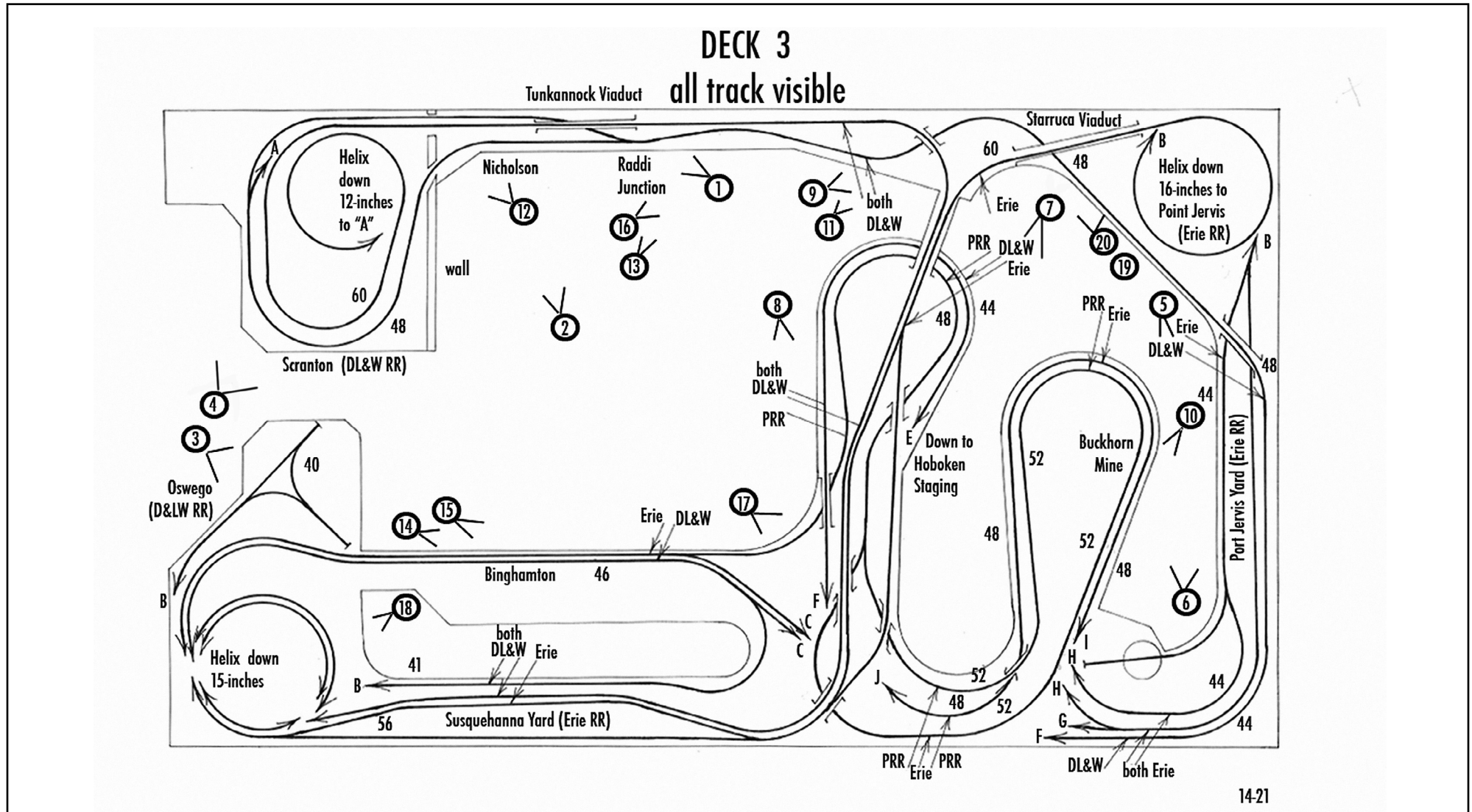


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JOE ATKINSON shows how he selected and developed this signature scene on his Iowa Interstate Railroad.

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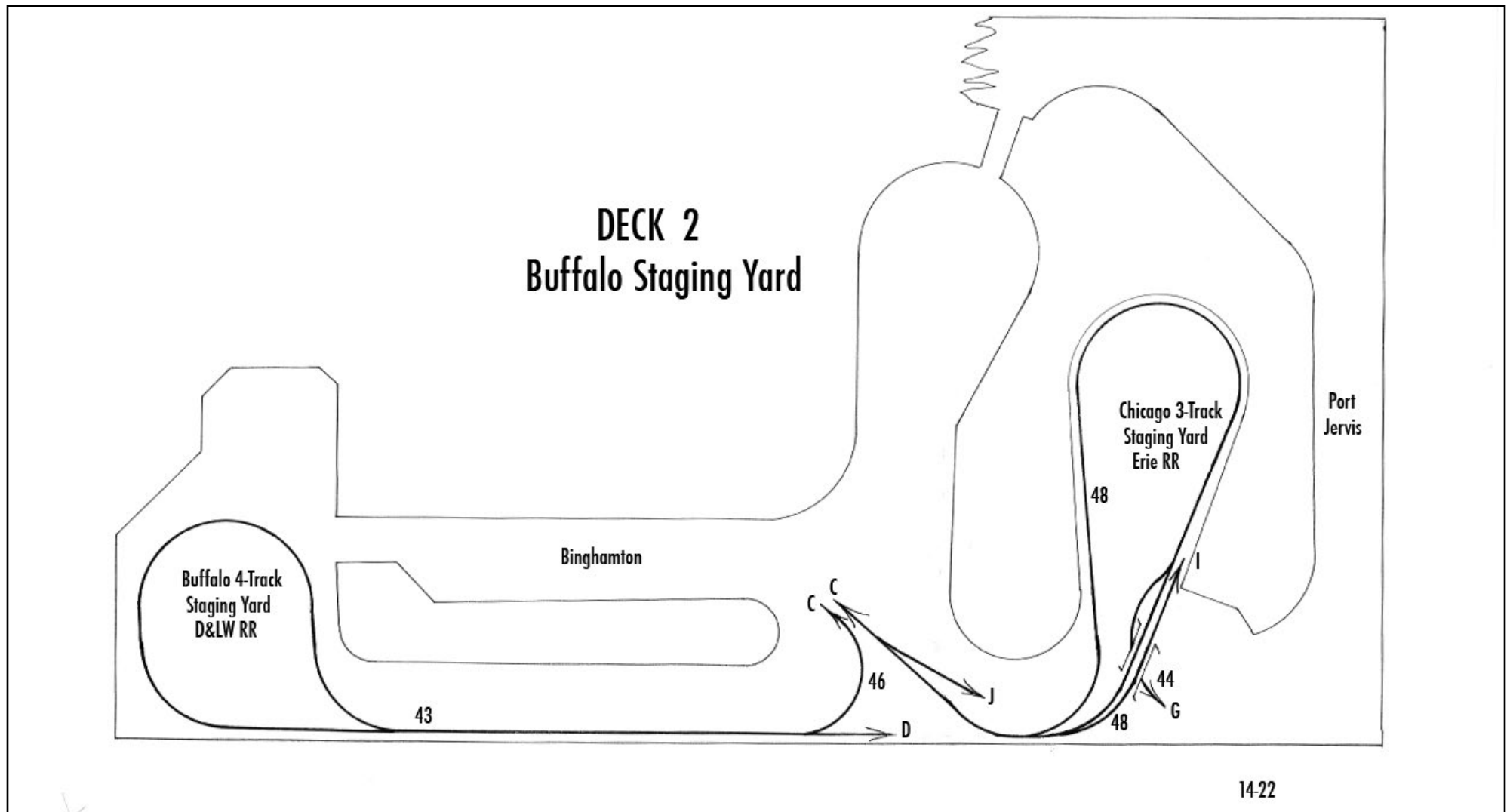
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20. Ron used two thick layers of decoupage resin to model the Delaware River. As an extra touch, he painted some fish on top of the first layer.



Deck 3 of Ron Patzer's 27 x 47-foot Erie-Lackawanna Layout
The layout includes most of the areas where the Erie Railroad (ERIE) and the Delaware, Lackawanna & Western (DL&W) Railroad track ran side by side, including the routes around the Port

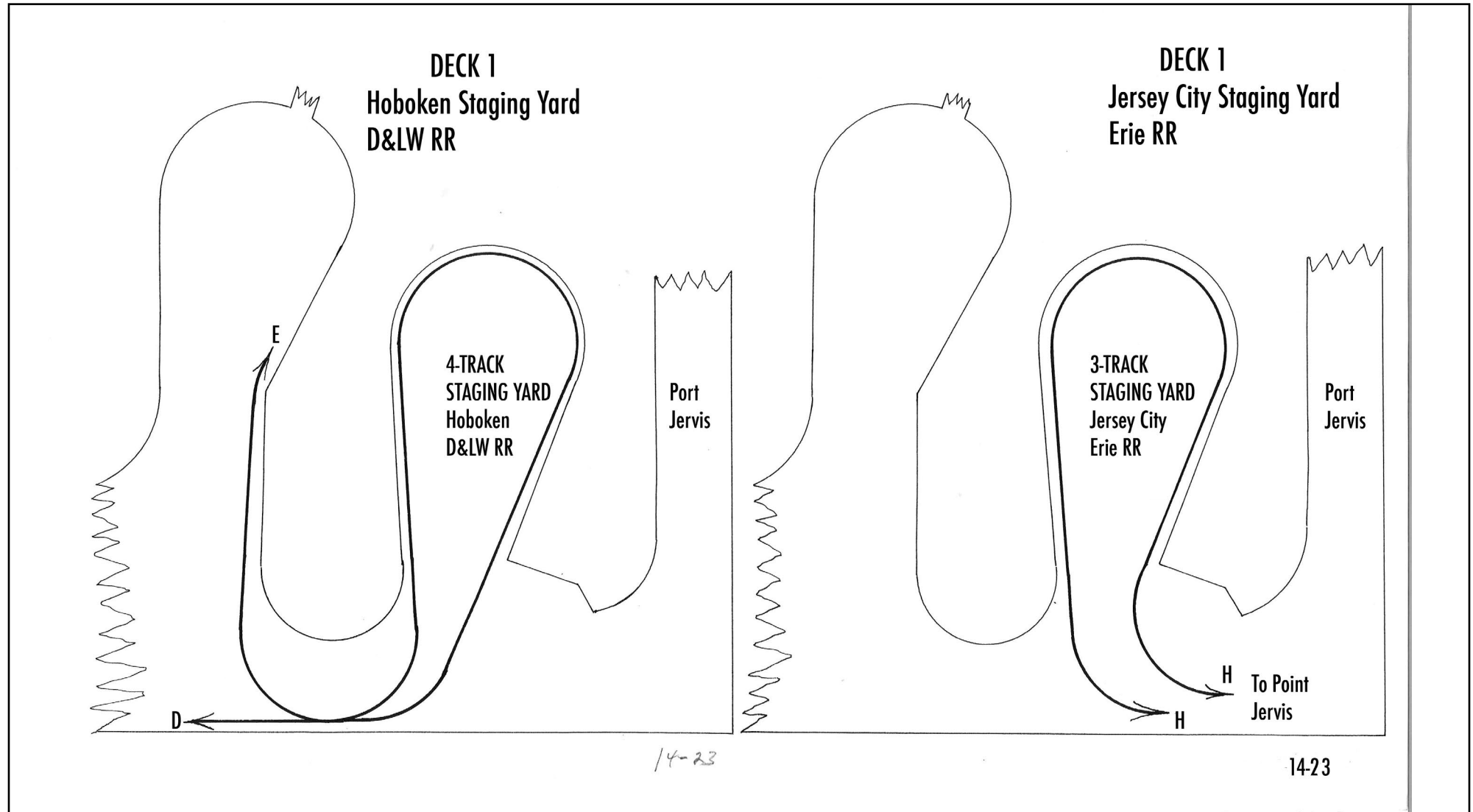
Jervis and Binghamton and Susquehanna yards. Ron has also included a portion of the Pennsylvania Railroad's (PRR) Elmira Branch. This complex layout also has four hidden staging yards, each with a reverse loop at C, E, F, G, H and I on the plan.



Deck 2 of Ron Patzer's 27 x 47-Foor Erie-Lackawanna Layout

This deck is 48-inches from the floor and holds the Buffalo 4-track staging yard, DL&W trains, and the Chicago 3-track staging yard where Erie Railroad trains head to and from Chicago. The two yards are connected by the track here at D to D on page 23.





Deck 1 of Ron Patzer's 27 x 47-foot Erie-Lackawanna Layout

The 4-track DL&W staging yard for trains to and from Hoboken and the 3-track Erie staging yard for trains to and from Jersey City are on the lowest deck.



NOTES ON THE TRACK DIAGRAMS

All of the layout drawings are single-line schematic diagrams showing the route of each mainline, with no double track or other parallel tracks or sidings shown. If there are two railroads running side-by-side, those two tracks are shown.

The drawings do not illustrate where minor tunnels or bridges may be placed or any other scenic details. The thicker lines are track center lines, the thinner lines are the exterior walls and the inner edges of benchwork.

The circled numbers indicate where the photographs were taken. The underlined numbers show the elevation of the track above the floor. The individual capital letters in pairs across the different drawings help to help identify where the track disappears and reappears, sometimes on another deck. ✓



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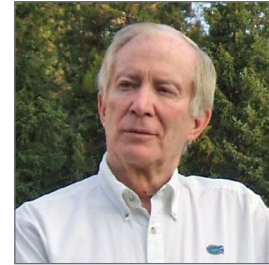
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ROBERT SCHLEICHER



Robert was editor of *Railmodel Journal* for 19 years and, prior to that, editor of *Model Railroading* magazine. He has also authored over a dozen model railroad books including the "Tyco Model Railroad Big Book of Model Railroad Track Plans" and three books for Lionel.

Bob has been a consultant to several manufacturers and helped to kick-start the Railroad Prototype Modelers concept. He is modeling the standard gauge Colorado & Southern in northern Colorado circa 1959 in HO scale. ■

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Creative layout DOWNSIZING

Model Railroad Hobbyist | August 2019 | #114



RATE THIS ARTICLE

TIMOTHY DUDLEY discusses what he did when his layout space got dramatically smaller ...

YOU JUST RECEIVED NOTICE AND YOU HAVE TO MOVE.
Wow! Now what?

Your existing layout (2' x 16') won't fit in the space allotted at your new location so you need to downsize. Looks like your new space will be 1.5' x 8'. So you think, "OK, maybe I can work with that."

CREATIVE LAYOUT DOWNSIZING | 2

1. My old layout had this nice industrial switching area in the back and an engine house in the front (track by the fuel tank).

Now the task is trying to fit 10 pounds into a five-pound bag!

The old layout

See [1, 2, 3] for a few before photos of my old layout. This shows what I started with, to give you some context for the downsizing.

Dismantling

In this case, I wanted to recycle as much of the old layout as possible. Recycling old layout materials is nothing new for me, but this is my latest story.

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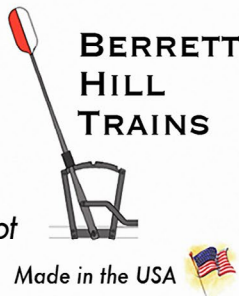


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CREATIVE LAYOUT DOWNSIZING | 3

I took the layout apart carefully, and saved everything, then I took inventory of what I had. I did not throw *anything* away yet!

First I removed all the structures and set them aside [4]. This gave me instant structures ready-to-go later for the new layout!



2. Main street through town crossed several tracks between the front fascia and the backdrop.



3. Here is a longer view of the industrial area and engine house seen in [1].

CREATIVE LAYOUT DOWNSIZING | 4



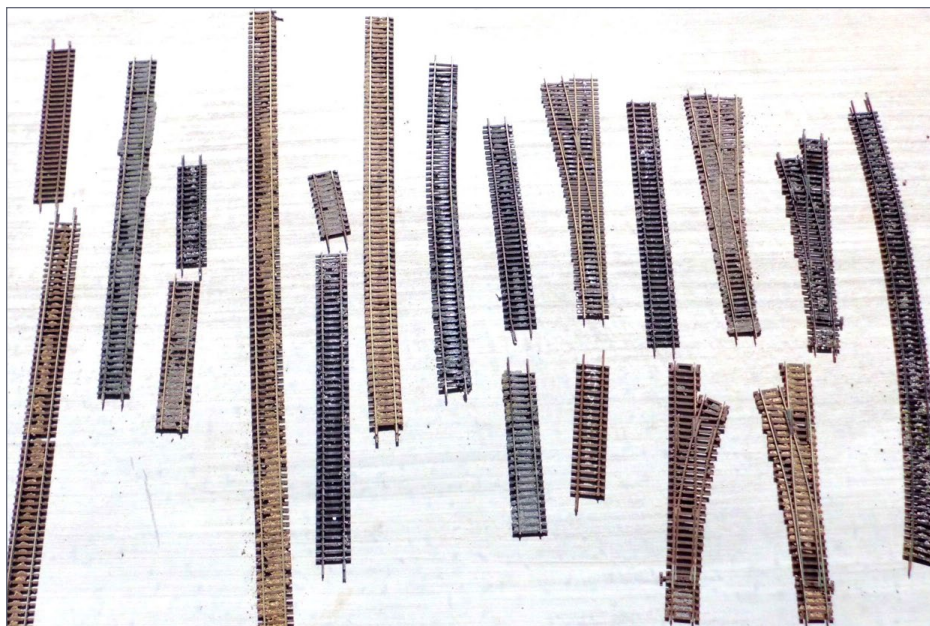
4. I removed all the structures from the old layout and carefully set them aside for reuse on the new layout. Not all of them may get reused, but I saved them all.

Not wanting to throw anything away, I removed all the track by breaking up the ballast and carefully prying up the track so as to not damage it. One important note: I'm a dead-rail guy, so my track had no wiring to remove. That made things *a whole lot* simpler!

I scraped some of the old ballast off, but I didn't bother removing all the ballast from between the ties [5] since I will be ballasting the track on the new layout, too. I figured that would give me a leg-up on ballasting the new track.

I was able to use most of this track on my new switching layout.

Finally, I dismantled the benchwork, saving everything here as well [6]. My goal, if possible, was to use all the parts from the old layout as "raw material" for the new layout.



5. I also saved the track from the old layout, but didn't remove all the ballast.



6. Here is some of the leftover wood and backdrop from the old layout. Also note the layout leg on the right – I saved everything!

Building the new layout

I built the new shadowbox 1.5' x 8' layout from the recycled lumber and backdrop from my old layout as much as possible.

I made the box of 1 x 3 scrap lumber, and made the bench top and backdrop from recycled ¼-inch Masonite. I used a sky-blue paint from Walmart for the sky and painted clouds with flat white over a cardboard cloud stencil.

For sound-deadening, I covered the benchwork top with two new ceiling tiles that I cut and glued down. For the lighting, I purchased a new 16-foot LED strip online and doubled it on the top of the sky backdrop, gluing it with contact cement.

I took inventory of the track I had and worked out a new track arrangement by re-arranging the salvaged track on the new layout bench top. This was an iterative process that involved test-fitting structures into various track arrangements.

You can see a couple of my attempts in [7, 8, 9, 10].

I waited a day or two after each configuration just to see if the arrangement made sense. After more than a dozen tries, I finally settled on a track plan that wasn't too congested, looked good with the structures, and worked well operationally.

After my "real-time" track planning and structure arrangement, the layout looked nothing like my original plan sketches. That's a good testament to the power of 3D layout planning with track and structures in real time.

Because I'm a "dead-rail" guy, I had no wiring on the new layout. I have battery-powered all my diesels, and turnouts are either finger thrown or have Caboose ground throws. That



7, 8. Here is one of my many tests of track and structure arrangements. With structures and track already available, it was easy to just keep trying different arrangements until something finally clicked.



9, 10. More tests to determine what would work best on the new layout.

made redoing the track a whole lot simpler. Just put it down and go!

I fastened down the track permanently, then added roads and scenery. Finally, I placed the structures, and I was up and operating again! You can see several photos of the new layout in [11-17].

Just because your circumstances change doesn't mean that you can't recycle a layout and create something new and just as enjoyable from it.



11. Here's a view of the new layout after fastening down the track and applying scenery. In the foreground sits Metal Craft girder and pipe on the right and Steamrollers Printing on the left. I was able to include a simple representation of small town USA in the middle-distance against the backdrop.



12. The Samaritan House is a homeless shelter to the left behind the trees, with Millbrook Bakery to the right against the backdrop.

Almost all the raw materials I used on the new layout came from the old one. For me, the excitement is really in the challenge of reusing as much as I could.

So look at the bright side: When life "hands you lemons" make something sweet out of them. ☑

See the rest of the photos on the following pages ...

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13. Johnson Lumber can be seen in the back, and Suburban Propane in the foreground.

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14. Here is a more-inclusive shot of the far end of the layout showing Millbrook Bakery at the far left against the backdrop, Steamrollers Printing just past the trees on the right, Metal Craft as the blue building in the distance, and small town USA against the backdrop past the bakery. I managed to get a lot into this space.



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JOE ATKINSON shows how he selected and developed this signature scene on his Iowa Interstate Railroad.

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15. Here is a view of the entire new shadowbox switching layout. There's a lot here, but it doesn't feel too cramped – just nicely populated with industries and structures. It's also fun to switch!



COOL SUPERGLUE TRICKS
JOE FUGATE shares some little-known expert superglue tricks that may surprise you.

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16. I finally got the fence up on the Metal Craft yard!



17. A view of the new layout from the opposite end. I'm quite pleased with how it came out. It looks nice and I got a lot into the space without making it feel overcrowded.

TIMOTHY DUDLEY



Timothy's dad hid an AHM train set so he wouldn't find it until Christmas morning. That started his love affair with the hobby.

Timothy and his brother built a 4x4-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.

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



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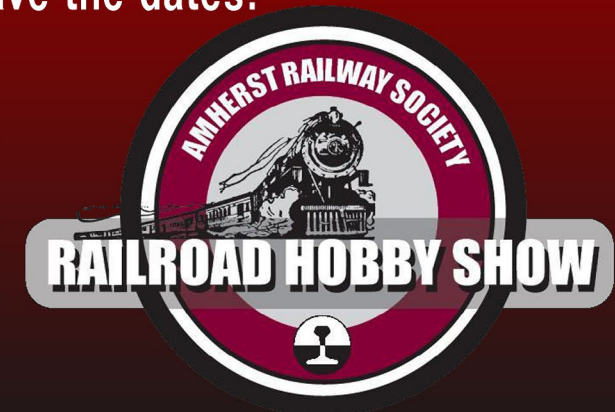
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Better train storage

Model Railroad Hobbyist | August 2019 | #114



RATE THIS ARTICLE

RICK BALASSAITIS discovers a better way to store his trains ...

I USED TO STORE MY N SCALE TRAINS IN REGULAR OfficeMax cardboard containers. Each held 116 cars: nine rows of 12 Micro-Trains cars plus eight spacers in the middle. That left a lot of open space above the cars.

To facilitate our house move, I cut the boxes down to eliminate the wasted box height as shown [1, 2].

Once we had relocated and settled into our new home, I purchased some cheap five-drawer plastic drawer storage units (about \$20). Each of the five drawers holds 78 Micro-Trains cars (6x13) on-end. The depth of the drawers also allows them to hold N scale locomotive boxes on-end.

BETTER TRAIN STORAGE | 2

A more efficient way

As I got to looking at my layout modules, I started wondering why I couldn't just store my cars and locos *under* my free-standing Woodbury module.

My modules are 16" wide and 6' long. I have about 12" of free space between the legs from front-to-back. So I got a 1x12 board, six feet long, and mounted a 1x3 vertically down the center of it.

The 1x3 backs and helps align the boxes and also provides an L-girder-like support so the board will not sag. It holds 135 Micro-Train containers stacked three-high on each side, or 270 total. I could also stack the cars four-high for a total capacity of 360 cars.



I store my cars by type, road name (reporting marks), and road number, so I have stacks of one, two, or three cars and don't use the full capacity.

Next, I looked at my Westville wall-hugging module. Its leg system is a

1, 2. (Top left, and left) Rick used to store his trains using cut-down boxes. He stored them wherever he could find space.

BETTER TRAIN STORAGE | 3



3, 4. Next, Rick got some inexpensive plastic drawer storage units and put his cars and locos in them.



5. Rick noticed his leg braces under his Woodbury module would make a perfect spot for a car storage shelf.

BETTER TRAIN STORAGE | 4



6. Rick made a shelf using a 1x12 with a 1x3 down the middle as a kind of L-girder stiffener to keep the board from sagging. The 1x3 also forms a great backing for aligning the boxes neatly.



7, 8. Here's Rick's new under-the-lay-out car and loco storage shelf system in use.

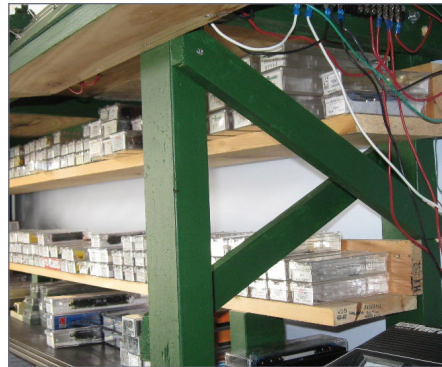


BETTER TRAIN STORAGE | 5

bit different, so I engineered a slightly different shelving solution for it.

For this module, I used a 1x6 board six feet long and added a 1x3 vertically along the back. The 1x3 provides a similar anti-sagging “L” girder strength. I made two such shelves from 1x6’s – this allows me to stack the cars two-high to add an additional 270 cars of storage capacity.

Using the under-layout space like this for storing my N scale equipment is very convenient and makes good use of otherwise wasted space! ✓



9, 10. For his Westville wall-hugging module, the different leg system meant Rick had to use a bit different solution for the shelves. He went with 1x6’s. One shelf sits on the bracing, the other shelf is attached to the legs below the bracing and has some short 2x2 posts sitting on top of his other floor shelving to provide extra support.

BETTER TRAIN STORAGE | 6



11, 12. Here is Rick’s second under-module shelving in use. Very neat, tidy, and effective.

RICK BALASSAITIS



Although he always had the traditional Lionels under the Christmas tree, Rick's journey into scale model railroading began around age 10 when his mother returned from food shopping with a grocery store giveaway: a Hobbytown plastic gondola. That marked the end of the ship and plane building era. A 4'x8' HO layout grew to 8'x12' but then in the late 60s he fell in love with

Atlas N scale.

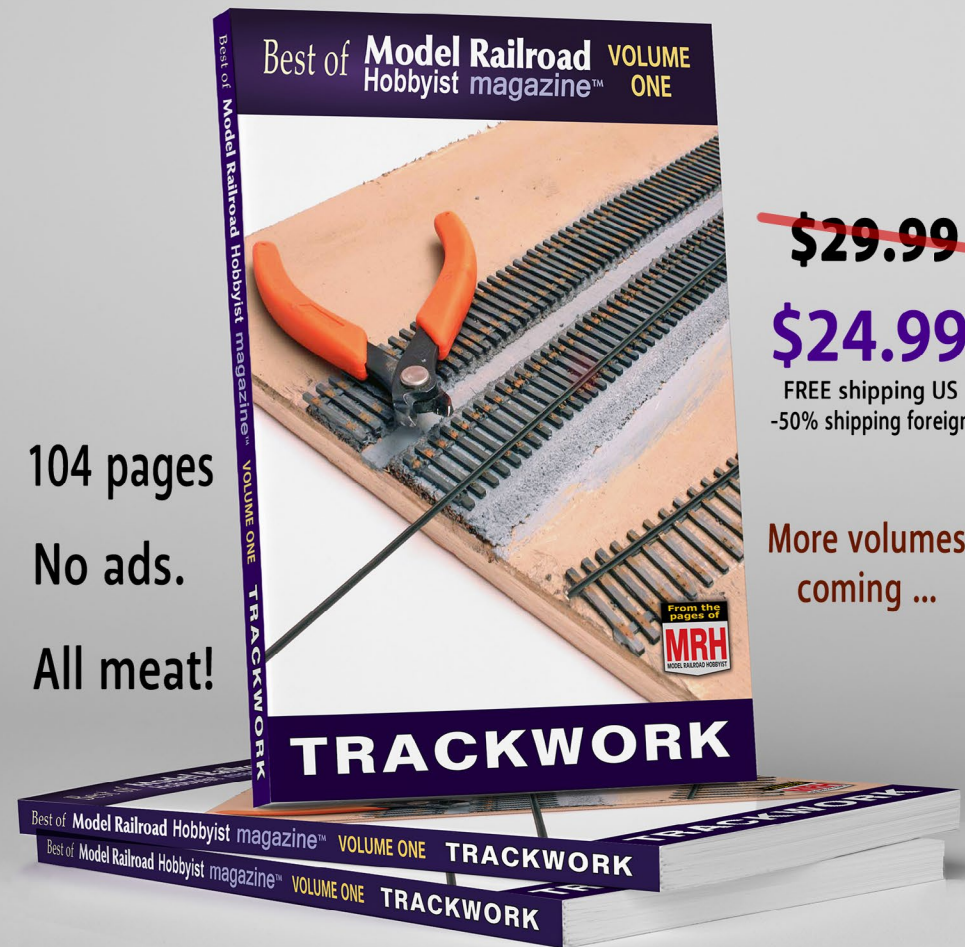
College and seminary saw the trains go into storage (and massive armchair train collecting). Finally, in 1998 a 4'x8' N scale layout was completed which then grew to 18'x19'. His wife's medical condition led a move to a one-story home. He confiscated the loft and began a layout modeling the towns in which grew up. He models the Pennsylvania-Reading Seashore Lines in the early 1950s. His three old layouts were featured in five articles in *N Scale Magazine* (1911-1917). He is currently finishing a 75% rebuild of the PRSL and looks forward to the return of his operating crew.

Rick has been married for 47 years, has 4 grown children and 13 grandkids. ■



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Model Railroad Hobbyist | August 2019



Different ways of making sand loads

In this 30 minute video, modeler *Central Jersey Conrail* explores different methods of making hopper car sand loads for his N scale hoppers. He steps you through the process of making each load type, and then he does a detailed assessment at the end of the results. (We skip the intro monologue and start at about 2:48.) ■



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AUGUST NEWS

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Model Railroad Hobbyist | August 2019 | #114

RICHARD BALE and
JEFF SHULTZ report the
latest hobby industry news



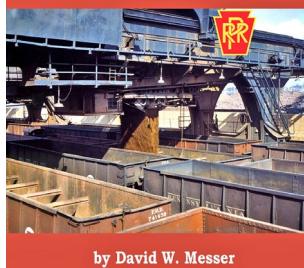
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NEW PRODUCTS FOR ALL SCALES

BlueRail Trains has new projects on the way. The first, in conjunction with Tam Valley Depot, is a DCC decoder adapter board. Capable of handling 6 amps of power, the 1.125 x 2.75-inch board uses the decoder of your choice, including sound decoders. Powered by AC, DC, DCC or battery, the board allows you to edit the DCC decoder's CVs with a BlueRail smartphone app. Pricing, specifications and pre-order information should be available soon.

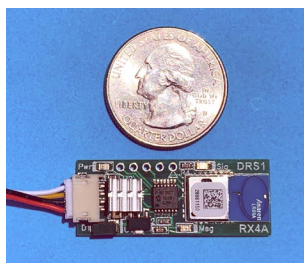
Their second project, in conjunction with an unnamed company, integrates Bluetooth and DCC Sound into a single board. The unnamed manufacturer, which has decades of experience making DCC sound decoders and has a large sound library, will make the boards available in a variety of sound and amperage combinations. Power and control can be via DCC over rails, or control can be via Bluetooth with power from DC or battery. For more information on BlueRail or their products, visit bluerailtrains.com.

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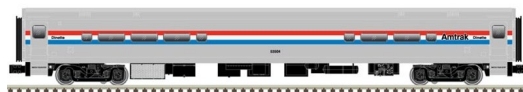
by David W. Messer

The **Pennsylvania Railroad Technical & Historical Society** is publishing *Conquest 1 – Pittsburgh to Erie, Ashtabula, Cleveland and Mansfield*. Authored by David W. Messer, the book covers the physical plant of the Pennsylvania Railroad's Lake Division, from 1848 to present day. The hardbound book is 240 pages, including 500 illustrations and 12 large maps. More information can be found at prrrhs.com.



Tam Valley Depot has expanded its line of Dead Rail products with the introduction of Dead Rail Receiver Board DRS1. The new board, which measures just 1.5 x .57-inches, is compatible with all existing DRS1 transmitters. The new receiver board has a built-in antenna and will detect frequencies from 869mHz and

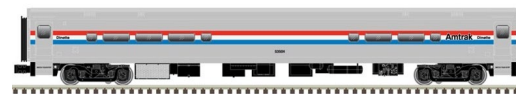
916mHz transmitters. It will also function on channels 1-16 of the CVP Airwire T5000 transmitter. Tam Valley Depot's new DRS1 is designed to function wirelessly with existing DCC systems when the transmitter is plugged into the DCC command station. The new board is rated at 2 amps. Existing DCC controllers may be used to control the trains. Power for the DRS1 receiver, DCC decoder, and the locomotive are supplied by an on-board battery. For additional information visit deadrailinstalls.com.

O SCALE PRODUCT NEWS

Horizon passenger cars. Availability is planned for the 1st

Atlas O is preparing new paint schemes and road numbers for Comet and

quarter of 2020. The O scale Master Line models will feature interior seating, separately applied metal handrails, and operating tail and headlights on cab cars. Comet cars will come with rubber tubular type diaphragms and inside bearing commuter trucks. The Horizon cars have diecast Superliner II trucks.



Amtrak Horizon passenger and food service cars will be available in Phase III,

and Phase IV paint schemes. Comet II coach and cab cars will be available decorated for MBTA, NJ Transit, Metro North.



O scale versions of ACF triple and six-bay cylindrical covered hopper cars are included in Atlas O's early 2020 schedule. Features include see-

through roof walks and 100-ton trucks with blackened metal wheelsets. Road names on the triple-bay car will be Hooker Chemical, Westroc, Potacan, and Union Pacific.



The cylindrical hopper with six discharge bays will be available decorated for Great Northern and Illinois Terminal.



In 1997 Thrall designed an articulated auto carrier for TTX

that would accommodate larger vehicles including trucks, SUVs and vans. Atlas O has included an O scale version of the articulated car in its 1st quarter 2020 release. Features of the Master Line model include a weighted diecast chassis, articulated diaphragm, end door details, and 70-ton roller-bearing trucks with metal

wheels. In addition to Santa Fe, road names will be TOAX, Norfolk Southern, and BTTX.



Atlas O's 1st quarter 2020 schedule includes the release of a group of 40-foot X29 steel boxcar. Several railroads followed the design with the

largest owner of the X29 being the Pennsylvania Railroad. In addition to PRR, Atlas O will offer the X29 decorated for Nickel Plate Road, Lehigh & New England, Chesapeake & Ohio, Detroit, Toledo & Ironton; and Chicago Great Western. Variations specific to the road name being modeled include different doors, and flat or corrugated ends.



Atlas O's 89-foot 4-inch intermodal flat

car is based on a prototype ACF built from the late 1960s through the 1970s. The O scale Master Line model is included in Atlas O's 1st quarter 2020 release. Road names will be Trailer Train (above), Western Pacific, Florida East Coast, Great Northern, Southern Pacific, Burlington Northern, and APL Linertrain.



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R. Bale

EXPRESS REFRIGERATOR CARS

Express refrigerator cars were used to transport high-value perishable commodities such as fresh fish, fresh flowers, milk, early seasonal fruits and vegetables, and other short-lived products requiring fast delivery to major markets. Since express refrigerator cars generally operated at the front end of passenger trains the underframes were built to meet the same strength standards as Railway Postal Cars. They were fitted with braking and steam lines compatible with passenger cars and rode on high-speed four-wheel passenger-type trucks. Regionally based railroads were reluctant to invest in expensive cars limited to seasonal use, so most express reefers were owned by express companies like American Railway Express and the Railway Express Agency. By the 1960s air freight lines had taken over the transportation of most highly perishable products.



The General American 53-foot 6-inch wood express refrigerator car was regularly seen at the front end of passenger trains decorated for Railway Express Agency and American Railway Express.

During the 1st quarter of next year Atlas O will release models decorated with those two familiar names as well as Nickel Plate Road, Northern Refrigerator, Western Pacific, and Soo Line. The O scale model will ride on diecast GSC Commonwealth high-speed trucks. Atlas O models are available with appropriate trucks and couplers for 2-rail or 3-rail operation.



Atlas O has included a 1:48 scale military jeep in its 2020 1st quarter release. The model features a WWII paint scheme, a uniformed driver, and a position-able windshield. For additional

information contact a dealer or visit atlaso.com.



New products announced at the National Train Show by **Bachmann** include an On30 scale Baldwin 2-6-2T Class 10 WWI-era trench locomotive. The ready-to-run model

will be available decorated for U.S. Army, Quartermaster Corps, and painted black but unlettered. The locomotive will be equipped with TCS WOWSound Digital Command Control sound decoder with Bachmann's Chuffinity technology. The system includes background battlefield sounds. This diminutive 2-6-2T is scheduled for release in September and promises to be popular with creative On30 modelers.



Bachmann plans to release two On30 World War 1-era freight cars next year. The models include an 18-foot boxcar and a low-side gondola.



The cars will be decorated for the United States Army (gray), and US Quartermaster (green). Bachmann

will market the new ready-to-run On30 freight cars in two-packs. For additional information contact a dealer or visit bachmann-trains.com.



Berkshires Valley Models added a new produce wagon and a produce truck to its line of O scale vehicle kits. The kits have laser-cut wood parts and nicely detailed white metal casting including crates, sacks, and baskets of fruits and vegetables.



The kits also include decals and a hanging scale for weighing the produce. For information visit www.berkshiresvalleymodels.com.



New cast detail items from **Rusty Rail** include a junk pile and a square exterior

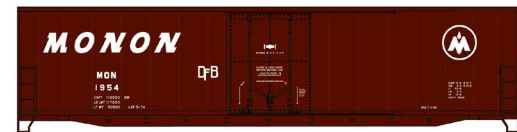
vent. The vent comes in five sections which allows for lengthening or shortening it. For additional information visit rustyrail.com.

HO SCALE PRODUCT NEWS



Accurail has released several versions of a kit for a Milwaukee Road single-door boxcar with full length side ribs. This is a

welcome addition to Accurail's line of economy priced HO freight car kits. The new models include cars decorated for The Hiawathas (above), the Electrified Olympian, and Milwaukee Road's billboard scheme (below). An undecorated version is also available.



The cast styrene kit includes a one piece body and separate roof, ladders, running board, underframe and several body details.

Also new from Accurail is a kit for a 50-foot Monon insulated steel boxcar with welded sides. The HO scale model is based on a prototype built in 1974.

Additional kits released by Accurail include a Boston & Maine 36-foot double-sheathed wood boxcar built in 1912 and rebuilt in 1945, a Chicago & North Western/Rock Island 50-foot exterior-post steel boxcar, a circa 1965 Canadian Pacific 50-foot welded-side steel boxcar with combination plug and sliding doors, and a Western Maryland ACF triple-bay covered hopper. All Accurail kits come with appropriate trucks with Delrin wheelsets and Accumate knuckle couplers. For additional information contact a dealer or visit accurail.com.

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Athearn will release its HO scale 4-8-8-4



Union Pacific Big Boy next June in three paint schemes. The Genesis model will be available as UP Heritage Steam Fleet No. 4014, as preserved engines Nos. 4004-06, 4012, 4017-18, and 4023; and in the wartime scheme of Nos. 4002 and 4011. The locomotive will be available with dual-mode SoundTraxx Tsunami2 sound decoder. A DC version with a 21-pin NEM connector for an after-market decoder will also be in the release.

Athearn has upgraded its Trinity triple-bay covered hopper



and will release it next May as a Genesis series model in both 10 panel and 12 panel body styles. The models will have separately applied end cages, etched end platforms, photoetched metal roof walks, and 100-ton trucks with 36-inch machined metal wheels with rotating bearing caps. Road names will be FXE, UP/CMO, Norfolk Southern, BNSF, BNSF (ex-GATX) and GACX Potash.

A triple-bay covered hopper based on a prototype built by FMC



will be available in Athearn's Ready-to-Roll line next June. Road names will be Reading Blue Mountain & Northern, BNSF, Burlington Northern, Chicago & North Western, Denver & Rio Grande Western, and Interstate Commodities Inc.

Athearn's June 2020 production schedule includes



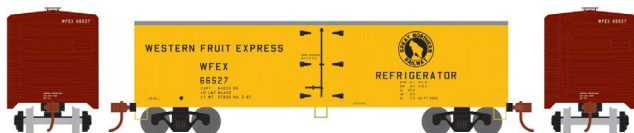
a group of 40-foot smooth side containers. They will be available in

three-packs decorated for Seatrain, Japan Line, Dart, YS Line, Atlantic Coast Line, SeaLand, and SHOWA.



Several versions of this Ford F-850 Grain Truck will

be in Athearn's June 2020 release. In addition to the Barton Families Farm scheme shown, the truck will be available decorated for Purina Mills, and Cargill. Trucks without lettering and painted white, red, blue, green, orange, and tan will also be in the run.



Roundhouse brand products coming from Athearn

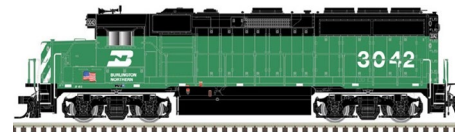
next June include this 40-foot wood reefer. Road names will be WFEX-Western Fruit Express, Pacific Fruit Express, Swift, Oscar Mayer, Bangor & Aroostook, and Soo Line. The HO scale ready-to-run model will have 50-ton Bettendorf-type trucks with 33-inch machined metal wheelsets.

Also due in June 2020 is a 50-foot steel gondola. Road names for the HO scale Roundhouse model will be Union Pacific, Southern Railway, Chicago, Burlington & Quincy; Conrail, CSX, David J. Joseph, Railgon, Herzog, Norfolk Southern, and Toronto, Hamilton & Buffalo. For additional information contact a dealer or visit athearn.com.



Atlas has announced an impressive assortment of new HO scale models scheduled for release during the 1st quarter of next year. At the top of the list is an Atlas Master Line

GP40-2 diesel locomotive in new paint schemes and new road numbers. In addition to the Canadian Pacific version shown here, road names will be Union Pacific, CSX, Norfolk Southern, Florida East Coast, Boston & Maine, Conrail, and Burlington Northern.



Features include directional lighting with golden-white LEDs, detailed cab interior with crew, individual windshield

wipers, metal grab irons and handrails, movable drop steps, walkway safety tread, uncoupling bars, trainline and MU hoses, and a snowplow pilot. Where appropriate to the prototype road being modeled additional details will include etched metal radiator and dynamic brake fans.



Additional HO scale locomotives coming from Atlas during the 1st quarter of 2020 include a Master Line Fairbanks-Morse

H15/16-44 diesel road switcher. The model represents the Phase I body style of both the H15-44 and H16-44 that were produced between 1947 and 1952. Road name options include F-M or AAR truck side frames, high or low-mounted headlights, early or late-production Phase I hoods, and a removable fuel tank skirt.



Decorating schemes will be New Haven, Union Pacific, Southern Railway, Pennsylvania Railroad, New

York Central, Milwaukee Road, Long Island Railroad, Rock Island, and Jersey Central. Both the GP40-2 and the H15/16-44 locomotive models will be available for analog DC as well as for DCC operation with a LokSound Select Dual-Mode decoder.

Displayed at the National Train Show was a pre-production sample of a Trinity 3230 Pressure Differential Hopper. Developed from the



larger 5660 PD by Thrall in the late 1990s, the model is new tooling with separately applied grab irons, cut levers, and etched metal roofwalks.

Roadnames in the first release will include CIT Group/Capital Finance, TXI (GBRX), General Electric Rail Services, Roanoke Cement, Trinity Industries Leasing, and Chicago Freight Car.



New passenger models coming from Atlas early next year include a 14-section sleeper

based on Pullman Plan 3958. Prototype cars of this plan were built between 1925 and 1930 with many remaining in service into the 1960s. Several of the 14-section cars continued in use in Mexico into the 1970s and 80s. Road names and individual car names will be Ferrocarriles Nacionales de México (Ignacio Aldama and Tuxpan, above), Rock Island (Prairie Lawn), Illinois Central (New Dominion), New York Central (Roenigen and New Martinsville), Union Pacific (Alpine Butter Cup and Alpine Bluebell), Chesapeake & Ohio (Fort Lee and Anne Bailey), Pullman (George Waring and William Osler), and painted but unlettered.



Notable features on the Atlas Master Line models include complete interior detailing, operating diaphragms, air condition ducting, underbody detail, and six-wheel trucks with metal wheelsets.



R. Bale

1932 ARA BOXCAR

After a year of testing several prototypes, the new boxcar the American Railway Association introduced in 1932 was accepted by 23 railroads that collectively acquired more than 14,500 cars.

The car proved to be a great success and its design evolved into the 1937, modified 1937, and Postwar AAR box cars.



New freight equipment coming from Atlas early next year includes an HO scale Master Line version of a 1932 ARA boxcar.



Road names on this release will be Nickel Plate Road, Linde Air Products, N De M - Ferrocarriles

Nacionales de México, Nashville, Chattanooga, and St Louis; Central of Georgia, Missouri Pacific, and Maine Central.



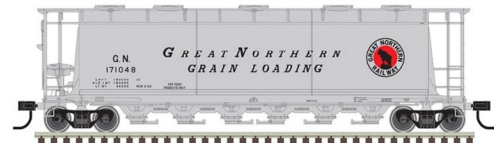
Atlas has included a 50-foot GARX bunkerless refrigerator car in its 2020 1st quarter release. The unique appearance

of the 1950-era car are the two large panels with horizontal rivet patterns on each side of the 7-foot 7-inch plug door. Road names on this release will be Norfolk & Western, Illinois Central, Chicago & Eastern Illinois, Toledo, Peoria & Western; Chicago North Western, Southern Pacific, and Denver & Rio Grande Western.

HO scale versions of ACF triple and six-bay cylindrical covered hopper cars are listed on Atlas' early 2020 schedule. Features include



Hooker Chemical, Cancarb, ACFX, Westroc, Potacan, Rail Logistics, and Conrail.



The cylindrical hopper with six discharge bays will be available decorated for Great Northern and Wabash.



In 1997 Thrall designed an articulated auto carrier for TTX that would accommodate large vehicles such as trucks, SUVs and vans. Atlas has included an HO scale version of the articulated car in its 1st quarter 2020 release. Features of the Master Line model include a weighted diecast chassis, articulated diaphragm, end door details, and 70-ton roller-bearing trucks with metal wheels. In addition to Santa Fe, road names will be TOAX, Norfolk Southern, and BTTX. The model requires a 22-inch radius.



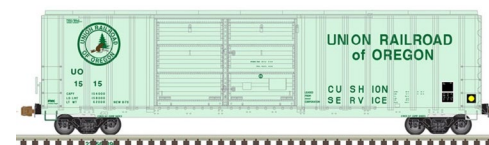
Period modelers will be pleased with the paint schemes Atlas will offer on the next release of its 36-foot wood reefers.

Decorative road names will be Agar Packing Company, Schwarzschild & Sulzberger Lard, REX Canned Meats (Cudahy), Pittsburgh Provision & Packing, New York Despatch, Nuckoll's Refrigerator Line, Lange Creamery, and Dold Packing Company.

An undecorated version will also be available. The Master Line model is based on a series of cars General American Car Company built in the mid-1920s for Cudahy Packing Co. Features on the Atlas Master Line model include opening doors and two different styles of opening roof ice hatches. The grab irons, ladders, stirrups, and door hardware are all separately applied.

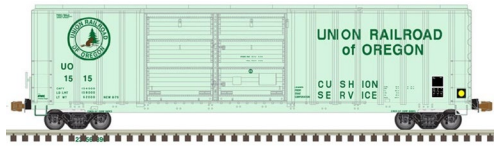


At the end of World War II, railroads ordered large numbers of 50-foot boxcars that were essentially the 1937 AAR design updated with Improved Dreadnaught ends and diagonal panel roofs. Atlas has included an HO scale version of the post-war car in its 1st quarter production schedule. Road specific details on the Master Line model include three different side sill styles (straight, tabbed and fishbelly), and 8- or 9-foot Superior or Youngstown sliding doors. Road names will be Canadian National, New York Central, Missouri Pacific, Reading, Chesapeake & Ohio, N De M – Ferrocarriles Nacionales de México, and Northern Pacific.



Completing Atlas' new HO scale product release for the 1st quarter of next year is an FMC 5077 cu. ft. double-door boxcar. The Master Line model is based on a prototype design introduced in the 1970s that may still be seen working and wearing the decorating scheme of second- or third-hand lease holders. Spotting features of the Plate C car include a near-flat X-panel roof, FMC signature side sills, and non-terminating box corrugated ends. Road names include Union Railway of Oregon, Union Pacific, Seattle & North Coast, and Camino, Placerville & Lake Tahoe. All Atlas HO scale ready-to-run models come with

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AccuMate knuckle couplers. For additional information contact a dealer or visit atlasrr.com.



Train Show included this 2-10-0 decapod steam locomotive. The steam domes, stack, cab, bell, whistle, pop valves, uncoupling levers, interior cab details and crew figures are all separately applied. The HO scale ready-to-run model will be available with dual-mode TCS WOWSound decoder, Keep-Alive capacitor; and Bachmann's Chuffinity technology. Road names will be Atchison, Topeka & Santa Fe; Erie, St. Louis-San Francisco, Western Pacific, and unlettered.



SC-44 Charger Locomotive graphic image courtesy of Siemens Mobility, Inc.

Also coming from Bachmann in 2020 is an HO scale Siemens SC-44 Charger diesel-electric locomotive. Features of the ultra-modern locomotive include directional headlights, interior corridor lights, roof-mounted strobe lights, marker

lights, and individual windshield wipers. The locomotive will have dual-mode TCS WOWSound decoder with Bachmann's Audio Assist and Keep-Alive capacitor. Road names on the initial release will be Amtrak Midwest, Amtrak Pacific Surfliner, and Amtrak Cascades (Washington State DOT).

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Bachmann has scheduled a November release date for a trio of HO scale Pennsylvania Railroad smooth-side passenger cars decorated in PRR's Tuscan red Fleet of Modernism scheme.



The release will include an 85-foot round end observation car, an 85-foot coach, and a 72-foot baggage car. The baggage car will also be available decorated for Baltimore & Ohio, Southern Pacific, and Union Pacific.

New Acela Express cars coming from Bachmann next year include a quiet car and a business class car. The HO scale models will have a detailed interior with seats and tables, interior lighting, flush windows, photo-etched air duct inserts, and a tilting chassis to ease hi-speed cornering.



New Bachmann HO scale freight cars due later this year include a unique live poultry car. Decorating schemes include Live Poultry Transit Co., Live Poultry Transportation Co., Palace Live Poultry Car Co., and Stentz Palace Poultry Car.



Bachman reports the tooling for this HO scale 40-foot hi-cube boxcar has been updated with positionable doors. The upgraded version is set for release next year decorated for Atchison, Topeka & Santa Fe; Burlington Northern, Denver & Rio Grande Western, and Union Pacific.



Bachman will add to its HO scale E-Z Track in November with the release of this flashing LED end of track bumper. For more information on Bachmann products contact a dealer or visit bachmann-trains.com.



Bowser has released a new production run of Baldwin DS-4-4-

1000 diesel switch engines. Features on the HO scale ready-to-run model include air hoses, individual windshield wipers, individual grab irons, coupler lift bars, an operating headlight, window glass, and a can motor with a flywheel. DCC models come with LokSound Select decoder. Analog DC versions have a 21-pin socket to simplify installation of an aftermarket decoder.



Road names are Bessemer & Lake Erie, Central of New Jersey (two

paint schemes), Copper Range, Lehigh Valley (two schemes), Milwaukee Road, Nickel Plate Road, Pennsylvania, Southern Railway, Southern Pacific (two schemes), and Union Pacific. Two slightly different versions of the locomotive will be available decorated for SMS and Canadian Pacific.



Bowser has released a 70-ton twin-bay covered hopper. It is available in a choice of 16 different road names. The HO scale ready-to-run model has

numerous separately applied details including the under-frame, air tanks, brake cylinder, triple valve, brake wheel, and knuckle couplers.



Road names are CB&Q-Burlington, Detroit, Toledo & Ironton; CHCX-Cedar Heights Clay, CSX-Central Soya, Delaware & Hudson, Erie Lackawanna,

Grand Trunk Western, Great Northern, HWCX-Haliburton, NAHX-International Minerals, SHPX-Mathieson, SHPX-Shippers Car Line, Southern Railway, UCOX-Union Carbide Linde, SHPX-Phosphoric Products, and XTRA-Western Pacesetter.



Also new from Bowser is a group of HO scale class H21 quadruple-bay coal hoppers.

Introduced in 1909 with clamshell discharge bays, variations of the class were built with a peak of almost 40,000 cars operational in 1951. Bowser offers the clamshell version decorated in three different Pennsylvania schemes, plus a black car decorated for the Union Railroad.



In addition to five PRR schemes, a class H21 car with four conventional discharge hoppers is available decorated for Penn Central and Virginian.

For additional information contact a dealer or visit bowser-trains.com.



RATE THIS ARTICLE



R. Bale

NYC 4-8-4 NIAGARA

Although the 4-8-4 wheel arrangement had proven its merit with several railroads by the late 1920s, the New York Central, other than a failed one-off experiment in 1931, did not get around to ordering 4-8-4s until 1945.

Because of NYC's low clearance gauge of just 15-feet 2-inches, the 4-8-4 Niagaras used a perforated pipe rather than a conventional dome to collect steam. The result was a smooth contour along the top of the boiler. The NYC's use of track water pans allowed for tenders with a relatively small water capacity which allowed more room for coal. NYC's Niagaras replenished water on the fly and completed the important New York-to-Chicago run with just one stop to replenish coal.

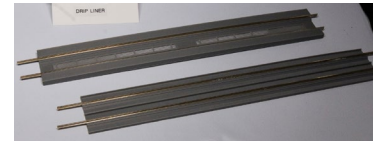


Broadway Limited plans to release an HO scale New York Central 4-8-4 Niagara this month. Six road numbers will be available for

the Paragon3 version of the class S1b steam locomotive. The model features Paragon3 sound and operating system with BLI's Rolling Thunder operational in both DC and DCC environments. The locomotive has traction tires and requires a 22-inch minimum radius. For additional information contact a dealer or visit broadway-limited.com.



Dimensional Modeling Concepts is selling a kit for a flatcar load of an industrial heat exchanger. The 45-foot long tube is 3D printed in gray plastic.



Announced as coming soon at the National Train Show, two types of fueling track pans were on display, a flush deck pan and a drip liner. For information visit www.dmcrrproducts.com.



ExactRail will release an Evans 5277 cu. ft. boxcar later this summer. This is a welcome rerun of a well-tooled model introduced nearly a decade ago. The HO scale model is based on an Evans/USRE prototype with an extended Stanray X-panel roof, and non-terminating box-corrugated ends. Road names will be Canadian National (2009 repaint), Ontario Northland (1983 repaint), GATX-Laurinburg & Southern (2016 repaint), Sault Ste. Marie Bridge Co. (1990 repaint), Ferdinand Railroad (1980 repaint), and Mississippian Railway (1979 original paint). Each road name will be available in multiple numbers.



The HO scale model will have 70-ton trucks with 33-inch machined metal wheels or 100-ton trucks with 36-inch wheels depending on the practice of the railroad being modeled. ExactRail's ready-to-run model comes with Kadee #58 couplers. For additional information visit exactrail.com.



InterMountain is planning a major release of HO scale 1937 AAR 40-foot boxcars with square

corners and Dreadnaught ends. This is InterMountain's first use of the highly-regarded tooling it acquired from Red Caboose.



Six road numbers will be available for a total of 19 different decorating schemes. Road names will be Canadian National, Nickel Plate Road, Frisco, Southern Railway, Texas & Pacific, Western Pacific, Illinois Terminal, Chicago

& Eastern Illinois, Southern Pacific (post 1946 scheme), and Soo Line. Chesapeake & Ohio cars will be available in two schemes. Both will have the rare deco ends (above).



Santa Fe boxcars promoting the road's name trains will be available for El Capitan, Scout, Chief, Super Chief, Texas Chief,

and Grand Canyon. The opposite side of the cars will display the straight-line version of Santa Fe's system map. There is a possibility that some of the road names listed will not make it into production if sufficient advance reservations are not received. For more information contact a dealer or visit intermountain-railway.com.



Iowa Scaled Engineering is selling a selection of galvanized steel grain bins in the Grain Belt Models line. The bins have prototypical accurate corrugations, realistic galvanized steel

appearance, and various side sheet heights. N scale bins are available in 24-, 36-, and 48-foot diameter. ISE's HO scale bin is 18-feet in diameter. Custom sizes also available. In modeling agriculture settings, particularly those at a distance from the viewer, the various sized bins, regardless of intended scale, could be mixed to achieve an effective scene.



The Grain Belt Models line also includes HO scale galvanized steel culvert piping in a variety of diameters. For additional information visit www.iascaled.com/store.



New models **Kadee** released to dealers this month include this 40-foot L&N PS-1 boxcar. The HO scale ready-to-run model replicates a prototype built by Pullman-Standard in 1950 with a 6-foot Youngstown sliding door. The model is painted in the as-delivered red oxide.



Also new from Kadee is a PS-2 twin bay covered hopper decorated for Conrail. The HO scale model represents a car built in 1956 that was repainted with alkali resisting light gray in July 1977.



Kadee has recently released this colorful 40-foot Toledo, Peoria & Western PS-1 boxcar. The ready-to-run model is based on a prototype built in

1953 with 7-foot 5-panel Superior doors. All Kadee ready-to-run models come with Kadee knuckle couplers and two-piece self-centering trucks. For more information contact a dealer or visit kadee.com.



At the National Train Show, Kadee introduced the #705 medium center set HO scale all-metal scale knuckle coupler, pre-assembled in a draft gear box. Compatible with the #713 and #714 couplers, the #705 can also be used with some TT and N scale models. For more information contact a dealer or visit kadee.com.



KV Models has HO scale EMD metal handrail stanchions. The samples shown are photoetched stainless steel. They will also be available in phosphor bronze to facilitate soldering to brass or phosphor bronze wire handrails. For additional details visit kvmodels.com.



Menards is selling an HO scale structure called Gamer & Thrones Co. The 10 x 5-inch model has more than 15 LEDs, a rotating illuminated toilet sign, four roof dormers, and several figures. The factory assembled structure requires a power supply which is available separately. For details visit menards.com.



Motrak Models has announced its first structure kit from Northeastern Scale Models, Valley Hardware and Plumbing Supply. Limited to 50 kits, some were still available when the News and Events column was created. The kit features laser-cut clapboard siding, laser-cut loading dock and porches, laser-cut paper 3-tab shingles, laser-cut window shades, Tichy Train Group plastic windows and doors, signage, and easy to follow instructions. The dimensions of the finished structure were not provided. For more information

visit motrakmodelsusa.com.



MTH Trains has an HO scale EMD SD70ACe diesel locomotive decorated as Union Pacific No. 4141 (George Bush 41 Presidential scheme), and Kansas City Southern (Veterans scheme).



Also available from MTH is an HO scale GE ES44AC diesel locomotives decorated for CSX (Honoring Our First Responders and Veterans). Both the SD70ACe and ES44AC are available for DC operation and with DCC System Proto-Sound 3.0.



MTH has an HO scale 4-8-4 Northern type steam locomotive decorated in Southern Pacific's Daylight scheme (two versions) and as the red, white and blue American Freedom Train.



A second steam locomotive released by MTH is a Union Pacific 4-8-8-4 Big Boy.

In addition to the original

as-built version, the Big Boy will be available modified with Wilson after-cooler radiators and a choice of either coal or oil tenders. Both the 4-8-4 and 4-8-8-4 steam locomotive models come with interchangeable drivers with or without traction tires. The locomotives are available with Digital Command Control/Digital Command System decoder; and Proto-Sound 3.0. For more info contact a dealer or visit mthtrains.com.



R. Bale

CNR BOXCAR WITH NSC3 ENDS

Between 1954 and 1956, the Canadian National Railway took delivery of 2,900 40-foot boxcars. The cars were built in Canada to AAR standards with the exception of the ends which were the distinctive National Steel Car end known as the NSC3. Also different were Canadian versions of Youngstown doors that had the panels joined by rivets in the valley of the corrugations, while the rivets in the American version were in the raised portion of the door panels. A meaningless detail to many but not to prototype modelers, aka rivet counters, who are dedicated to historical accuracy.



National Scale Car has a mini-kit for rebuilding an InterMountain 40-foot 10-foot 6-inch high boxcar with a 6-foot wide door into a Canadian National AAR boxcar

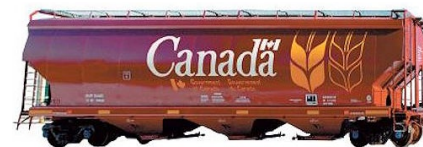
with NSC3 ends and Canadian style Youngstown doors. In addition to the ends and doors, the mini-kit includes a slack adjuster,

tack boards, correct eight-rung ladders with attached sill steps, and accurate Black Cat decals. The modeler must provide the host InterMountain boxcar with either a diagonal panel or PS-1 roof. For more information visit nationalscalecar.com.



North American Railcar is developing an HO scale version of a National Steel Car 5431 cu. ft. triple-bay covered hopper car. The model is based on a new design that has a capacity of 100 metric tons. This promises to be a complex, well

detailed model with numerous features and road name variables. They include two different roofs and photo-etched metal roof walks, different hopper bays (with or without vibrator brackets), different hand brakes (conventional and High Power Ellcon-National), square or rounded trough hatches, and tapered or angled end cages. Outlet gates will be gravity type, ATP long gravity, or Miner short. Additional features include photo-etched crossover platforms, Kadee #58 couplers, and investment-cast end gate capstans. The cars will have 100-ton Barber S-2 trucks with semi-scale 36-inch wheels.



Road names will be Canadian Pacific (Red lettering, Beaver logo), Canadian National, WFRX-CN Grains Connect Canada (Wheat Board

Partnership), Burlington Northern Santa Fe, NKLX-Louis Dreyfus Company, PHLX-Parrish & Heimbecker, FURX-First Union Rail, CAIX-CAI Rail Inc , and two TRGX-Richardson International cars with tapered or beveled end ladders. For additional information visit pwrs.ca.



Oxford Diecast has added a 1950 Oldsmobile Rocket 88 club coupe to its assortment of 1:87 scale models. For more information contact a dealer or visit walthers.com.



Railfan Models has introduced an HO scale version of a Kasgro 325-ton 12-axle, 36-foot depressed deck flat car. Kits for the car and the transformer load are available separately. A limited quantity of assembled and decorated models, including a transformer load, are also available. This is a long car that requires a 20-inch minimum radius. For additional information visit railfan-models.com.

Railfan Models has introduced an HO scale ver-



Rapido Trains is preparing tooling for a group of Rail Diesel Cars the

Budd Co. built for Canadian railroads. The HO scale models will include an all-coach RDC-1, and RDC-2 and RDC-3s with compartments for baggage and/or mail.

Both the original Phase 1 (1949-1956) and later Phase 2 (1956-1962) Canadian RDCs will be produced. Major spotting differences in the prototype production runs include the end diaphragms, changes in



number boards, and three types of roof blisters.

Paint schemes will include Canadian Pacific (as delivered on RDC-2s and RDC-3s only), Canadian Pacific (Maroon with Hockey Stripes, RDC-1s only), CP Rail

(Action Red with Hockey Stripes), Canadian National (as delivered), Canadian National (Black Noodle), VIA Rail Canada (early scheme), Pacific Great Eastern (as delivered on RDC-3s only), and British Columbia Railway (Dogwood herald on RDC-3s only). Painted but unlettered models will also be available. Rapido has set October 7 as the deadline for ordering with delivery planned for spring 2020. For additional information contact a dealer or visit rapidotrains.com.



Resin Car Works is selling prototypically accurate craftsman kits for several classes of HO scale SFRD reefers. New kits are available for Rr-43 cars

rebuilt in 1947 with Morton metal running boards, and Rr-45 cars rebuilt in 1948 with Apex metal running boards. Both the Rr-43 and Rr-45 classes had rectangular steel riveted panel roofs, and early versions of Improved Dreadnaught ends.



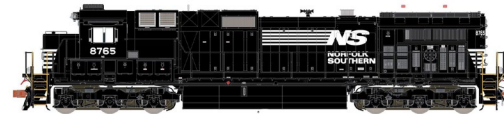
RCW is reissuing kits for SFRD rebuilds of the Rr-35, Rr-36 (above), Rr-39, and Rr-40 classes built between 1944 and 1946. The kits feature a one piece body casting,

a pair of Tahoe Model Works truck side frames (less wheelsets), and extensive downloadable instructions. The quartet of historians and expert modelers responsible for developing these highly-accurate SFRD kits are Charlie Slater, who made the master patterns; Tom Madden, who did the casting work; Ken Soroos, decal art and kit instruction formatting; and Frank Hodina, kit instructions and model photos. For more information visit resincarworks.com.



ScaleTrains.com's fall schedule calls for the release of HO scale models of a Trinity 31,000-gallon tank car with head shields. Road names will be TILX, Deep Rock, and

Phillips. The prototype cars carry gasoline, crude oil, petroleum distillates, or ethanol with the only visual difference being the labeling on the hazmat placard. ScaleTrains.com will offer a Rivet Counter version of the model with several pre-printed placard options. An Operator series model will have blank hazmat placard and decals.



Included in the September 2019 release of HO scale Rivet Counter Dash 9 locomotives is a Norfolk

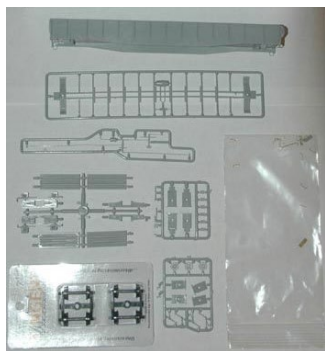
Southern Dash 9-40C with a GE Spartan cab and a rooftop early Dayton-Phoenix air conditioner. The air conditioner's position led to the units being nicknamed "Top Hats." Modeled in their "As Delivered" state, the prototypes were built between January and April 1995. Available in four numbers, the models include the late dynamic brake exhaust, operating front, rear, and side LED walkway lights; front and rear deck mounted alternating LED ditch lights, tall snowplow with open doors and grab irons, 4-step stepwells with see-through steps, and many other prototype specific details.



Other new freight cars coming from ScaleTrains.com during the 2019-2020 winter season include an HO scale version of this Thrall-Trinity 42-foot coil steel car. More

than 130 individual parts go into assembling this ready-to-run Rivet Counter model. Features include three body types, six different removable hoods, see-through photo-etched metal walkway, simulated wood interior floor, positionable load dividers, complete underbody brake details, and a coil steel weight load. Road names will be Norfolk Southern, CSX, Conrail, Chicago Heights Terminal Transfer, Indiana Harbor Belt, and Canadian Pacific. For additional information visit scaletrains.com.

Tangent Scale Models is selling two versions of an undecorated kit for an HO scale Bethlehem 52-foot 6-inch 70-Ton riveted gondola with drop-ends. Kits are available for cars



with either a wood floor or with a steel floor. Also available are styrene parts for the Bethlehem gondola including brake wheel options, Duryea underframes, slack adjusters, and etched metal tiedowns. For more information visit tangentscalemodels.com.



Walthers announced an extensive list of new products at the National Train Show including a Mainline series NW2 diesel switcher. Walthers HO scale model

is based on a Phase V version built in 1949. Road names will be Elgin, Joliet & Eastern; Indiana Harbor Belt, and Union Railroad. An unlettered NW2 in blue and yellow, and an undecorated DC-only model will be included in the June 2021 release.



Walthers plans to release a Proto series EMD SW1200 diesel switch engine next month. The HO scale model is based on units that went into service in

the mid-1950s. Road name variables include Flexicoil or AAR Type A trucks with plain or roller bearings, and hood or sill-mounted handrails. Road names will be New Haven, Canadian National, Denver & Rio Grande Western, and Illinois Terminal. Walthers NW2 and SW1200 locomotives will be available for DC operation and with ESU Sound and DCC decoder.



Walthers is booking dealer reservations for an HO scale GP15-1. A late October release is planned. The Trainline series model is based on a diesel loco-

motive EMD introduced in the mid-1970s. Spotting features of the 12 cylinder 1,500 hp unit include its flat-topped, pointed nose, and angled cab roof. In addition to Norfolk Southern, road names will be BNSF, Canadian Pacific, Conrail, CSX, and Union Pacific. The operating system for the economy priced Trainline model will be standard DC.



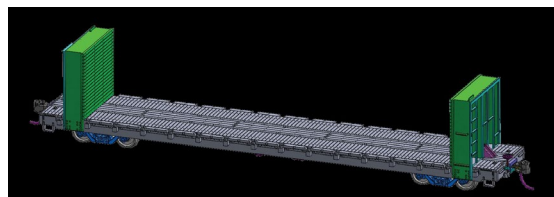
New HO scale rolling stock announced by Walthers at the National Train Show includes this Proto series

50-foot Evans cushion coil car. Walthers model is based on prototypes in service from the 1970s to early 2000. Details include V-shaped load cradle and separate hood restraints, etched metal walkways, underframe cushioning device, and individually applied grab irons. Road names will be Bessemer & Lake Erie, Chessie/C&O, Detroit, Toledo & Ironton, T&I, Elgin, Joliet, and Eastern, Grand Trunk Western, Indiana Harbor Belt, Penn Central, and M-K-T. Road-specific removable hoods with lifting rings and stacking brackets will be either round, angled, or composite glass fiber. Additional decorated hoods will be available separately. A June release date is planned.



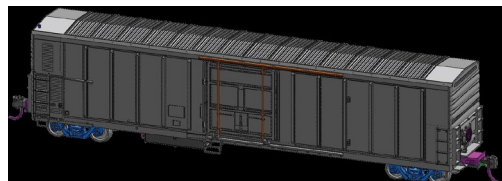
Also scheduled for release next June is a Walthers Mainline 53-foot Railgon gondola. The model will be produced from new tooling based on

Railgon 310000 series cars. In addition to Railgon/GONX, road names will be Baltimore & Ohio, Chicago & North Western, Delaware & Hudson, Denver & Rio Grande Western, Elgin, Joliet & Eastern; Soo Line, and undecorated. The HO scale model will have 100-ton roller-bearing trucks with 36-inch machined metal wheelsets.



A 60-foot bulkhead flat car with an inside length of 48 feet is included on Walther's June 2020 schedule. The

model reflects prototypes fitted with Pullman-Standard 8-foot 6-inch bulkheads in the late 1960s. Roadnames on the Mainline ready-to-run model will be Canadian National, Canadian Pacific, Indiana Harbor Belt, Weyerhaeuser, and two Trailer-Train schemes.



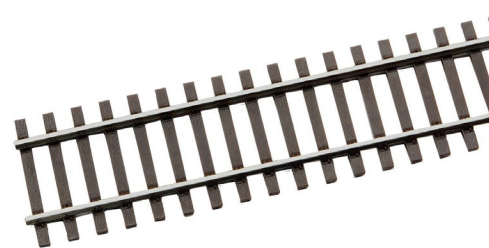
Walther's reports it is cutting tooling for an HO scale 57-foot mechanical reefer based on a prototype built by Pacific Car & Foundry in the late 1960s. Notable details include a 9-foot Youngstown plug door with separate latch bars, a

ribbed Stanray peaked roof with a capped exhaust stack, shortened ladders and low hand brakes, and either a Keystone or Hydra-Cushion underframe depending on the road being modeled. Road names will be American Refrigerator Transit, BAR, Great Northern/WFCX, Pacific Fruit Express, SPFE, and UPFE. Delivery is planned for next March.



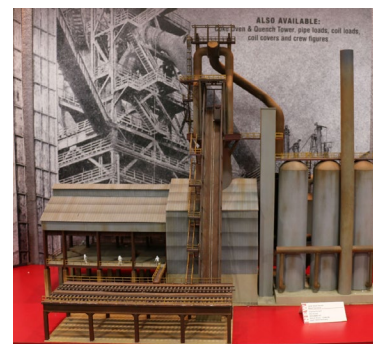
Walther's has released to dealers a Mainline series 53-foot well car. The HO scale model

follows an NSC prototype. The cars are available individually and as a 3-unit set. Road names are BNSF and TTX.



Walther's will be expanding its line of DCC-friendly HO scale nickel silver track components during the 2nd quarter of next year. The new items include a 36-inch bridge track with two end

pieces and two filler ties. Both the running rail and inside guard rail are code 83. An April release date is planned for Code 100 and code 83 left and right #8 and #10 turnouts, 20/24-inch and 24/28-inch curved turnouts, and a #6 double crossover. Code 100 left and right #4, #5 and #6 turnouts are scheduled for a June release date. All Walther's track components are visually compatible with dark brown wood grain ties, and with a spike and tie plate molded on each tie. Spike holes are located next to the rail with starter points for fasteners molded on the underside of the ties.



At the National Train Show, Walther's announced that the steel plant structures in the Cornerstone line would be re-released, one building at a time, starting in late November 2019 with the Electric Furnace building. The Coke Oven and Quench Tower with Larry & Quench cars is due in late December 2019

followed in January, February, and March with the Blower Engine House with piping extensions, Rolling Mill with Reversing Mill Stand, and Blast Furnace with Stairways and Railings.



A March 2020 release date has been set by Walthers for an HO scale kit based on Milwaukee's Everett Street Station and Train Shed. When assembled, the Cornerstone model will have a footprint of 22.16 x 8.4 inches. The clock tower tops out at 22 inches.



Also due next March is a Cornerstone kit for the former Walthers headquarters at 1245 North Water Street, Milwaukee, WI. Walthers occupied the building from 1958 to 1969. It has since been the home of a variety of businesses and is currently a popular eatery. When assembled

the three-story model has a footprint of 4.75 x 8.5 inches. For additional information on Walthers products contact a dealer or visit walthers.com.



Woodland Scenics has announced two new plastic structure kits in its DPM Building Line. The HO scale kits include Humble Home (left) and Victorian Cottage (upper right).



The figures, street lights, and landscape details shown in the illustrations are not included. A release date is pending. For more information contact a dealer or visit woodlandscenics.com.

N SCALE PRODUCT NEWS



Athearn reports that it will release an N scale 4-8-8-4

Union Pacific Big Boy next June in three paint schemes. They are UP Heritage Steam Fleet No. 4014, preserved engines Nos. 4004-06, 4012, 4017-18, and 4023, and in the wartime scheme as Nos. 4002 and 4011. The locomotive will be available with dual-mode SoundTraxx Tsunami2 sound decoder. A DC version will also be offered.



Three-packs of 40-foot smooth side containers are included in Athearn's June 2020 release of N scale models. Carrier names will be K Line, Showa, SeaLand, ACL, Sea Train, YS Line, DARK, Japan Line,

OOCL, NYK, NOL, Mitsui, and APL. For additional information on Athearn products contact a dealer or visit athearn.com.



Atlas has set the release of a large number of new N scale models during the 1st quarter of 2020. At the top of the

list is an Atlas Master Line GP40-2 diesel locomotive in new paint schemes and new road numbers. In addition to the Boston & Maine (Guilford Rail System) scheme shown here, road names will be Southern Railway (Operation Lifesaver), Burlington Northern, Union Pacific, Florida East Coast, Canadian Pacific, and CSX. An undecorated model will also be available.



Features include directional lighting with golden-white LEDs, safety tread on walkways, and dynamic brakes

when appropriate to the prototype road being modeled.



Atlas has included an N scale Master Line Alco S-2 diesel switcher in its 1st quarter schedule. Alco introduced the low-hood 1,000 hp S-2 in

1940 as a turbocharged version of the earlier S1. Features of the N scale model include fine scale handrails, separately applied uncoupling levers, air hoses, directional LED lighting, and a diecast hood and chassis. Road names will be Southern Pacific, Maine Central, Lehigh & New England, Erie, Chicago Great Western, and Canadian National. Operating systems available for both the GP40-2 and the S-2 will be DC, DCC, and DCC with sound.



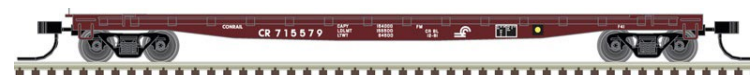
In 1997 Thrall designed an articulated auto

carrier for TTX that would accommodate oversize vehicles such as trucks, SUVs and vans. Atlas has included an N scale version of the articulated car in its 1st quarter 2020 release. Features of the Master Line model include a weighted diecast chassis, an articulated diaphragm, end door details, and 70-ton roller-bearing trucks. In addition to Santa Fe, road names will be TOAX, Norfolk Southern, and BTTX.



The North American Car Company produced the prototype of this 50-foot smooth side RBL car in the

mid-1960s. Atlas' N scale version will be available early next year decorated for NIRX, QOCX, Mountain Pine Lumber, Sexton Foods, Dakota, Minnesota & Eastern; Delaware & Hudson, and Ashley, Drew & Northern.

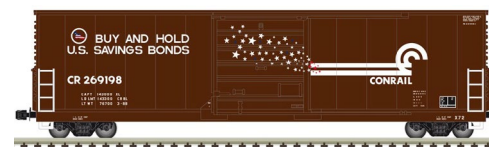


This Atlas N scale 53-foot 6-inch flat car will be available decorated for Union Pacific, Southern Pacific, Rock Island, Minneapolis & St. Louis, Illinois Central Gulf, and Conrail.



The original owners of the Evans-built X72 boxcar were Western Pacific and Penn Central. Atlas' N scale version

replicates the smooth welded car sides and the forklift friendly 10-foot wide 6-panel Superior door.



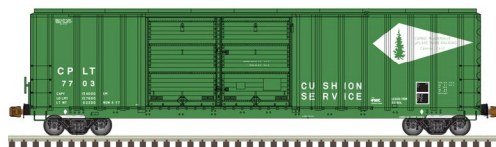
In addition to the two original owners, the new Atlas Master Line model will be available early next year

decorated for York Rail, Canadian National, and two Conrail versions including this distinctive star-studded scheme that promoted U.S. Savings Bonds.



Atlas' 2020 1st quarter schedule includes a new production run of steel bay-window cabooses. The N scale model

is based on a prototype built by International Car Co. Road specific variations in the Master Line model include a solid window, double window, and a shortened bay. Road names in this release will be Chicago & North Western, Union Pacific, Rock Island, Kansas City Southern, Milwaukee Road, Frisco, and Conrail.



Completing Atlas' new N scale product release for the 1st quarter of next year is an FMC 5077 cu. ft. double-door

boxcar. The Master Line model is based on a prototype design introduced in the 1970s that may still be seen working and wearing the decorating scheme of second or third-hand lease holder. Spotting features of the Plate B car include nearly flat X-panel roof, FMC signature side sills, and non-terminating box-corrugated ends. Road names include Union Railway of Oregon, Union Pacific, Seattle & North Coast, and Camino, Placerville & Lake Tahoe. All Atlas N scale ready-to-run models come with AccuMate knuckle couplers. For additional information contact a dealer or visit atlasrr.com.

Bachmann announced three N scale locomotives at the National Train Show including two versions of a Baltimore & Ohio class



EM-1 2-8-8-4 articulated steam locomotive.

Features include

all-wheel pickup, soft white LED backup and headlight, and blackened metal drivers with traction tires. The Spectrum model will be available in October with DCC Dual-Mode SoundTraxx Econami Sound decoder.



Bachmann has set a November delivery date for an EMD GP40 diesel locomotive. Road names will be BNSF, CP Rail, CSX, Norfolk Southern, and Union Pacific. The N scale model will have DCC with Econami Sound Value package.



Also scheduled for release in November is a Norfolk & Western

4-8-4 Class J steam locomotive. Three road numbers will be available for the N scale model which will have DCC sound equipped with Econami Sound Value package.



New N scale rolling stock coming from Bachmann this winter includes a 40-foot 8-panel steel gondola. Road names will be Atchison, Topeka & Santa Fe; Burlington Northern, Denver & Rio

Grande Western, and Pennsylvania Railroad. For additional information contact a dealer or visit bachmanntrains.com.



ExactRail will release an N scale Evans 5277 cu. ft. boxcar later this summer. This is a welcome rerun of a well-tooled

model introduced nearly a decade ago. The N scale model is based on a 1978 Evans/SIECO prototype with the spotting feature being the straight side sill. Road names will be Ontario Northland (1983 repaint), GATX-Laurinburg & Southern (2016 repaint), Mississippian Railway (1979 original paint), Sault Ste Marie Bridge Co. (1990 repaint), Ferdinand Railroad (1980 repaint), and Canadian National (2009 repaint).



The car will come with 70-ton trucks with 33-inch machined metal wheels or 100-ton trucks with 36-inch wheels depending on the practice of the road name being modeled. Micro-Trains body-mounted couplers on this new run replace the problematic truck-mounted couplers used on the previous release. For additional information visit exactrail.com.

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KatoUSA has set an end of year release for a new run of BNSF SD70ACe

diesels. Utilizing tooling developed for the Spirit of Union Pacific locomotive, this new BNSF run will feature a modified nose headlight and an isolated cab. Kato plans to have BNSF No. 8400 ready by

Christmas with two additional road numbers available in January. In addition to a DC-analog version, the N scale locomotive will be available with TCS DCC decoder installed. ESU Loksound DCC will be available on special order. See your dealer for details.



KatoUSA has added a Transition Sleeper to the selection of N scale Superliner II cars scheduled for release late this year. The previously announced rerun of

Superliner I four-car sets in Amtrak's modern Phase VI paint scheme is still on target for a December release. For additional information on all KatoUSA products contact a dealer or visit katousa.com.

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Micro-Trains has released to dealers a 70-foot mail-baggage car decorated for the Southern

Railway. The N scale model represents an all-steel heavyweight car built in the 1920s that continued in service until the early 1960s. Like the prototype, the Micro-Trains model rides on six-wheel passenger trucks with plain bearings.



Also new from Micro-Trains is this 40-foot standard box car with a Youngstown sliding door and P-S ends. The N scale model is influenced by a prototype built in the late 1940s that has been updated by having its running board removed and ladders shortened. The British Columbia Railway model wears a 1970s green repaint with a dogwood herald.



This Union Pacific triple-bay covered hopper is available from Micro-Trains in two road numbers. The N scale model represents a 4427 cu. ft. car built by Pullman-Standard and rebuilt in the early 1990s.

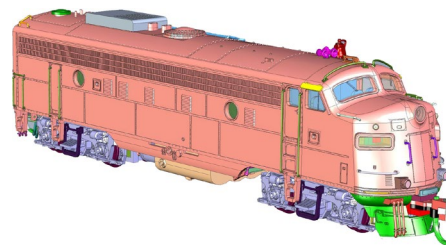


Micro-Trains has released a three-pack of GATX 56-foot general service tank cars. Introduced in the 1970s, the frameless tankers had a capacity of 24,900 cubic feet and were used primarily in the petroleum industry. For additional information contact an authorized Micro-Trains dealer.

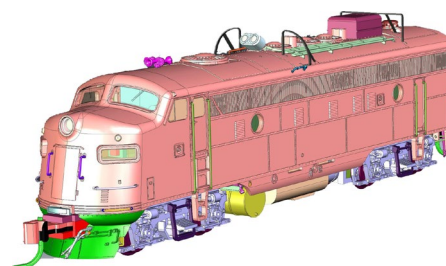


Motrak Models has announced its first N scale structure kit from Northeastern Scale Models, Valley Hardware and Plumbing Supply. Limited to 50 kits, there were still some available when the News and Events column was created. The kit features laser-cut clapboard siding, laser-cut loading dock and porches, laser-cut paper 3-tab shingles, laser-cut window shades, Tichy Train Group plastic windows and doors, signage, and easy to follow instructions. The dimensions of the finished structure were not provided. For more information visit motrakmodelsusa.com.

Rapido is developing tooling for a FP9A Canadian-built diesel locomotive. The Rapido model promises to be the first accurate N



scale model of the unique FP9As GMD built between 1954 and 1958 in London, Ontario. Features on the model include roof-mounted cooling coils, separate air hoses, separate grab irons and handrails, working headlight, rear headlight and number boards; and working ditch lights and rooftop Gyalite where appropriate to the individual locomotive being modeled.



Canadian Pacific versions of the FP9A will have dynamic brakes, vertical slit grilles, frame-mounted water tank, and etched-metal icicle breakers. Decorating schemes will be Canadian Pacific (Block and script lettering), and CP Rail in Action Red with both 5- and 8-inch stripes.

Canadian National models will have frame-mounted rerailers, rooftop bell, Farr grilles and a CN style steam generator. CN class C and D units will have 36-inch radiator fans, with 48-inch fans being applied to class E units. CN paint schemes will include 1954 (delivery, and 1961 stripes), VIA-CN, and VIA Rail Canada (both CP and CN car body styles). An Algoma Central version is also planned but sufficient pre-orders must be received to meet minimum production requirements. Standard DC (silent) models will be available as well as DC/DCC sound models using recordings taken from a real FP9A unit with a 567C prime mover operating under load. Delivery is planned for summer 2020.



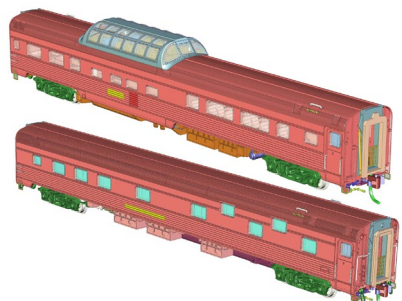
Rapido is quoting a late spring 2020 date for the introduction of a VIA Rail F40PH-2D diesel locomotive. The N scale model will be based on prototype F40PH-2Ds built in London, Ontario between 1986 and

1989. Among the many Canadian-only features, the most easily spotted are the car body panels and door locations, a specialized fuel tank, and unique arrangement of the underbody appliances. The model will have working headlights, ditch lights, and number boards; separate grab irons and handrails, full underbody detailing, and road-specific rooftop variants.



Rapido's Canadian F40PH-2D will be available decorated in both the original 1986-1998 livery and the 1998-2014 Canada scheme. An undecorated version will be included in this run. Silent DC

models and DC/DCC sound versions will be available.



Rapido has announced plans to produce a complete N scale version of The Canadian, Canada's most prestigious transcontinental train. The Canadian will be available in a special 10-car set consisting of a baggage/dormitory, Skyline Dome coach/coffee shop, diner, Park Car

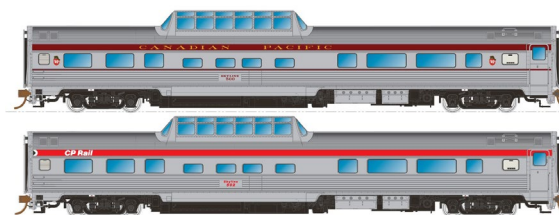
Dome sleeper/lounge observation, and two each of the following cars; Chateau Sleeper (4 sections, 8 duplex roomettes, 3 bedrooms, 1 drawing room), Manor Sleeper (4 sections, 4 roomettes, 5 bedrooms, 1 compartment), and a coach. For modelers wanting longer trains the coach and sleepers will be available separately.



R. Bale

THE CANADIAN

Canada's famous transcontinental train, known as The Canadian, was introduced by the Canadian Pacific Railway in 1955. It served as the nation's flagship train operating from Montreal and Toronto to Vancouver. It featured new FP9A locomotives and a consist of brand new stainless steel passenger cars built by Budd in Philadelphia. The Canadian lasted with CP until 1978, when it was transferred to VIA Rail Canada. It continued to operate on the original CP routing until 1990, when it was moved to Canadian National tracks. After upgrading The Canadian to Head End Power and refurbishing the aging Budd cars, VIA relaunched the beloved train in 1992 in new silver and blue livery. Despite suffering from poor timekeeping by the freight-oriented railway, the Canadian continues today as VIA's flagship transcontinental showpiece. Seasonal consists could range as high as 30 cars with 18 to 22 being typical.



Details include accurate Budd fluting profile, full underbody detail including piping and conduits, full interiors, including two optional Skyline interiors; track-powered interior lighting, etched-metal grab irons and handrails, and operating marker lights on all Park and HEP-equipped cars.



Paint schemes available will be Canadian Pacific (Maroon), CP Rail (Action Red), VIA Rail (original), VIA Rail

Canada (HEP rebuild), and painted but unlettered. The order deadline is January 13th, 2020 with delivery expected in summer 2020. For additional information contact a dealer or visit rapido-trains.com.



RSLaserKits is selling an N scale craftsman kit for Bain & Mitchell Wagon Co. The kit includes two farm wagons and spare wagon wheels. The structure is based on a real building in Salt Lake City. The assembled kit has a footprint of 3.625 x 7.25 inches.

New detail items from RSLaserKits include 16-foot row boats. The kits are composed of laser-cut pre-colored cardstock. The boats are sold in a six-pack. For more information visit rslaserkits.com.



ScaleTrains.com plans to release an N scale GE C44-9CW in September. The feature-laden Rivet Counter series

model will be available decorated for Santa Fe (ditch lights on the pilot, four-step well), BNSF (H2 paint scheme, ditch lights on deck), BNSF-Heritage III (Five-step well, snow plow, nose door), Norfolk Southern (Five-step well, snow plow, high mounted headlight), Norfolk Southern (Horsehead scheme, high mounted headlight, rear anti climber), Southern Pacific (speed lettering, deck mounted ditch lights, snow plow, four-step well), and Union Pacific (snow plow, five step well, ditch lights on deck).



Control systems on the Rivet Counter model include DC (DCC ready), ESU Next DCC motor only, and ESU LokSound DCC & Sound. For additional

information visit scaletrains.com.



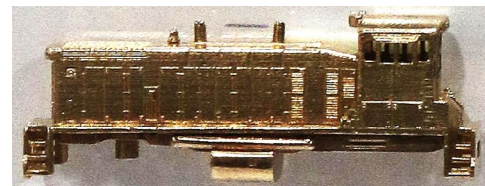
Walthers plans to release two new N scale Cornerstone structure kits at the end of 2019. The first kit is a classic two-story frame house built throughout North America from about 1870 to 1910. The kit includes parts for two different porches and front walls.



The second residential kit has several variants including an open or enclosed porch, optional roof dormers, and a separate single car garage. Both kits are composed of pre-colored molded

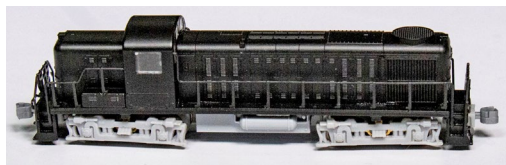
plastic components. For additional information contact a dealer or visit walthers.com.

Z SCALE PRODUCT NEWS



American Z Line announced they would be developing a new EMD SW1500 switcher in Z scale. Company representatives assured the MRH

photographer that despite the mockup on the announcement, the actual locomotive would be produced in styrene. The announcement did not include an expected availability date.



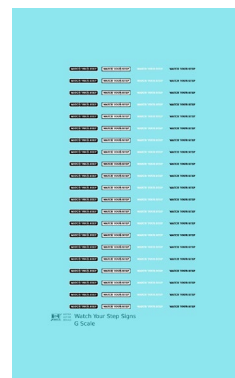
AZL also had a production sample of the upcoming Alco RS-3/RSD-5 in Z scale on hand. Produced between 1950 and 1956,

approximately 1700 RS and RSD locomotives were produced. The RS-3 will have 2-axle AAR type B trucks while the RSD-5 will be equipped with the 3-axle Trimount trucks. Roadname specific details will include smokestacks, turbochargers, headlights, number boards, airhorns, snowplows and fuel tanks. Three production runs are planned with the following road names proposed: RS-3: GN, NP, CP, NH, UP, SOU, MILW, PRR, DH, SAL, BN, SSW, NYC, CN, DRGW, RSD-5: ATSF, SP, C&O. For more information see a dealer or visit americanzline.com.

NEW DECALS, SIGNS AND FINISHING PRODUCTS



additional information contact a dealer or visit microscale.com.



K4 Supply Company has water slide decals for passenger car Watch Your Step signs. Stand-alone lettering and lettering with contrasting backing are printed in both black and white. Printing at 1200 DPI assures legibility on these water slide decals. The decals are available for HO, S, O, and G scales. For ordering information go to ebay and search K4 watch your step decals.

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

! BRIEFLY NOTED AT PRESS TIME ...

Accurail's next release of HO scale freight car kits will include an Illinois Terminal 36-foot Fowler wood boxcar and a 40-foot steel PS-1 boxcar decorated for Milwaukee Road. We'll have details next month ...

Bowser is accepting reservations until August 30 for HO scale Baldwin diesel units including AS16, AS616, and AS416 switch engines; and DRS 4-4-1500, and DRS 6-6-1500 road engines. Delivery of the Executive series models is set for April 2020 ...

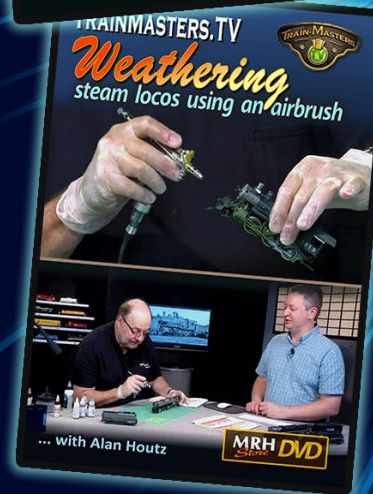
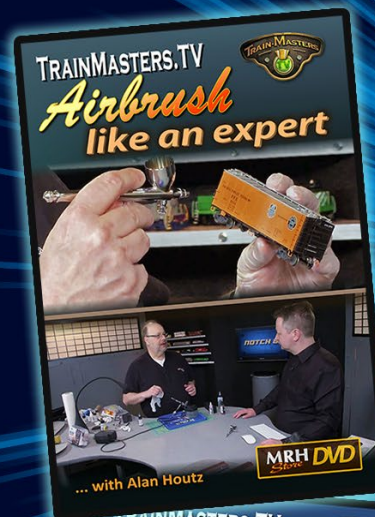
At the St. Louis RPM Meet late last month **Dan Kohlberg** announced the availability of HO scale water-slide decals for CB&Q HC-1B twin-bay covered hopper, GATX 8000 gallon general service tank cars 1948-1960s, and 1960s-1980s schemes for the same GATX tankers. For more info visit www.icgdecals.com ...

InterMountain has released an HO ACF center flow twin-bay covered hopper. Nine road names in six numbers each are available, plus gray data only ...

Smoky Mountain Model Works has a prototypically accurate O scale resin kit for a Southern Railway 41-foot 6-Inch low-side gondola. Learn more at www.smokymountainmodelworks.com ...

SoundTraxx has posted a brief video about soldering tips and design changes in their Mini Cube speakers. Check it out at view.bbsv1.net/bbext/?p=land&id=8E31372BACB25563E0530100007F6BE0&vid=38a3f320-d2d9-40c2-92c7-03614bf563ba ...

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SELECTED EVENTS



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AUGUST 2019

(Many events charge a fee. Check individual info website for details.)

AUSTRALIA, VICTORIA, BRAYBROOK, August 3-4, Sunshine Model Railway Club's annual exhibition, Braybrook Secondary College Gym Hall, Burke St. Info Ted Allan 93118389.

CALIFORNIA, CROCKETT, August 10, Carquinez Model Railroad Open House at 645 Loring Ave. Info at www.cmrstrain-club.org.

KENTUCKY, LOUISVILLE, August 4-11 (not August 10th), St. Matthews Eline Library Model Train Show, sponsored by the K&I Model Railroad Club at the St. Matthews Eline Library, 3940 Grandview Ave. Info at www.kandimrr.com.

NEW YORK, BUFFALO, August 3-4, Buffalo & Susquehanna Railway Symposium, hosted by the Western New York Railway Historical Society at Heritage Discovery Center, 100 Lee Street. Info at www.trainweb.org/wnyhdc.

OHIO, MARION, August 10, Summerail 2019, sponsored by Marion Union Station Association, 532 West Center Street. Info at www.summerail.com.

OHIO, PAINESVILLE, August 23, Railroad Memorabilia Show, at Painesville Railroad Museum, 475 Railroad Street. Info at painesvillerrailroadmuseum.org.

SELECTED EVENTS | 2

OREGON, PORTLAND, August 27-31, 35th National Garden Railway Convention, hosted by Rose City Garden Railway Society, at DoubleTree by Hilton Hotel, 1000 NE Multnomah Street. Info at www.ngrc2019.org.

PENNSYLVANIA, ALTOONA, August 3-4, N-Scale Weekend & Model Train Show, sponsored by Bedford Model Railroaders at Altoona Jaffa Shrine Centre. Info at www.n-scaleweekend.com.

PENNSYLVANIA, STRASBURG, August 11, Eastern Pennsylvania 2 Rail O Scale Train Show and Swap Meet, at Strasburg Fire Company, 203 West Franklin Street. Request info from Rich Yoder at oscale48@comcast.net.

VIRGINIA, LYNCHBURG, August 10, Lynchburg Railroad Day, Model Train and Railroadiana Show, at Boonsboro Ruritan Club, 1065 Coffee Road. Info at www.blueridgenrhs.org/rail-day.

September 2019, by location

ARIZONA, MESA (Metro Phoenix), September 25-29, Arizona Junction, 2019 NMRA Pacific Southwest Region Convention, hosted by PSR Arizona Division, at Sheraton Mesa Hotel at Wrigleyville West, 860 North Riverview Mesa. Info at azdiv-nmra.org/psr2019convention.

CALIFORNIA, SACRAMENTO, September 4-7, 39th National Narrow Gauge Convention, at DoubleTree by Hilton Hotel, 2001 Point West Way. Info at www.nngc2019.org.

INDIANA, INDIANAPOLIS, September 14, Train Show & Sale, sponsored by Naptown & White River Model Railroad Club, at Emmerich Manual High School, 2405 S. Madison Avenue. Info at naptownrr.org.

MARYLAND, LINTHICUM HEIGHTS (Metro Baltimore), September 19-22, Mid Atlantic RPM Meet, at Double Tree by Hilton, BWI Airport, 890 Elkridge Landing Road. Info at marpm.org.

SELECTED EVENTS | 3

MISSOURI, SPRINGFIELD, September 7, Fall Train Show, sponsored by Ozarks Model Railroad Association, at East Hall Ozark Empire Fairgrounds Eplex, 3001 N. Grant Ave. Info at www.omraspringfield.org.

NEW YORK, LIVERPOOL (Metro Syracuse), September 19-22, NMRA Northeastern Region Empire Junction 2019 Convention, at Holiday Inn, 441 Electronics Parkway. Info at empirejunction.org.

WASHINGTON, BATTLE GROUND, September 28, 46th Great Train Swap Meet, sponsored by Southwest Washington Model Railroaders at Battle Ground High School Gymnasium, 300 West Main Street. Request info from Larry Sprenkel at Larry.sprenkel@gmail.com.

WISCONSIN, MILWAUKEE, September 21, NMRA Wise Division RPM Meet, Four Points Sheraton at Milwaukee Airport. Info at www.wisedivision.org.

Future 2019, by location

CANADA, ONTARIO, BRAMPTON, October 5-6, Greater Toronto Train Show, at Brampton Fairgrounds, 12942 Heart Lake Road. Info at www.torontotrainshow.com.

CANADA, ONTARIO, FENWICK, November 16-17, 23-24, Open House at Greater Niagara Model Railroad Engineers, 1141 Maple Street. Info at gnmre.ca.

CALIFORNIA, BELLFLOWER (Metro LA), October 5, Railroad Prototype Modelers Meet, at Encounter Christian Church, 10012 Ramona Street. Info at www.laapm.org.

CALIFORNIA, SAN LUIS OBISPO, October 4-6, Central Coast Railroad Festival and Train Show. Info at ccrrf.com.

CALIFORNIA, OCEANSIDE, October 12, Train Show & Swap Meet, sponsored by North County Model Railroad Society at Heritage Park, 230 Peyri Drive. Info at swapmeetinfo@ncmrs.org.

SELECTED EVENTS | 4

FLORIDA, DAVENPORT, November 9, NMRA SSR Eastern/Western Fall Workshop, at Edgehill Recreation Association Clubhouse, 50 Westridge Drive. Request info from Jim Robertson at 352-249-6862.

ILLINOIS, LISLE (Metro Chicago), October 24-26, 26th Chicagoland RPM (formerly known as Naperville Meet), at Sheraton Hotel & Conference Center. Info at www.rpmconference.com.

ILLINOIS, MORTON, October 26, Central Illinois Train Xchange, at Blessed Sacrament Church, 225 East Greenwood Street. Request info from Roger at citrainx@gmail.com.

INDIANA, INDIANAPOLIS, December 7, Train Show & Open House at Naptown & White River Model Railroad Club, 1115 McDougal Street. Request info from Steve Handly at nap-townmrr@gmail.com.

KENTUCKY, LOUISVILLE, November 16, NMRA MCR Division 8 Train Show, at Holy Family Parish Saffin Center, 3938 Poplar Level Road. Info at www.div8-mcr-nmra.org.

MASSACHUSETTS, GARDNER, October 5, Southern New England 2 Rail O Scale Fall Show, at United Methodist Church, 161 Chestnut Street. Info at www.snemrr.org.

MICHIGAN, EAST LANSING, November 10, Model Railroad Club Show and Sale, sponsored by Lansing Model Railroad Club at Michigan State University Pavilion. Info at www.lmrc.org.

MICHIGAN, TROY, November 7-10, NMRA NCR North Central Region Convention, at Troy Community Center, 3179 Livernois. Info at www.div8.ncr-nmra.org/ncx-2019.

MISSOURI, KIRKWOOD (Metro St. Louis), October 12-13, Greater St. Louis Train Show, sponsored by Mississippi Valley N Scalpers at Kirkwood Community Center, 111 South Geyer Road. Info at mvns.railfan.net.

SELECTED EVENTS | 5

NEW YORK, ALBANY, December 1, Great Train Extravaganza Show & Sale, sponsored by NMRA Hudson Berkshire Division at Empire State Convention Center. Info at gtealbany.com.

NEW YORK, SCHENECTADY, November 2, Open House at Hudson-Berkshire NMRA Division, 4026 Ryan Place. Request info from Irwin Nathanson at HUDSON.BERKSHIRE.NMRA@gmail.com.

NORTH CAROLINA, FLETCHER, October 4-5, Autumn Rails Train Show, at Expo Building, Western North Carolina Agricultural Center, sponsored by French Broad e'N'pire NTRAK Club. Request info from Ray Baldwin at 607-72-9694.

NORTH CAROLINA, WINSTON-SALEM, November 8-9, RPM Carolinas School of Railroad Modeling Techniques, at Forsyth County Center, 1450 Fairchild Road. Info at sissonstony.wixsite.com/rpm-carolina.

OHIO, CAMBRIDGE, October 20, NMRA MCR Division 6 Swap Meet, at Pritchard Laughlin Center, 7033 Glenn Highway. Info at div6-mcr-nmra.org/swapmeet.html.

PENNSYLVANIA, EASTON, October 6, 43rd Annual Lehigh Valley Regional Train Show & Expo, at Charles Chrin Community Center, 4100 Green Pond Road. Info at www.lehighlines.org/events.html.

PENNSYLVANIA, LANCASTER, November 23-24, Brass Expo & Custom Craftsman Models 2019 Show, at Wyndham Lancaster Resort & Convention Center, 2300 Lincoln Highway. Info at brassexpo.com.

WASHINGTON, SPOKANE, October 13, Fall Train Show, sponsored by River City Modelers at Spokane Fair & Expo Center, 404 North Havana Street. Request info from Shirley Sample at shirley@busnws.com.

SELECTED EVENTS | 6

Beyond 2019, by date

FLORIDA, COCOA BEACH, January 9, 2020, Prototype Rails, at Cocoa Beach Hilton Oceanfront, 1550 North Atlantic Avenue. Info at www.prototype Rails.com.

PENNSYLVANIA, MALVERN (Valley Forge), March 27-29 2020, Railroad Prototype Modelers Meet, at Desmond Hotel. Info at rpmvalleyforge.com.

MISSOURI, ST. LOUIS, July 12-18, 2020, NMRA National Convention and National Train Show. HQ at Hilton St. Louis at the Ballpark. Info at gateway2020.org.

CALIFORNIA, SANTA CLARA, 2021, NMRA National Convention and National Train Show.

ENGLAND, BIRMINGHAM, 2022, NMRA National Convention and National Train Show. Info at www.nmra2022uk.org. ■



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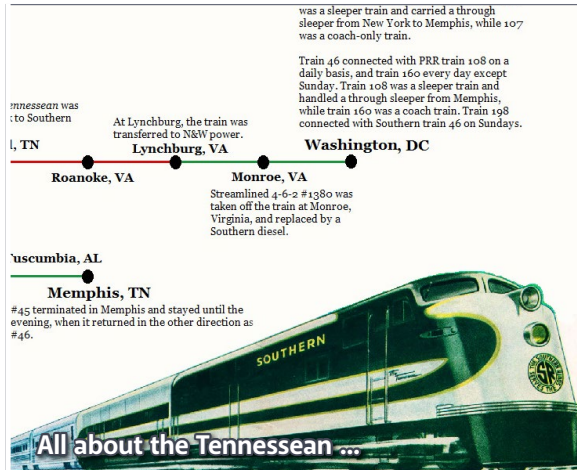
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