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AUGUST 2022 | FREE

MRH

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- Spring Mills Depot flat car
- Painting & weathering brick
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150th
ISSUE!

Eric Miller tells ...

A tale of two locos

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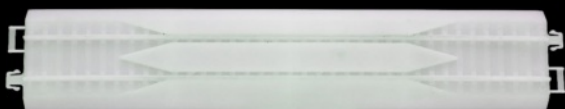


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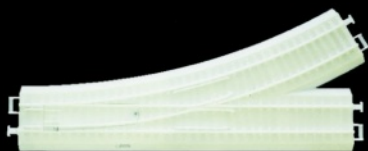
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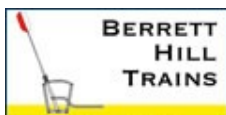
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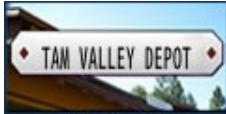
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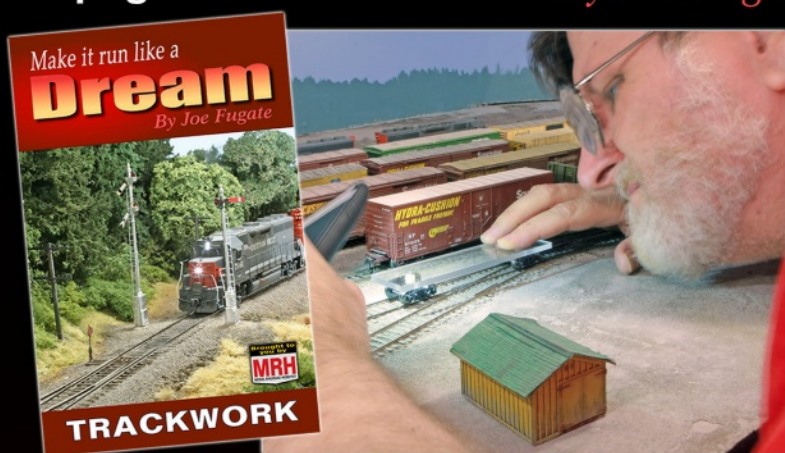


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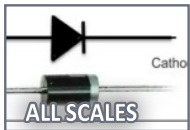
Publisher's Musings: Celebrating issue number 150
JOE FUGATE



MRH Website this month: Repurposed passenger stations, ...
Compiled by JOE FUGATE



What's Neat: Trevor Jones' layout interview, ...
KEN PATTERSON



Electrical Impulses: The diode matrix revisited
HENRY VAN WYK



The tale of two locomotives
ERIC MILLER



Lilacs, crepe myrtles, and roses
STEVE GILLETT



First Look: Spring Mills Depot DODX flat car
JEFF SHULTZ



Savvy Modeler online: Athearn sound and light upgrade
Compiled by the MRH STAFF



August 2022 news and events
RICHARD BALE and JEFF SHULTZ

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PUBLISHER'S MUSINGS



Model Railroad Hobbyist | August 2022

JOE FUGATE: CELEBRATING MRH ISSUE
NUMBER 150 ...



THIS ISSUE IS MAGAZINE NUMBER 150! We've come a long way since releasing issue number 1 in January 2009. Let's take a quick trip down memory lane.

Blast from the past

We actually announced *Model Railroad Hobbyist* magazine at the NMRA 2008 National Convention in Anaheim, CA.

The modelers we told reacted enthusiastically. The vendors (eventual paying advertisers) were not so enthusiastic

for the most part. I don't think they quite knew what we were even proposing, and at that point, *MRH* magazine was just so much vaporware. So I couldn't really blame them.

To provide context, keep in mind the internet in popular culture was just over a decade old and Apple had just rocked the world with the introduction of the iPhone. Tablets did not yet exist. Your typical desktop computer monitor was 4x3 ratio with a resolution of 1024 x 768. Flat screens were all the new rage.



1. Apple had just introduced the iPhone in 2008.

At the 2008 NMRA Train Show, we broke new ground by walking around the show with a video camera and shooting vendor interviews. Remember, the iPhone with a video camera was revolutionary and still an oddity. To shoot decent digital video, you would typically drop serious dollars to get a decent digital video camera (that's our approach).

At the time, we were shooting with a 480i video camera, which looks ancient now.



2. Shooting NTS video in 2008 broke new ground.

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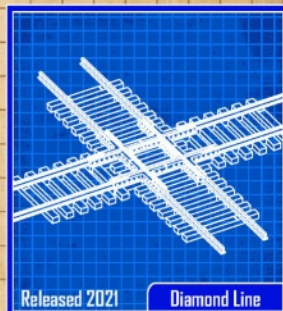
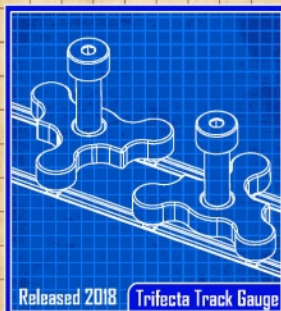
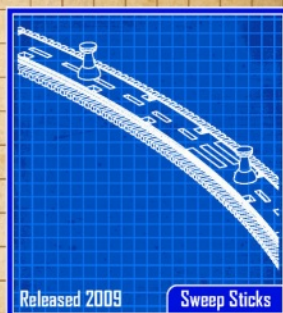
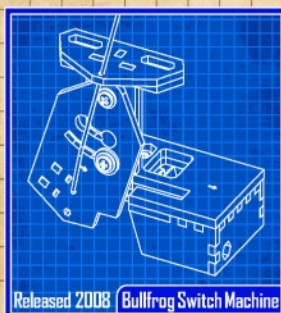
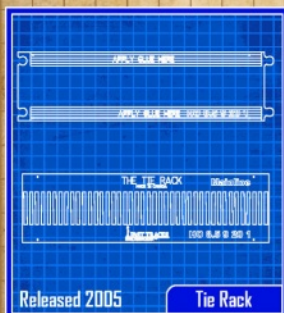
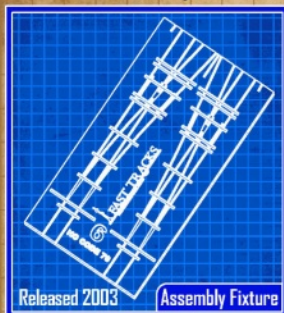
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PUBLISHER'S MUSINGS | 3

Fits and starts

We rolled out issue 1 in January of 2009. The PDF pushed the envelope by including Flash animation and video on the cover and throughout the issue in ads and in various articles.

We quickly discovered the idea of widely usable Flash animation inside a PDF was a support nightmare. We had drank the Adobe kool-aid only to discover all their high sounding claims about Flash were not true. No wonder Apple later declared it would not support Flash on their devices! Sorry to say it, but Flash *sucked*.

As soon as we released issue 1, problem emails flooded in from people who could not get Flash to work on their computer.

We rapidly moved to create a static version we called the Standard Edition. Any videos were a link to play video on YouTube. Let YouTube deal with supporting folks who couldn't play video.



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What's new on TMTV

Some recent shining examples ...



Making your own circuit boards ...

How to make your own circuit boards with ease



Jim Six's steam loco weathering methods



Why a bigger layout may not be better



Tricks with microbrushes

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The move away from Flash animation quickly solved 99% of our support issues with the magazine. I'm happy to say here in 2022 that Flash is history. RIP Flash, I say.

Enter the tablet

In the first year of *MRH's* release (2009), many modelers said it was nice the magazine was a free PDF, but it wasn't nearly as portable as a paper magazine, making it a bit of a pain to read. Remember, this was circa 2009 and the iPhone was just barely a year old.

Here's what I wrote in response to those less-than-thrilled about reading *MRH* magazine on a computer screen:

"I don't think the device you're looking for is here yet. IMO, the perfect device would be close to 8 x 11 in size and display PDFs in color. It would also be inexpensive, maybe selling for \$300 or so."

When Apple announced the iPad in 2010, they listed it at \$499. It didn't take long before you could find discounted pricing – I paid something like \$329 for my first iPad later in 2010.

Somehow, I just knew something tablet-like was coming, and it didn't take long. Here in 2022, I can find 32GB ten-inch tablets refurbished for well under \$100. That's not enough memory to store a lot of magazines at once, although a 10" tablet is the *perfect* size for reading *MRH*.

If you want to store a lot more magazines on your mobile device, I recommend you get a 128GB ten-inch tablet. If I google "10" tablet 128 gb" – I can find tablets selling for anywhere from \$150 to \$300. That's enough memory to store 100 or more *MRH* back issues. Not bad!

If you want the ultimate device for reading *MRH* and *Running Extra* – and really for viewing anything we sell – get yourself a new 128GB iPad and install GoodReader on it (\$5 in the Apple app store).



PRESS RELEASE



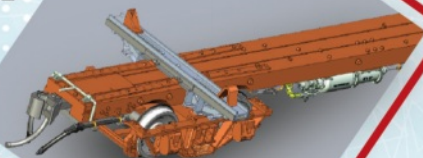
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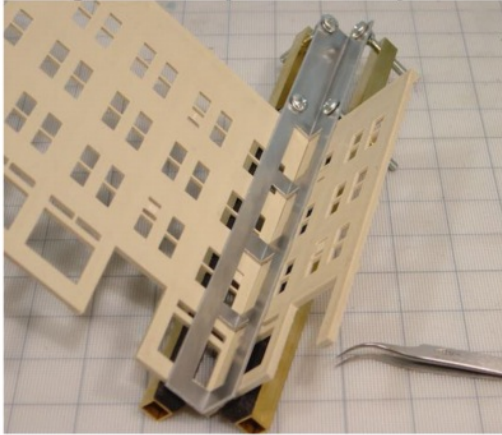
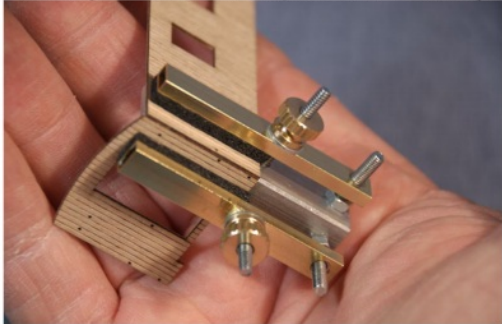
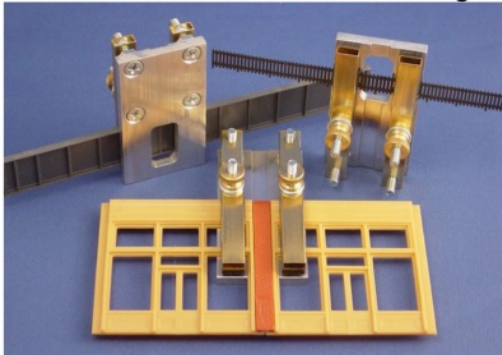
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GoodReader is the *MRH* Swiss Army Knife app for all our products. That's right, it not only reads PDF and lets you annotate them (think: highlighter, margin notes), but it also unzips and plays our MP4 video files.

All within this one app!

The other thing I like about having a digital magazine collection on a tablet is it's instantly searchable. Try doing that with your paper magazine collection!

Through the years

We started out publishing a new 100+ page issue quarterly in 2009.

Come 2010, we went to bi-monthly and approached 150 pages. In 2011, we moved to monthly and have been monthly ever since.

Pages have fluctuated based on the ad revenue. Ad revenue peaked in 2016, and so did page count.

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HAVE A LIMITED AMOUNT LEFT FOR THE SHELF**

From 2016-2018, page count fell because ad revenue likewise fell. Meanwhile, article submissions kept coming in. What to do with all these great articles in our backlog?

From a publisher's perspective having a large backlog is great. Makes it really easy to balance an issue with topics from across the board.

However if you're an author, a publisher with a large backlog that pays upon publication is really bad. Our backlog was so large you could wait 24 months or more to see your article finally get published.

In November of 2018, we launched our ad-free all meat extra magazine, *Running Extra*. That's a play on the term used by the railroads to describe their practice of running extra trains that are not on the schedule when needed.

Since *Running Extra* gives us a way to publish more of the great articles from our backlog than ads will pay for, its name perfectly describes what the magazine does.

But since *Running Extra* has no ads, it's not free. *MRH's* claim to fame is to be the best deal going when it comes to hobby media.

We wanted to maintain our "best deal going" approach with *MRH Running Extra*. Where else can you get an 80-100 page no-ads magazine for just \$2.99 per issue? And if you take advantage of our current subscriber special, you can get each magazine (including all 44 back issues) for just 53 cents per issue. Such a deal!

Back issues

I estimate we now have something approaching 20,000 pages of *MRH* back issues you can peruse, all for free.

That's a lot of how-to information, most of which is still quite relevant.

And as mentioned, we launched *Running Extra (MRH-RE)* in November 2018, and we're up to issue 45 on that magazine.



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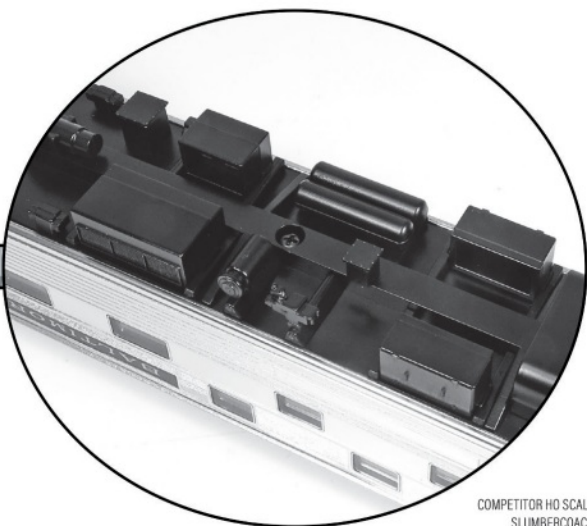
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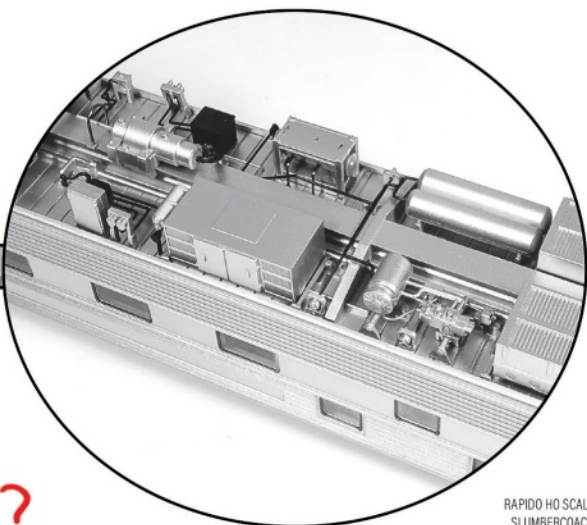
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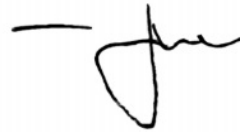


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- 2nd** A beginner's guide to railroad signals
- 3rd** Publisher's Musings: Unexpected benefits of SL2

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- 1st** Limited Modeler: The case for local passenger trains
- 2nd** Getting Real: Fitting an industry into a tight space
- 3rd** Building a resin car kit

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In

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August issue ...

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**Limited Modeler: Dealing with layout challenges**

JIM SIX

**Getting Real: Modeling an unusual piece of equipment**

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THIS
MONTH

Model Railroad Hobbyist | August 2022

Compiled by **JOE FUGATE**



Repurposed passenger stations

MRH forum member **Mustangok** (Kent B.) asked: *“Checking to see how many modelers are using an old passenger station for something else on their layouts?”*

We liked **CP Rail’s** example above. “This station has the wooden platform removed. It is now used by local MOW crews. (Late 1980’s). Read the full thread for more examples.



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

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

MRHMAG.COM

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1. *MRH* forum moderator **Neil Erickson** took this image and estimated the dimensions in answer to forum member **towazy's** query.

Structures of the Colorado narrow gauge

MRH forum member **towazy (Tom W.)** started a thread on the *MRH* forum looking for ideas on narrow gauge station structures from the 1920s.

MRH forum moderator Neil Erickson found a photo of a building, used some tools to estimate its dimensions, and posted some basic plans for it.

“Would something like this work? I used SketchUp PhotoMatch [to determine the size of the structure features]. The photo has approximate dimensions and would be easy scratch build.”

Check out the full thread for more.

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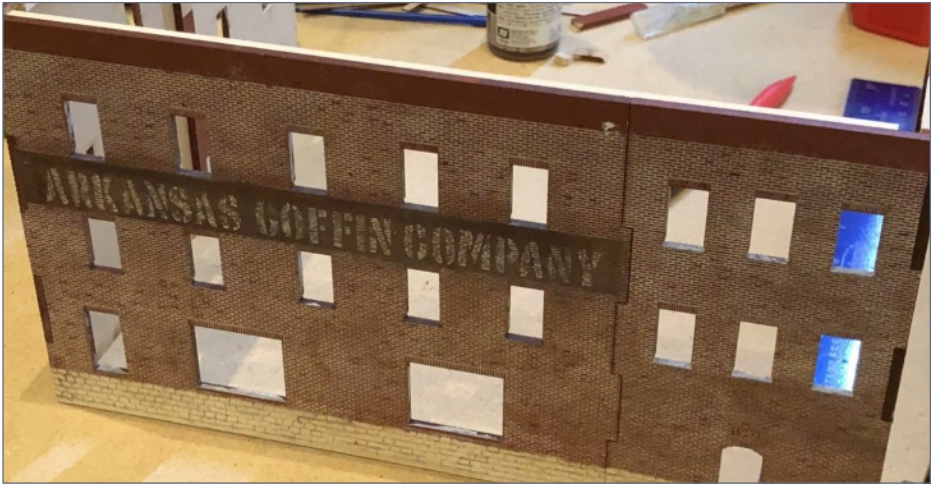
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2. *MRH* forum member **musgrovejb** posted a nice video on how he painted and weathered the brick on this structure.

Realistic brick (how to video)

MRH forum member **musgrovejb** (Joe M.) posted a very nicely done video on how he painted and weathered a brick structure to get a realistic look.

The video runs for almost 20 minutes and goes step-by-step through the process.

The thread spawned a discussion asking how realistic is it to clearly show mortar lines on brick structures, particularly in the smaller scales.

To find out more about what is and is not proper when modeling mortar lines on scale brick structures, check out the full thread at the link below.

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



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3. *MRH* forum member **Mustangok** temporarily laid this interchange yard and then asked the other forum members for their thoughts on what they might change to improve the track arrangement.

Small interchange yard

MRH forum member **Mustangok** (Kent B.) (repurposed passenger stations, previously) also shared with us his interchange yard plan and asked for feedback.



“Since my track planning on paper was always too optimistic, I am going with full size everything and simply pinning track down until it looks right to me. It appears fairly straightforward to me, but I wonder if those with a lot of operations under their belt see something that won’t work well, or is not legit with regard to prototype ops.”

Kent also noted:

“I plan for a kind of low dollar operation and the locomotives will be left out [in the distance on the two tracks]. I made room for a road alongside for access and truck based servicing. With my narrow benchwork a lot of structures just don’t look right.”

Check out the insightful feedback Kent received on this thread!

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



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Fascinating journal/blog threads

The *MRH* Forum hosts a number of inspiring layout journals. Recently Tom Johnson returned with his new Cass County RR...

View the full thread on the *MRH* website

4. Tom Johnson's new Cass County Railroad journal is a feast for the eyes, as you can see here in this photo. Tom not only shares many great visuals with us, but he also goes behind the scenes into how he does it.



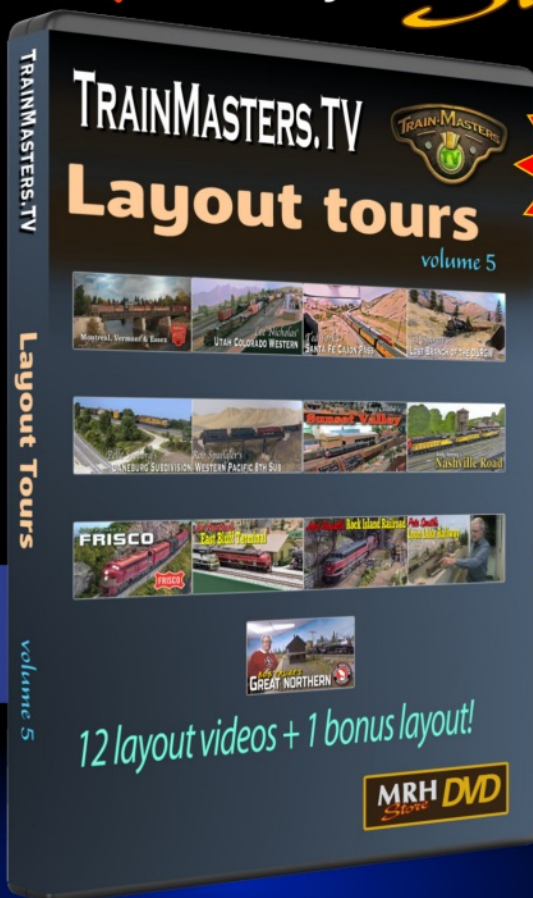
5. Tom has a fantastic eye for detail as this photo attests. All the details just look "right" with that pop machine being just plain amazing. Remember this is HO scale and if you'd like to know how Tom does something, just visit the *MRH* forum and ask!



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WHAT'S NEAT

column



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KEN PATTERSON COVERS THIS MONTH:

- **JENNY KIRK** INTERVIEWS **TREVOR JONES**
- **MODELING IDEAS** FROM **ABOVE** SHOWS FOREST FIRE DAMAGE
- **NEW PRODUCTS** FROM **BACHMANN**



click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

THIS MONTH JENNY KIRK INTERVIEWS TREVOR JONES ABOUT HIS HO scale outdoor layout, Modeling ideas from Above shows trains running through areas burned over last summer and night running, and Larry Harrington shows off the latest from Bachmann in HO and large scales.



1. Jenny Kirk interviews Trevor Jones about how he built an HO scale railroad in his garden.

in the AUGUST 2021 MRH RUNNING EXTRA!

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2. Trevor's track bed is reinforced concrete with piles every three or four feet, and with a topping created with three grades of cork chips, rubber chips, cement, and SBR (styrene-butadiene rubber). He then pins down the track with stainless steel pins.



3. To deal with expansion and contraction, each section of track has a 1mm gap between it and the next section. Trevor hasn't had any temperature-related rail issues, although it does get up to 100°F in the summer.



4. Trevor has chosen the plants carefully, and places them in cuts, holes, and crevices to restrict their growth.



5. Trevor admits that the track must be kept very clean, stating that he watches the weather forecast for three days in a row of good weather coming up, the first to clean everything and the second and third to run the trains.



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6. The layout is 2.7 scale miles in length, allowing Trevor to run full-length trains.



7. Trevor runs both North American and European trains, since the garden scenery is flexible in where it resembles.



8. When it comes to critters taking up residence on the layout, Trevor says that frogs showing up in the tunnels is common and advises that tunnels should not be more than twice the length of an arm's reach long for ease in cleaning.



9. Bridges are designed to be weatherproof, being constructed of brass I-sections, with sheets of aluminum, and copper pipe. The non-weight-bearing superstructure can be made of plastic.



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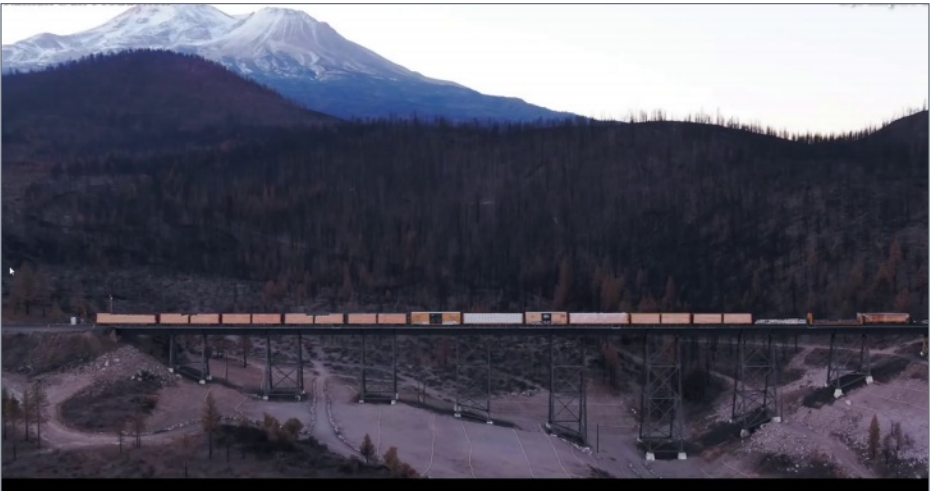
10. Jenny shows how switch machines can be hidden inside fake rocks, using a plastic box to keep everything weathertight.



11. Things to remember about designing an outdoor layout include making sure cuts are aligned with the sun so they won't take too long to dry out from being permanently in the shade, and that the modeler will probably need to excavate in order to have areas that are below track level, as well as water features.



12. Dan Scheidell's Modeling Ideas from Above segment follows Union Pacific trains through Hotlum, California, an area that was thoroughly burned-over in the 2021 wildfire season's Lava Fire.



13. The area includes the Dry Canyon Trestle, which was damaged enough to require replacement. It's seen here with Mt. Shasta in the distance.



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14. Dan flew his drone after dark, capturing the look of trains in limited light, which resembles the low blue lighting used by some modelers to mimic night on their layouts.



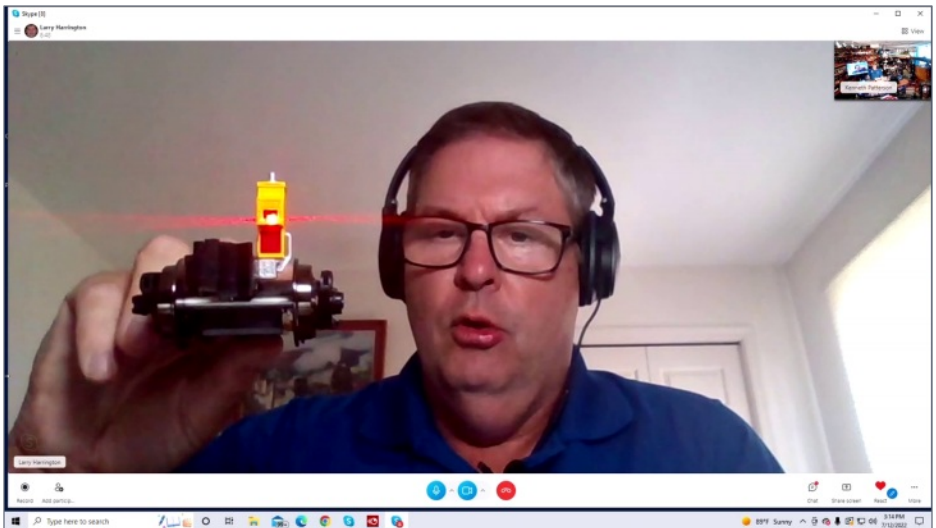
15. Bachmann's Larry Harrington joins Ken to show some of the upcoming products in HO scale, including pieces of the Ringling Bros. and Barnum & Bailey circus train. Shown here is the pie car for the blue train. The pie car for the red train also is being developed.



16. Seen here is the colorful Advertising Car.



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17. This large-scale end-of-train (EOT) device will be available on the 53' Evans boxcar as well as a separate piece. It is battery- or track-powered and includes an on-off switch.



18. Bachmann is continuing to release new Eggliners, including this one for the 4th of July.



19. The Egg Force One Egliner includes a suitably modified presidential seal stating, "In eggs we trust."



20. One of the new box vans in the large-scale Thomas & Friends line, Brendam Bay Shipping Co.



21. Finally, Mr. Jolly's Chocolate Factory is in the stories, where every day one of the engines goes to the factory to pick up boxcars of chocolate for the people of Sodor.

To see full Trevor Jones layout and interview, the full Modeling Ideas from Above video, and all the models Larry Harrington shared with Ken, check out the video linked at the beginning of this article. ☑

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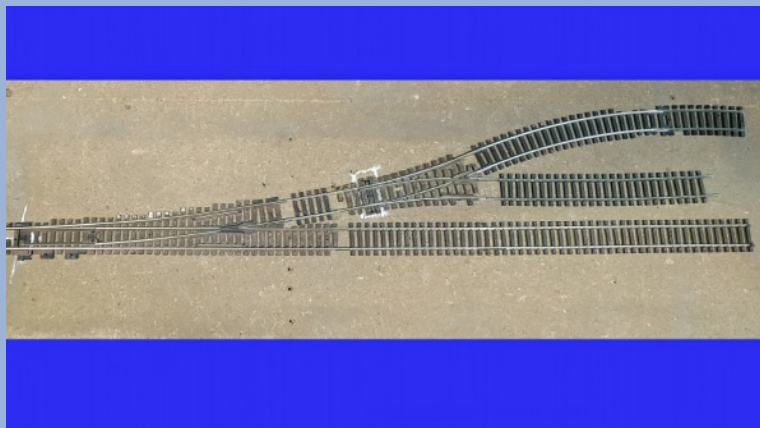
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The diode matrix

Revisited



Electrical
Impulses

Model Railroad Hobbyist | August 2022



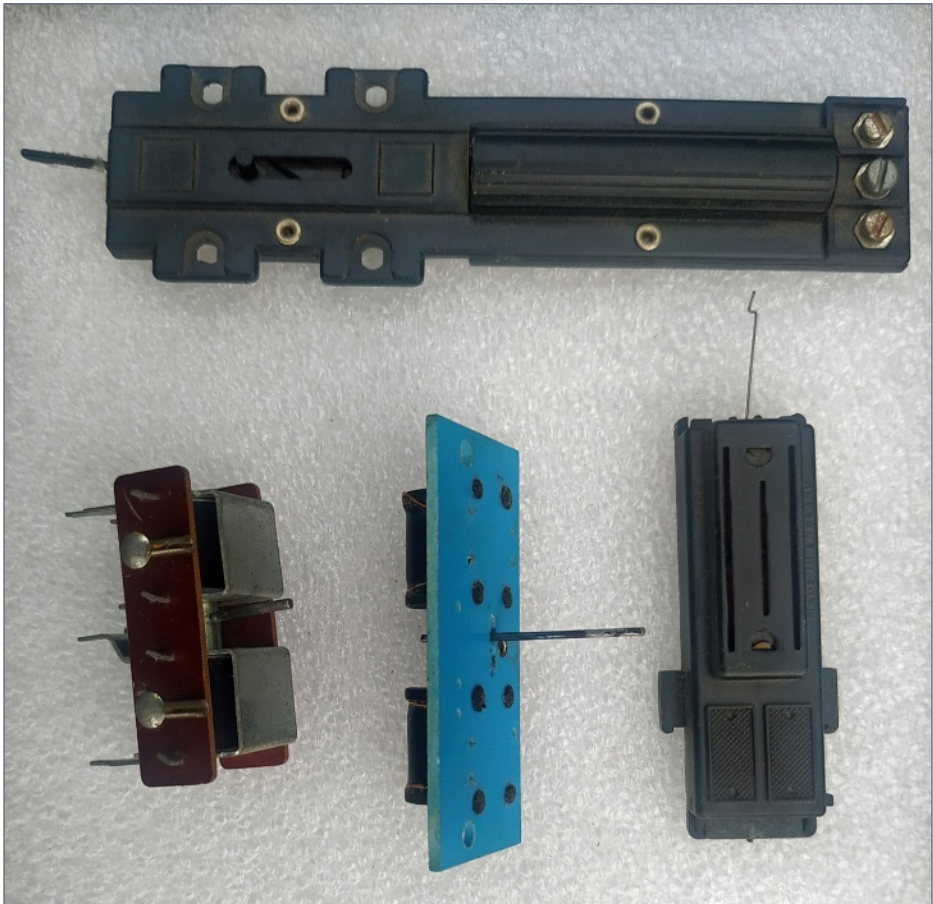
HENRY VAN WYK SHARES HIS SYSTEM FOR ROUTE-BASED TURNOUT CONTROL ...

ON MY LAYOUT, I use twin-coil machines to set my turnouts via manual, push-button control [1]. Using electric switch machines to control turnouts has several advantages over other methods. Not only can you align switches reliably and remotely from a control panel, but you can also connect two or more turnouts to a single button on the control panel for automated route alignment.

This works well for crossovers where there are two possible routes of travel: straight or diverging. The turnouts on either side

of the crossover must both be set in the same way for the crossover to work. Wiring both switch machines for single-button operation is simple.

If the turnouts lead to three or more possible routes, things get a bit more complicated. Consider entering a station on the main (A) with two sidings (B and C) diverging to the left. The first turnout set to diverging sets the route into the sidings, but the second turnout directs you into one of two sidings [2].



1. Various twin-coil switch machines.



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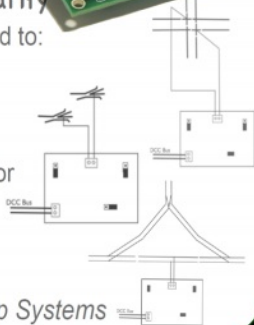
Crossings

Automatic Reverser for

Turntables

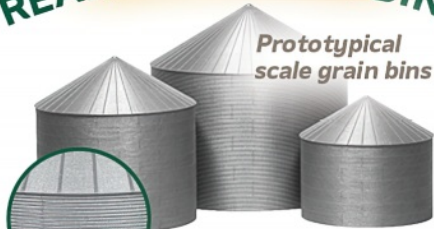
Wyes, Loops

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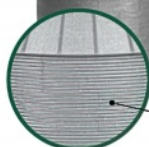


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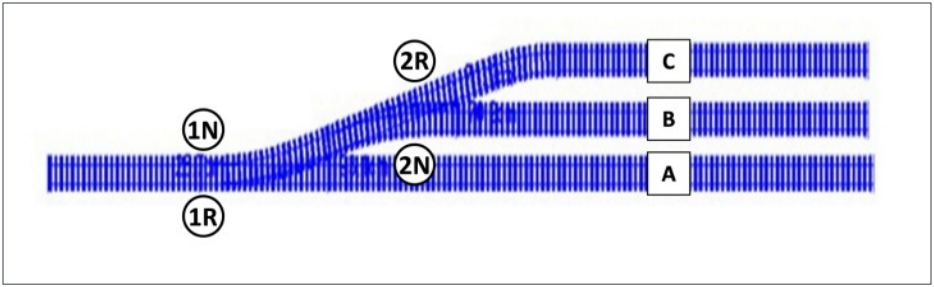
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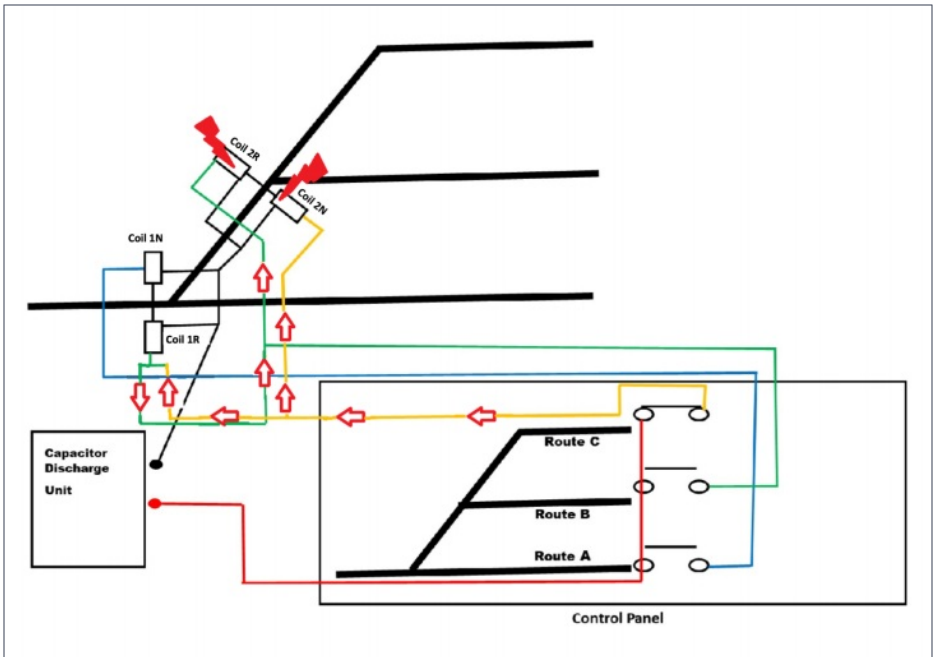
2. To set for route A (normal or straight), only coil 1N is energized. To set for route B (1 reverse or left-diverging, 2 reverse or right-diverging), coils 1R and 2R must be energized. Route C (1 reverse left-diverging, straight), coils 1R and 2N must be energized.

A button to align for route A in our example is simple and coil 1N is the only one energized. Routes B and C both involve coil 1R to diverge from the main, but either coil 2R for B or 2N for C. Since both 2R and 2N must be wired to 1R for single button control, they would both be energized with 1R, which creates a problem [3].

Diodes, which allow current to flow only one way, from anode to cathode, provide a solution [4]. Since I am powering my turnouts with DC, I can use diodes to block current flowing to coil 2N for B or 2R for C.

HOW A DIODE MATRIX SYSTEM WORKS

I push a button to select a route, and current flows to all the coils connected to that button. To block current flowing to unused coils, I place diodes in the circuit [5]. Determining where and how to place the diodes is a three-step process of mapping the routes and turnouts, creating a grid of which turnouts are used for each route, and finally, laying out the circuitry.



3. Normal, unimpeded flow of current would energize both coils 2R and 2N.

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MAPPING THE TURNOUTS

To know how many diodes to use and where to put them, I need two things: a track plan and a grid showing all the possible routes and all the switch machine coils. I number all the routes using letters.

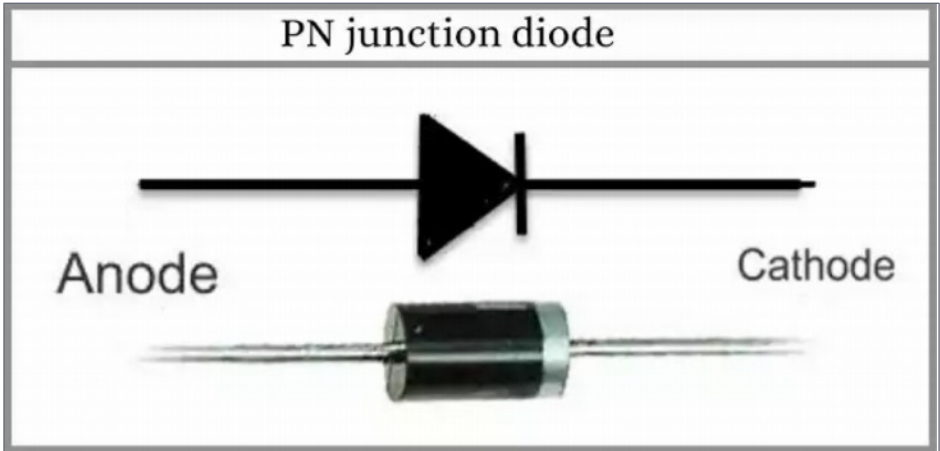
I can number the coils in a few ways, though for this article I am using the standard notation of “N” for “normal” (straight) and “R” for “reverse” (diverging). This can get a bit tricky, however. See the sidebar “When the simple becomes complex.”



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4. Diode and its symbol. circuitspedia.com/pn-junction-diode-depletion-region/image

CREATING THE GRID

I use a computer and spreadsheet, but a piece of paper with a grid drawn it or graph paper works just as well. From the plan, I count how many routes there are. In the first example [2], there are three routes, which I label A, B, and C.

To label the switch machine coils, I look at the track plan and number each turnout. I then add "N" or "R" to denote whether the the coil will set the turnout to "normal" or "reverse." My first example has two turnouts, so I label the coils 1N, 1R, 2N, and 2R.

With this information, I draw up a grid with five rows and six columns [6]. The rows represent the possible routes, and the columns represent the switch coils. The bottom row and far left column are for tallying the number of diodes I will need for the project.

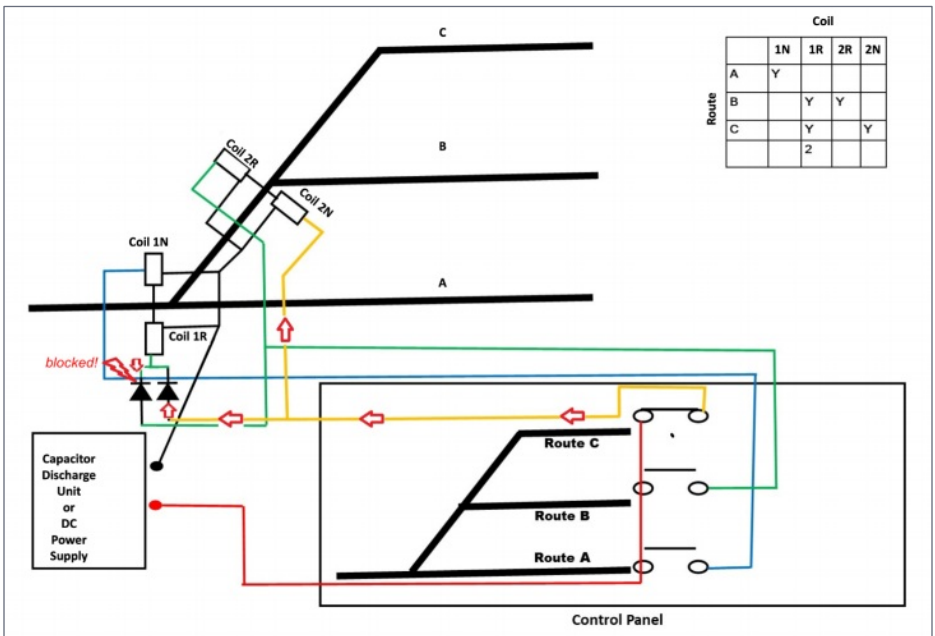
Turning to the track plan, I determine which turnouts must be aligned for each route and how. From here, I know which

turnouts need to be engaged for the route, so I mark them with a “1” on the grid in the corresponding cells.

Finally, I count the number of routes engaging each coil. If only one route engages a given coil, I can ignore it, but if two or more routes use a coil, then I need to have as many diodes as there are routes. I record this in the corresponding cell of the Total row at bottom. I use the Total column at far right to calculate how many total diodes I need to purchase for my control panel.

PLANNING THE CIRCUITS

I use the information on the grid to wire my turnouts. For route A, I have only one turnout coil active, 1N, and this is the only alignment for which 1N is active. I can simply wire the button for route A to coil 1N [5].



5. By adding two diodes, I can restrict current to flow only to coils 1R and 2R for route B, or only to coils 1R and 2N for route C.

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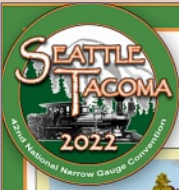
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Coil Route	1N	1R	2N	2R	Total
A	1				
B		1		1	
C		1	1		
Total		2			2

6. Grid for track layout example in [2]. Only coil 1R is used for more than one route, so it will need two diodes. I use the bottom-right cell to calculate the number of diodes needed to complete this project.

The row for route B shows two turnout coils active, 1R and 2R. Coil 1R is active for two routes, so I add a diode (1N4001) inline between 1R and the pushbutton for route B, with cathode pointing to 1R. The parallel connection between the button and coil 1R is direct [5].

Route C requires two coils be energized, 1R and 2N. Again, I wire a diode inline between 1R and the route C button, with a direct parallel connection between pushbutton and 2N [5].





H. Van Wyk

A SIMPLE CAPACITOR DISCHARGE UNIT

A standard trainset power supply may not be sufficient to operate two turnouts simultaneously, especially if the twin coil machines you are using have large coils that draw a lot of current. I use a capacitor discharge unit (CDU) to overcome this.

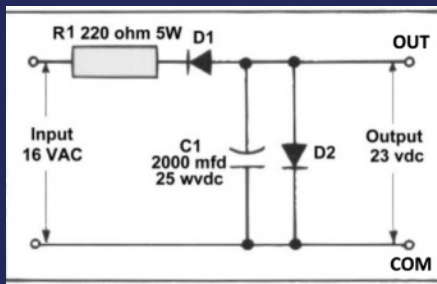
The CDU stores electrical energy and releases it in a burst sufficient to power at least four turnouts – I control up to four with a single button on my layout. The CDU's DC output is ideal for operating more than one turnout simultaneously.

Here is a circuit from Peter J. Thorne's book, *Electronic Projects for Model Railroaders*.

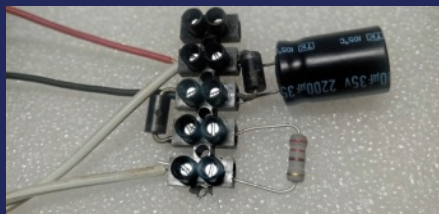
Use a terminal strip connector to join the components.

Parts List:

- 1 x 220-ohm 5W resistor
- 2 x 1N4001 diode
- 1 x 2000uF, 35V, electrolytic capacitor.
- Terminal strip connector.



7. Simple capacitor discharge unit.



8. Component built on a terminal strip.





M. Dodd

A WORD OF CAUTION FOR CDUS

The author recommends using a CDU to energize multiple turnouts, but this should be used with caution. Although the CDU he recommends works on his layout with his equipment, it is not a universal solution.

The CDU has no current-limiting resistor between the capacitor and the output. As such, there is on the one hand nothing to prevent it from blowing 1N4001 diodes. On the other hand, limiting output current would obviate the CDU's ability to power multiple switch machines.

Familiarize yourself with the current needs of the equipment you are using on your layout. Atlas machines, for example, have relatively small coils that do not draw much current, so the CDU may not be necessary. Older Kemtron machines, by contrast, had large coils that drew a lot of current.

Make sure that the power system you use will work with the current needs of the equipment you have.

BRINGING IT TO THE CONTROL PANEL

I use control panels with track diagrams on them to give a clear indication for each possible route, with one momentary-contact pushbutton for each route [9]. On the back side, I wire one terminal of the pushbuttons together, to be connected to the CDU's OUT terminal. I connect the other terminal of each button switch to the coils they need to energize for route alignment [10].

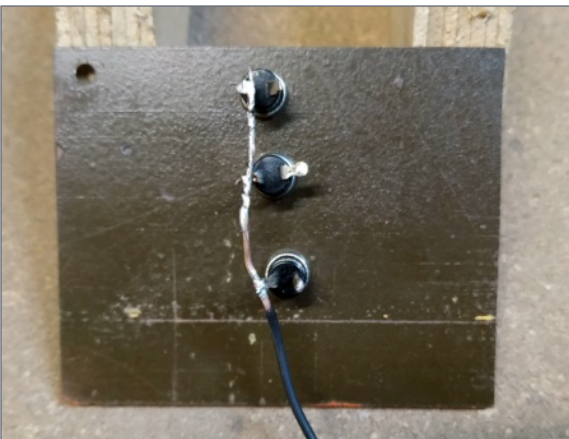
I use strip connectors to connect wires from the terminal with wires coming in from the turnout coils. The strip needs one terminal for each switch coil, plus a common connection, so in our example there are five. Though the connector strip is

optional, it allows me to easily add multiple diodes for the matrix to a single terminal, and allows me to easily connect wiring to all the turnouts of a given routing [11].

I solder wires to the switch machines, taking care to label the wires to match the coils (1N, 1R, 2N, 2R). I then connect these to the appropriate terminals on the strip connector for pushbutton operation. The two coils of each switch machine share a common connection, which I connect to the CDU's COM terminal [12].



9. My control panel shows a representation of the sample track plan from [2].



10. The rear of the panel, with wires in place connecting all buttons to the CDU's OUT terminal. From top-to-bottom, the other button terminals will connect to the coils for routes C, B, and A.



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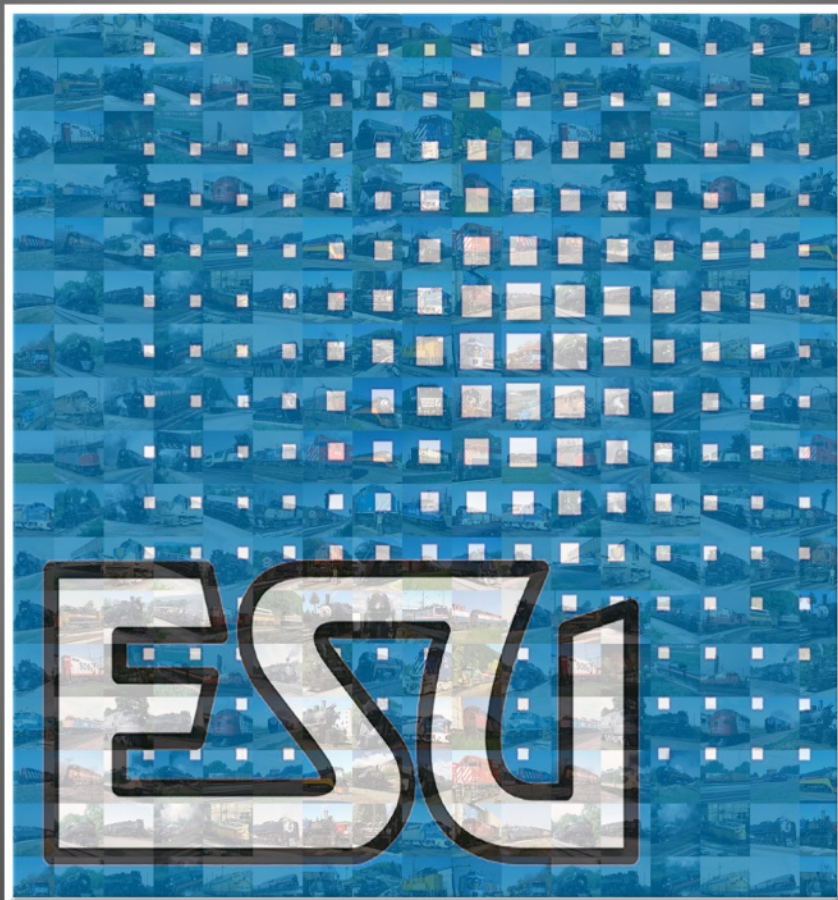
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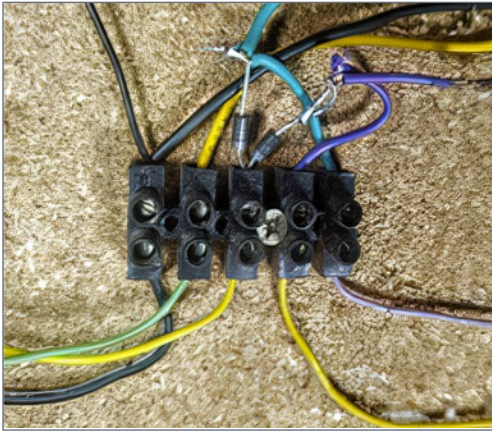
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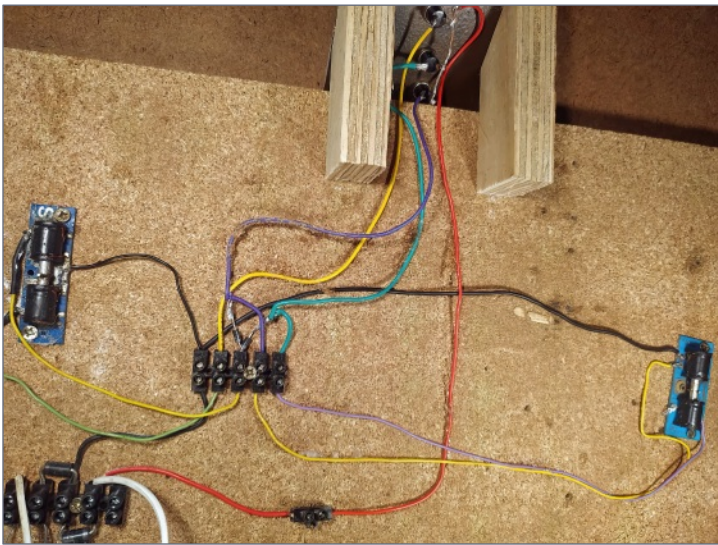
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11. The five-terminal strip connector. The far-left terminal connects the common terminals from the switch machines to the CDU. Second terminal from the left, the yellow wire passes directly through from panel button A to coil 1N. At center terminal are the two diodes passing current from buttons B (left) and C (right) to coil 1R. Second terminal from right is the line from button C to coil 2N, soldered to the anode of the right diode. The far right terminal connects button B to coil 2R, soldered to the anode of the left diode.

from right is the line from button C to coil 2N, soldered to the anode of the right diode. The far right terminal connects button B to coil 2R, soldered to the anode of the left diode.



12. Here is the complete system for our example. The machine for turnout 1 is at left, with 1N at bottom and 1R at top. The strip connector is in the center. The machine for turnout 2 is at right, with 2R at bottom and 2N at top. The control panel is at the top of the image and the CDU is at the bottom left.



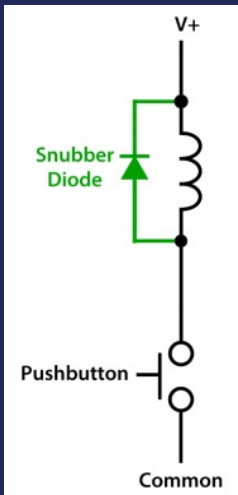
M. Dodd

PROTECTING PUSHBUTTONS FROM TWIN-COIL SWITCH MACHINES

Twin-coil switch machines (and all electromagnets) have an annoying trait: When the actuating circuit is opened (pushbutton released), the coil's collapsing magnetic field produces a voltage of opposite polarity. (This is known as "back-EMF" in DCC circles.) The reverse voltage creates an arc across the pushbutton's contacts, burning them, and eventually causing them to fail.

Electrical engineers following best practices design an electromagnet circuit with a "snubber" diode wired across the coil to absorb the reverse-polarity voltage. This protects the mechanical contacts. The drawing shows how this snubber diode is wired [13].

Here's how to add a snubber diode across each coil in a twin-coil switch machine. Connect cathode (banded end) to the coil terminal that is wired to the **positive** terminal of the power source. This is the COM terminal of the CDU shown in [7], and the **yellow** or green lines in diagrams [3], [5], and [21].



13. Snubber circuit diagram.

Connect the snubber diode's anode (unbanded end) to the **negative** terminal of the power source. This is the OUT terminal of the CDU in [7], and the **black** lines in diagrams [3], [5], and [20].

You can use the same diodes (1N4001) as called for in the rest of this project for your snubbers, and at 50 for about \$4.00 on ebay, they provide cheap protection for pushbuttons when wired across the coils in switch machines. Be sure to add one for each switch machine coil to your shopping list (i.e., *two* for each machine).

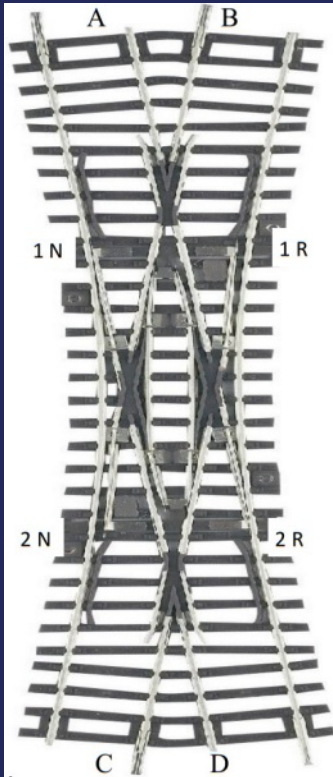




H. Van Wyk

WHEN THE SIMPLE BECOMES COMPLEX

With two switch machines things become more complex. There are four different configurations to set the different routes. Possible routes A-D and B-C as straight routes and A-C and B-D as diverging routes. No matter which side the switch machine is set, the Normal or Diverging route is dependent on the second switch machine. Thus for route A-D coils 1N and 2R needs to be energized, for curved route, A-C coils 1N and 2N needs to be energized. Care must be taken to identify the correct coils for each route.



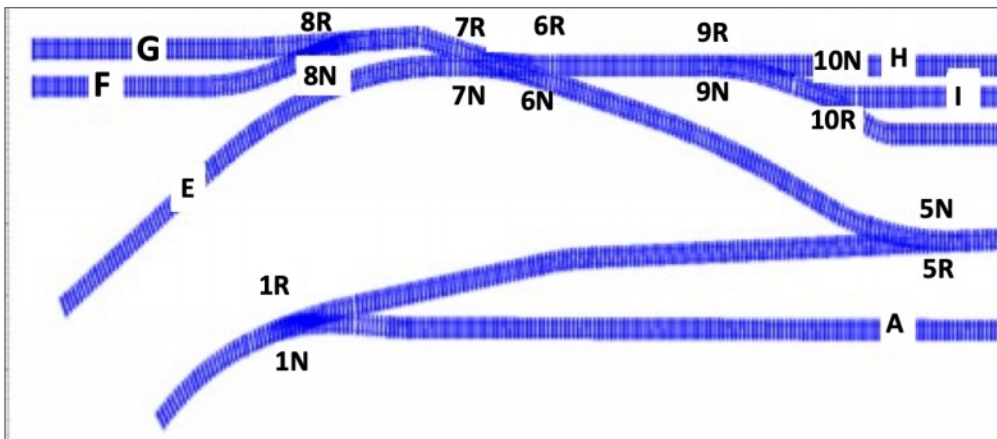
14. This old atlas brass double-slip switch has a single switch machine. *eBay photo*

A MORE AMBITIOUS PROJECT: VLAKTEPLAAS

Vlakteplaas is one of the towns on the upper deck of my layout. It is a small town with a steam locomotive servicing facility with a two-stall engine house, water, coal, and an ash pit. In addition, the town has a passenger station, a passing siding, and two spurs serving various industries [15].



15. A view of Vlakteplaas, with station in the foreground and coaling facility across the tracks.

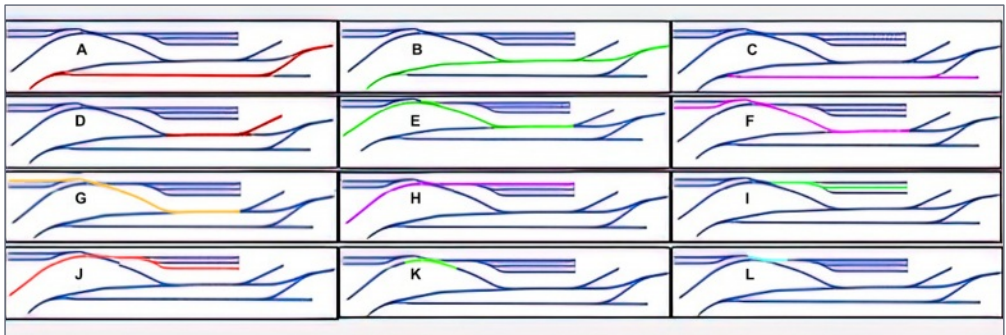


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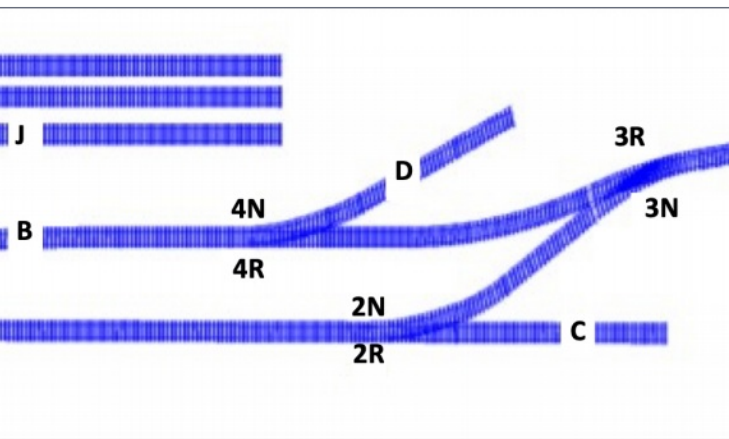
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Consequently, Vlakteplaas has a complex track plan, including eight standard turnouts, one double-slip crossover, and 12 automated routing options. Although this track plan is more complex than the original example, the procedures for calculating routes, turnouts, and diodes is much the same. I begin with mapping the routes [16], then go back to the main map and fill it in with the route and turnout coil labels [17].



16. The Vlakteplaas map illustrating the routes.



17. Track map for Vlakteplaas with routing letters and switch coil numbers.

Once I have all the routes and turnouts labeled, I create my grid, and enter the data to determine the number of diodes needed for each turnout coil. The grid is large, with 20 switch coils and 12 routes to calculate, though the process is like the earlier example [18].

From here, it is a matter of assembling the control panel with pushbutton switches [19] on a larger scale than the first example. I carefully number each wire connected to the coils, then connect them to the strip connector.

I make sure that the diodes go in their proper terminals, per the grid, with cathode oriented toward the switch coils. Then I connect each set of coils for a given route to the control panel, one route at a time, and test each route as it is completed. Testing frequently helps with troubleshooting.

Coils	1R	1N	2N	2R	3R	3N	4N	4R	5N	5R	6R	6N	7R	7N	8R	8N	9R	9N	10N	10R		
Routes																						
A	1			1	1																	
B		1				1	1		1													
C			1																			
D								1														
E										1	1		1									
F										1		1	1		1							
G										1		1	1			1						
H											1			1					1			
I												1	1				1				1	
J											1			1			1		1			
K											1		1									
L												1	1									Grand total
TOTALS										3	4	4	4	4			2					21

18. This grid from Vlakteplaas shows me how many diodes are needed (21), and where they go.



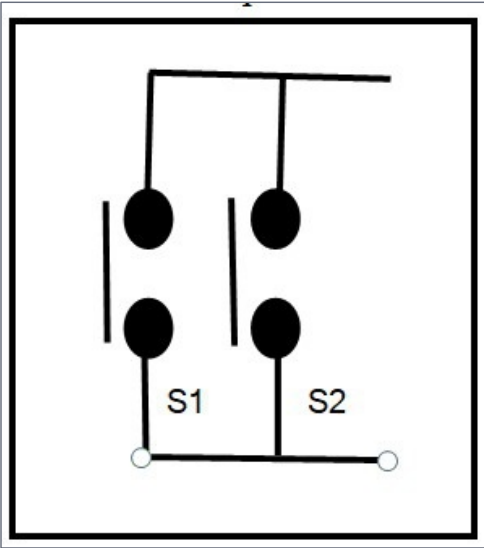
19. Vlakteplaas control panel.

ADDING A SECOND CONTROL PANEL

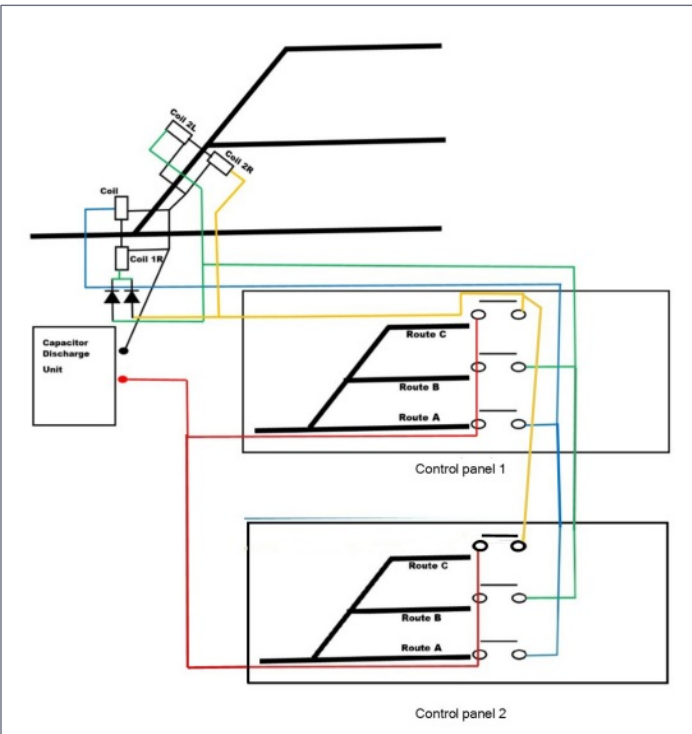
Sometimes a layout requires a second control panel, for instance when there is a peninsula, and you need to control turnouts from either side of it. Adding a second control panel is easy with this diode matrix system. You can control one device from two different switches if those switches are wired in parallel [20].

Build the second panel the same as the first, connect the panels' commons, and connect the button terminals of the second panel to the corresponding button terminals of the first. This allows either panel to select routes [21]. Using this technique, you can duplicate a panel in full.

You can also share only selected routes between two panels. I use a dispatcher's panel for centralized control over all main-



20. Switches wired in parallel.



21. Circuit diagram for two control panels, and where they go.





22. Dispatcher's control panel.

line turnouts [22]. Each town on the layout has its own panel to control local routings, including shared control of the main-line turnouts in town.

The diode matrix turnout control system makes it easy! Just take care that two operators don't activate two routes that use the same turnouts simultaneously.

For more detailed information see Peter J. Thorne's book, *Practical electronic projects for model railroaders*, published by Kalmbach in 1974, 1975, 1977, and 1979. ✓

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HENRY VAN WYK



Henry became involved in the model railway hobby at the age of 5, when he received an HO scale Lima battery-operated train set for his birthday. Up to age 5 Henry lived with his parents in a company house adjacent to the South African Railways line. He daily saw steam locomotives shunting and hauling mainline freight and passenger trains.

Soon the battery train set was replaced by an electric train set. He and his dad built a layout on his bedroom floor. With every Christmas and birthday, the set was expanded with more track, locomotives and rolling stock. Soon the layout on the floor became too small, and a new layout, hinging from the wall was built in the garage. This was eventually replaced by a multi-deck layout, which sadly was never finished, as Henry's dad passed away in 2006.


During 1994-2004 Henry had a layout based on the MKT, and hosted bi-weekly operating sessions with 4 to 6 operators. Henry inherited all his dad's South African Railways models.

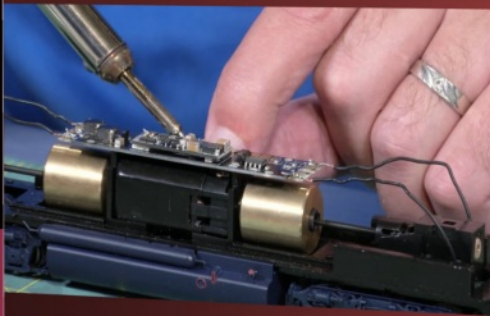
Henry lives in Pietermaritzburg, South Africa, with his wife and two teenage sons. He currently models the South African Railways from 1980-1990. He also has two adult daughters from a previous marriage.

Henry is a property manager for the Methodist Church of Southern Africa, managing two apartment blocks. He operates the sound system at church and enjoys taking the family dog for her daily walk. Henry also enjoys videoing and photographing his layout to share via his website and YouTube channel. ■



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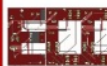
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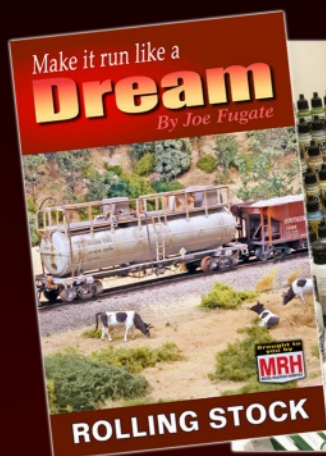
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The tale of two locos



1. My finished freelanced GP20u and GP30u rebuild locos based on ATSF prototypes.



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**ERIC MILLER FREELANCES AN ATSF
GP20U AND A GP30U REBUILD FOR HIS
NEW SPSF LAYOUT ...**



I AM BUILDING A NEW SHELF LAYOUT BASED ON A proto-fantasy railroad that has always caught my interest, the Southern Pacific & Santa Fe Railway. This time, I am going in a freelance direction, basing it on the fictional town of Maple in southeast Nebraska, which was the location of my first model railroad in high school. Maple is similar to Superior in that it is a busy railroad junction with a former Santa Fe branch that comes up to the north from Kansas.

My era is still the 1990s and the layout will be based on a former Rock Island branch that is now an industrial spur operated by the SPSF.

There are many items I can reuse for my new layout, such as rolling stock and structures, but I need to build new motive power. I decided to model a GP20u and a GP30u, both common Santa Fe locomotives assigned to Big Lift Yard to serve local jobs between Englewood and Colorado Springs.

My small switching layout operations require only one locomotive, but I want at least one backup in case something goes wrong before or during an operating session. Follow along as I show you how I built these SPSF (former Santa Fe) HO scale locomotives.

BACKGROUND AND CHOOSING THE MODELS

The Santa Fe typically used GP20u and GP30u locomotives as the local road power in the Midwest. These were GP20s and GP30s that the Santa Fe rebuilt in its Cleburne shops. As part of the rebuild, the shops upgraded their 567 prime movers with 645 power assemblies, providing a boost in horsepower while allowing the Santa Fe to simplify its spare parts inventory.





2. Here are the models that I started with.

The SPSF would have inherited many GP20u and GP30u locos, so I decided to model one of each. Proto 2000 had decent, nicely detailed models to get me started, and they would be easy to repower with Kato trucks and drives.

I initially thought I would buy them already painted in the Kodachrome scheme, then just re-badge them SPSF, saving me from the time-intensive job of painting. As I looked at the models more, I realized the factory paint jobs were not up to my standards. Further, it would be easier for me to match the paint for the details I needed to add if I just painted the models myself.

To save time, I searched for models with yellow handrails and mostly black sills. I ended up getting an SF Merger GP20 and Nickel Plate GP30. The GP30 had the correct-size fuel tank, but I forgot that the NKP's GP30s had no dynamic brakes, so I added my own from an Atlas GP40 shell.

SPSF

Applegate Industrial Spur
Maple Subdivision
Kansas City Division
Eastern Region

Scale: HO (1:87)

Size: 27" X 29"

Locale: Southeast Nebraska

Era: Mid-1990s

Style: Shelf

Mainline run: 58 feet

Minimum radius: 30°

Minimum turnout: #6

Benchwork: foam on plywood shelf

Height: 44"

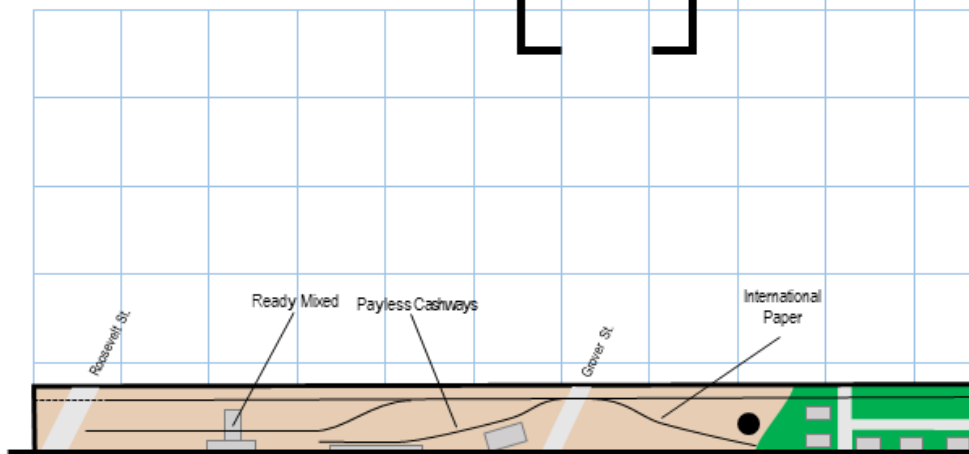
Roadbed: Cork

Track: Code 83 flextrack

Control: NCE DCC

24" grid

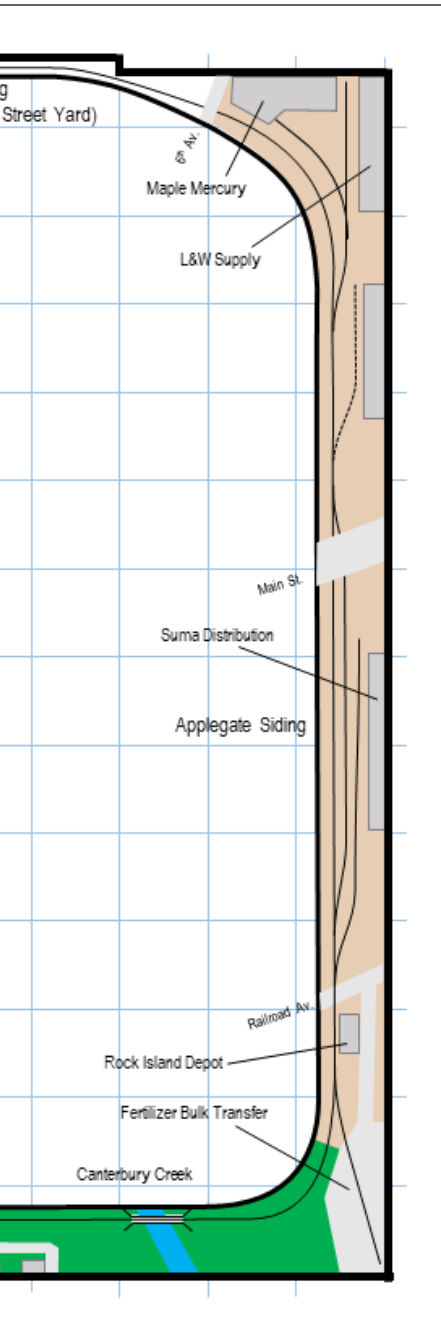
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3. The layout design.



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Looking at prototype photos, I decided to add three-chime Nathan horns, air conditioners, and antennas with stands to the cabs. I used a combination of leftover parts and parts from Details West for these. I did not add beacons because it seemed the Santa Fe started taking these off by the early 1990s, but I also left the front headlights on the top of the cab instead lowering them to the low short hood [4].

As part of its rebuild program, Santa Fe standardized and re-sized cab window sizes to simplify replacement parts inventory. I had to get rid of the GP20's large middle window to reflect this. I cut out the old window and filed it to fit the center windows from a B23-7 cab that I had on hand (and glazing that fit it).

Then I drilled a couple holes to add windshield wipers.

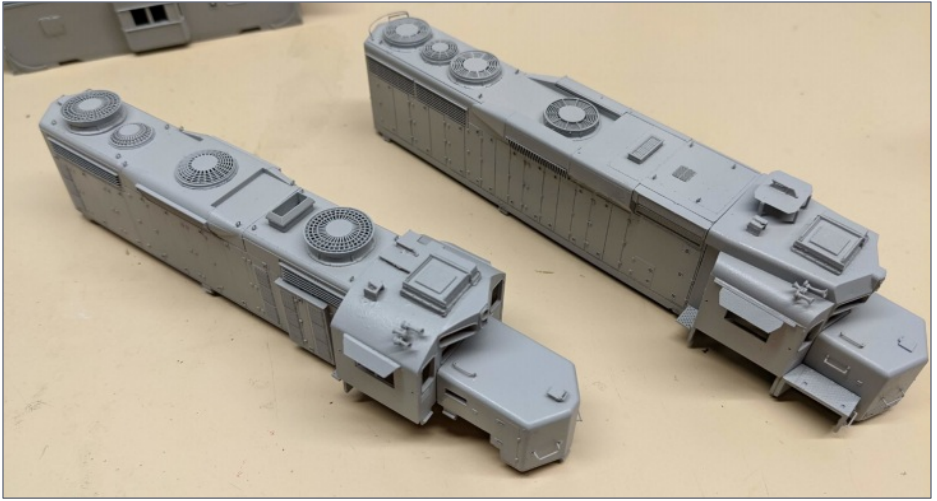
PAINTING

Painting took two days. On day one, I painted the primer and yellow [5]. On day two, I tackled the rest of the colors: masked yellow, painted primer again, then red, then masked the red and yellow, then painted black. Then I took off the masking and did a little touch-up painting with a brush [6].



4. I stripped much of the paint using 91% isopropyl alcohol, and added details. These models are ready for primer.





5. Here are the units in in primer gray. I also painted a Walthers bay-window caboose at the same time as a stand-in before the Athearn Genesis wide-vision with sound came out.

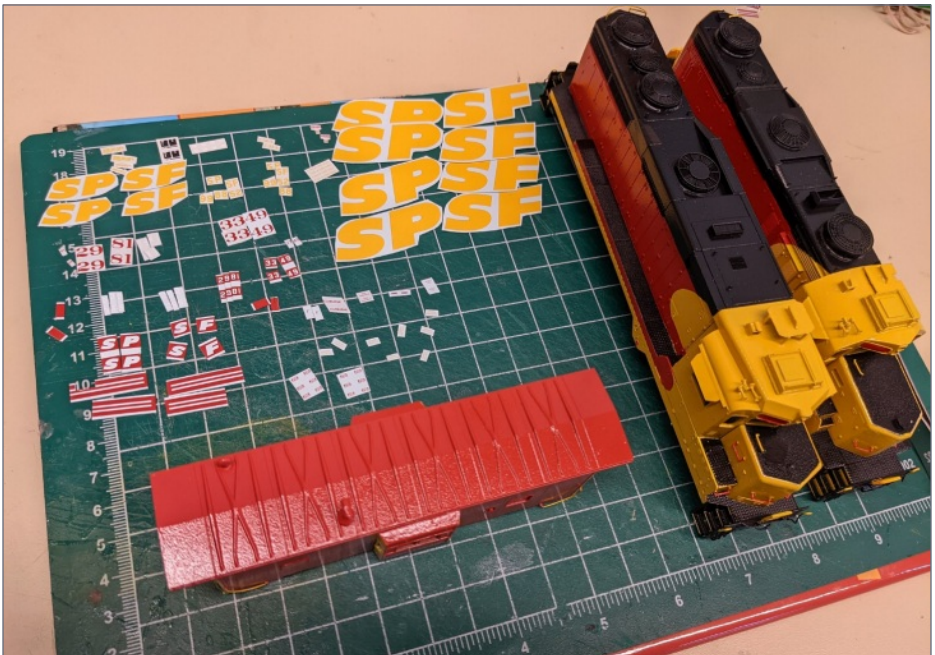


6. The result after painting.

DECALS

I used Microscale's newer SPSF decal sets, which seem to have better lettering than in the past. The letters now are a little more "squished" down and flatter. I used two sets: 87-1520 (SP) and 87-1521 (SF). These sets also have decent diesel data, and the smaller lettering was good for the caboose [7].

I found two prototype photos of Santa Fe GP20s and GP30s near my locale in my era. I noted their numbers, but then renumbered them according to the SPSF renumbering scheme as published in Joseph W. Shrine's 1986 book: *SPSF Motive Power 1986: Southern Pacific and Santa Fe Prepare to Merge*. The GP20u became 2981 and the GP30u, 3349.



7. Preparing to apply decals.



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A TALE OF TWO LOCOS | 10

The decals went on easily, although the nose stripes were a pain to get straight while cutting out each individual letter. The billboard letters on the long hood were tricky, and getting rid of the bubbles took several applications of Walthers Solvaset. The results were sharp [8, 9, 10].



8. The letters are a snug fit on the GP20 hood.



9. The letters look a little less crowded on the GP30 hood.



10. And don't forget the little red caboose, who always comes last!

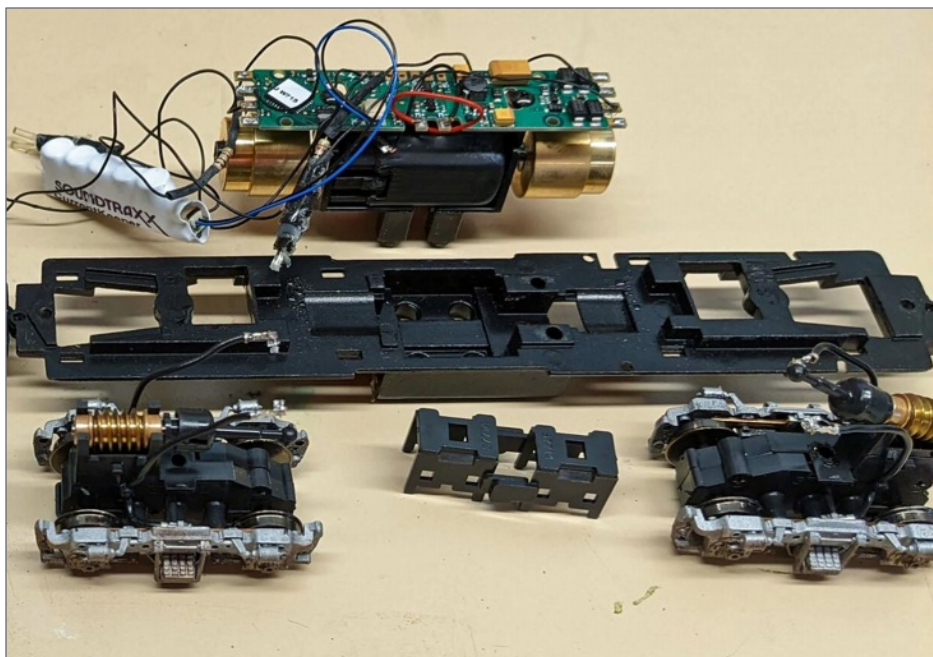
REPOWERING THE LOCOMOTIVES

Lifelike Proto 2000 locomotives have a reputation for developing cracked split gears in their trucks, and many find their drives to be dated. To address these issues, I planned to re-power these locomotives with the Kato trucks and drive, including drivshafts, from an old Stewart Hobbies F unit.

I didn't bring the parts directly over from the old Stewart. Before this project, I already had upgraded a Front Range GP9 and Athearn CF7 with Kato trucks and drives for an earlier layout. I decided to use these parts for the new locomotives and save the shells for possible future use.

I had based the GP9 and CF7 on former SPSF locomotives that had been patched with the shortline's markings, so the trucks were already painted silver, and weathered. I had even installed SoundTraxx Tsunami2 and Econami DCC sound decoders. Everything would transfer right over to the GP20u and GP30u, including the SoundTraxx mini-cube and iPhone speakers I had used [11].





11. Here is a photo of the parts before I cut up the frame to accommodate the Kato motor, flywheels, and drive.

I needed to mill out the Proto 2000 frames to accept the slightly larger Kato drives, and to give the trucks more room to maneuver [12, 13].

FINISHED PRODUCTS

With the Kato drive and truck assemblies in the Proto 2000 chassis frames, I glued the speakers, lights, and CurrentKeepers in the shells using silicone acrylic latex caulk, then attached the shells and added the couplers.

Now these diesels are ready for service on the new SPSF Applegate spur layout! I just need to work on that. [14, 15]. ☑

See the following pictures ...



12. The frame after milling to accommodate the Kato motor and flywheels. The larger flywheels need space to spin without rubbing on the frame. I also milled space for the Kato gear towers to swivel, as they are wider than the original Life-Like ones. *James Regier, photo*



13. The drives and trucks fit nicely after I milled the chassis.



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14. GP30u 3349 idling in front of the future Applegate suburban neighborhood.

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ERIC MILLER



Eric got into model railroading just before high school. He started working on a prototype-free-lanced concept, based on the fictional Maple.

Following college, Eric began modeling the SPSF in 2005. He built the proto-lanced SPSF Meadow Sub in 2010, then a small switching layout. Now he is working on a new freelanced shelf layout based on the SPSF in Maple, Nebraska.

Eric lives in the Denver, CO area with his wife Heather and two daughters (who help with scenery and operations). He works at a transit planning consulting firm. ■



**15. GP20u 2981 with
a boxcar in tow.**



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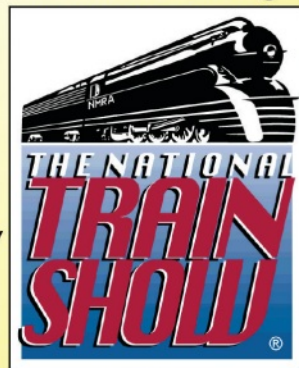
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Lilacs, Crepe Myrtles, and Roses



Model Railroad Hobbyist | August 2022



STEVE GILLETT USES SCRAP WIRE TO CREATE REALISTIC SHRUBBERY ...

RATHER THAN GLUING DOWN GREEN FOAM TO REPRESENT BUSHES OR shrubs, you can create realistic ones with minimal effort. Using scrap wire, ground foam, and inexpensive materials you can find at your dollar store, you can build them in about 10 minutes. Follow along as I show you how I make lilacs, crepe myrtles, and roses.

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LILACS AND CREPE MYRTLES

Lilacs are stunning bushes that can grow into small trees, and are found all over the northern USA. If your layout is in a southern clime,

then crepe myrtles are very similar in appearance. Both produce vibrant flowers in a variety of colors including white, lavender, pink, red, and crimson, and the technique is the same for both.



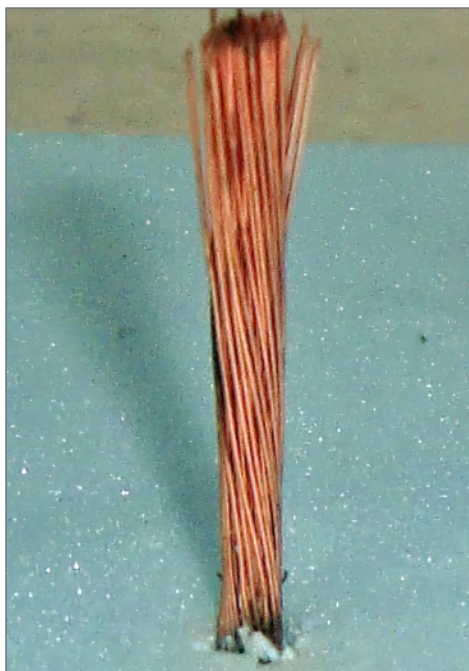
1. These lilacs started off as #12 wire.



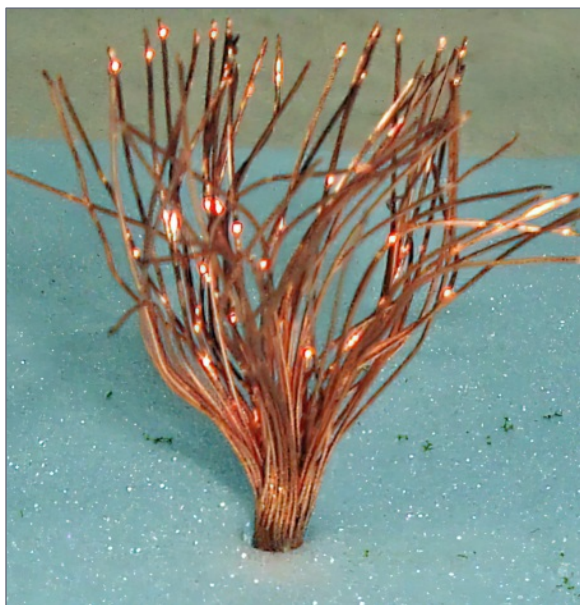
2. #12 stranded wire. This “zip cord” is used for bus wires under an NTRAK module. Strip 1/4” of insulation, then tin the wire with solder.



3. For N scale scenes, cut the wire between 1 and 1-3/4 inches. For HO scale, cut the wire between 1-5/8 and 3”. Not counting the 1/4” tinned portion, this will make bushes 10-20’ tall.



4. Grasp the tinned end of the wire with needle nose pliers and pull off the remaining insulation.



5. Using your fingers, spread the wire strands into the rough shape of a bush or tree. Use rail nippers to prune the bush armature so the strands are shorter on the sides than on top.



6. When you have your desired shape, spray the armature with gray paint to represent bark.



7. Fill a small container with fine green turf.



8. Hold the soldered armature tip with paper-towel-wrapped needle nose pliers and spray it with adhesive. Dip the tree into the turf and move it around for even coverage. Shake off the excess.



9. When the adhesive is dry, dab the tips of the branches with nail polish to represent blooms. When the nail polish dries, do the final shaping of the branches.



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10. Drill 1/8" holes and plant the trees into your scene.

ROSES

The process for creating rose bushes is similar. Instead of heavy #12 wire, this time use the very fine #30 wire that comes with hard-wired decoders. These wires only have about six strands. The process is similar as for the lilacs, but with adaptations to accommodate the fine strands.

Strip and tin $1/4''$ of wire. Cut the wire so its total length is $5/8''$ for N scale or $1''$ for HO scale.

To plant the roses, you can either drill a hole with a #72 bit to accommodate their tinned base, or you can simply glue them to the surface without drilling and cover the base lightly with dirt. The second option is much easier, and I cannot tell the difference. ☑



11. Use a hemostat wrapped in paper towel to hold the base of the wire. Spread and prune the filaments to the desired shape. Spray the strands medium to dark green to represent the rose stems.





12. Spray with adhesive. The wire strands of #30 wire will not hold their shape if you dip them in ground foam. Use a salt shaker to sprinkle the foam on instead, rotating the rose bush for uniform coverage. Shake off the excess.



13. When the adhesive has dried, apply red nail polish to the tips to represent rose buds. When the polish is dry, you can give the bush its final shape.

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SUPPLIES NEEDED

- 12-gauge stranded wire (for lilacs)
- Decoder wire (for roses)
- Gray spray paint
- Spray adhesive
- Green ground cover
- Nail polish (lavender, white, pink, red, or crimson)

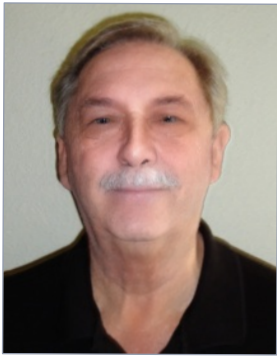
TOOLS NEEDED

- Soldering gun or soldering iron
- Needle nose pliers
- Rail nippers
- Wire cutters
- Salt shaker

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STEVE GILLETT



After a career as an engineer in the petroleum industry, Steve retired and moved to Tulsa, OK where he was able to actively pursue his long-time interest in model railroading. He has been a member of the NEONS (North East Oklahoma N-Scalers) since 1999 and has either built or participated in the building of many of the club's NTRAK modules, all of their power boxes and all of their storage cabinets. His NEONS

title is Minister of Modules.

Since 2011, Steve has been writing and publishing articles in *N-Scale* magazine, *N-Scale Railroading* magazine, *N-Trak Newsletter* and the *NMRA Layout Design SIG Journal*.

Tulsa has a roving band of model railroaders dubbed the Tuesday Night Gandy Dancers. Steve is active in this group that helps Tulsa area modelers build their home layouts.

In Tulsa, Steve is on the committee that has hosted the Annual Tulsa Layout Design & Operations Weekend for the past 12 years.

Steve, who is nicknamed "Razor", is the owner of the Spaendahl Yamánee & Densum (SY&D) railroad, an operations-oriented, 10½' x 13½', tri-level, N-scale, semi-prototypical home layout. ■

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LOOK

column

Model Railroad Hobbyist | August 2022



Spring Mills Depot DODX 68' Transport Flat Car, Conexes, and Tie-Down Chains

**JEFF SHULTZ SHOWS US A MODEL SEVEN
YEARS IN THE MAKING ...**

IN THE LATE 1970S - EARLY 1980S, the US Department of Defense needed flat cars suitable for carrying two of the recently developed M1 Abrams tanks, which weighed 60 tons each, with planned future versions weighing up to 73.6 tons.

From this requirement came the DODX 40000-series 68' transport flat car. Equipped with three-axle Buckeye trucks, the cars had a light weight of about 46 tons, and could carry a load of 150 tons.

They were constructed in several batches. Fruit Growers Express built the first cars, numbered 40000 to 40099, in 1981.

FIRST LOOK | 2

Thrall built the second, 40100-40299, in 1983. Ortnor built the third, 40300-40549, in 1985. GRE built the fourth batch, 40500-40599, in 1987.

The FGE cars differ from the later batches in several details. While the FGE cars feature a 10'-3" deck with curved edges and a side sill that angled inward from top to bottom, the Thrall, Ortnor, and GRE cars have 10'-5" decks with sharp edges and vertical side sills.

Other differences between the FGE cars and those from the other manufacturers include the location of the brake lines, the number of tie-down channels in the deck, and the triangular deck support brace construction.

The 40000-series cars are generally equipped with either an Ellcon Model 7900 lever brake or the Wabtec Model 9020. The cars include 12 removable container cleats, which can be flipped over and stored flush with the top of the deck. The cars are routinely equipped with 36 tie-down chains, and prior to 1992 they were equipped with up to 50 chains.

Another spotting difference is that the trucks on the FGE cars are oriented opposite each other, pointing inward. The other manufacturers have the trucks oriented in the same direction, away from the car's B-end.



1. The FGE body style (top) in Cascade Green was built in 1981 and repainted after 2001. The Ortnor body style (bottom) with the as built olive green paint scheme was built in 1985.



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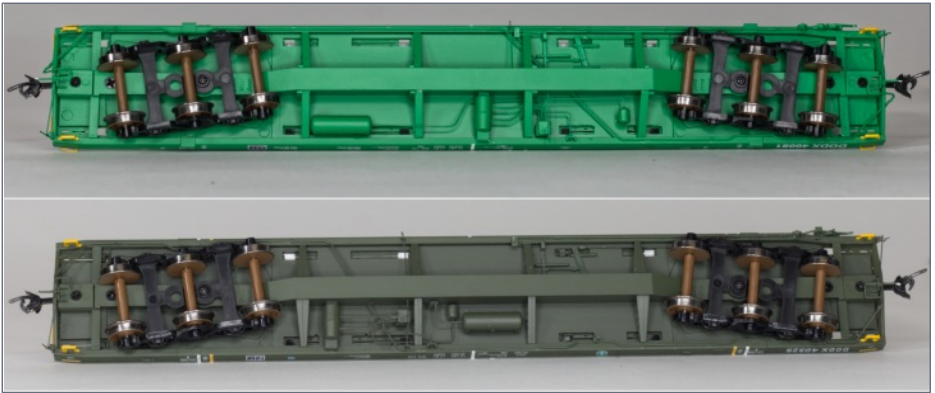
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FIRST LOOK | 3

A few cars were built for special purposes, such as buffer cars for nuclear material transport trains, which have flat decks. Five of the FGE cars were reassigned for Navy service, with additional GRE cars purchased to replace them in the DODX collection.

MRH received two versions of the DODX 40000 cars from Spring Mills Depot – an FGE-built DODX 40081 and an Ortner-built DODX 40329. The FGE car is painted in a post-2001 scheme



2. The two body styles have different brake setups, with the train line crossing through the center sill at different locations.



3. The two car designs have different end plates, with the train line passing through the car end on the FGE car.

described as “Cascade Green” which is a brighter green than the paint scheme of the same name used by Burlington Northern Railway. The Ortner car came in the as built (1985) olive-green scheme. Each deck measures 68’ scale feet from end to end.

Spring Mills Depot is offering the basic FGE, Thrall, Ortner, and GRE cars in three different paint schemes, olive green, urethane green, and Cascade Green. Multiple numbers are available for the FGE, Thrall, and Ortner cars, with one number in olive green and urethane green offered for the GRE body style.



4. This picture shows the 20' Conex seated in the container cleats and the Ellcon Model 7900 hand brake lever on the Ortner car.



5. The FGE car features the Wabtec Model 9020 hand brake lever.

Additionally, unnumbered FGE, Thrall, and Ortner cars are offered in each paint scheme. Four numbers of the GRE flat deck buffer car and two of the Navy materials cars are also available. A total of nine separate body styles are offered.

The models feature newly tooled three-axle Buckeye trucks, oriented per the prototype, which are also available separately. The wheels and axles are painted brown for a rusty appearance. Out of the 24 wheelsets on the two models, two measured as too narrow on an NMRA standards gauge, but were easily adjusted into gauge.

The models feature genuine Kadee couplers, separately applied details, and 12 separate container cleats. The car weighs 4.7 ounces, which is about an ounce light for its length per NMRA recommended practice 20.1, but that is easily made up with a load.

Also newly released from Spring Mills Depot are 20' Conex, Tricon, and Quadcon containers. The 20' Conex is like a 20' ISO container and includes forklift slots in the base. The Tricons and Quadcons are smaller containers, which can be connected to others of the same size to create a single item that fits in the same footprint as a 20' container.

Molded of plastic, only the 20' Conex has a floor – the others are open on the bottom. The Tricon/Quadcon connectors are very small, and Spring Mills Depot offers replacements separately.

The containers received by *MRH* are in an olive-green scheme and are offered in three combo packs of olive green and three of desert sand, with each pack featuring different numbers on the containers. The 20' containers are also available in separate three-packs with marine gray, brown, and patched brown containers in each pack.

Spring Mills Depot has also released 20-packs of rust-colored tie-down chains. Each pre-assembled chain includes a slip hook, length of chain, locking sleeve, compression unit, jam-nut, turnbuckle gear, and anchor cleat. They measure approximately eight scale feet in length.



6. The container pack includes a 20' Conex, three Tricons, and four Quadcons. The Tricons and Quadcons can be separated and rearranged.



7. Spring Mills Depot's tie-down chains are eight scale feet in length and are assembled from nine separate pieces.



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8. The central channels on the car decks are not glued down to facilitate gluing the cleats on the tie-down chains into them.

Available from the Spring Mills Depot website at www.springmillsdepot.com, the cars are \$64.95, the container three-packs are \$49.95, the tie-down chains are \$39.95, the trucks are \$12.50/pr, and the container connectors are \$1.00 for four. A DODX car number decal sheet is also available for \$2.00. ☑

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Sound and light upgrade for Athearn diesel

YouTuber **Andy Dorsch** upgrades a Athearn “Yellow Box” Genesis Wisconsin Southern F45 by adding an ESU LokSound decoder and some nice enhanced lighting. Running time: 30 minutes.

One important note: Avoid blue can CRC, metal surfaces will get dirty again fast after cleaning. Much better is the green can CRC (look for Protectorant): [see this shopping list link](#).

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AUGUST NEWS

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Model Railroad Hobbyist | August 2022

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



NEW CLUB CARS

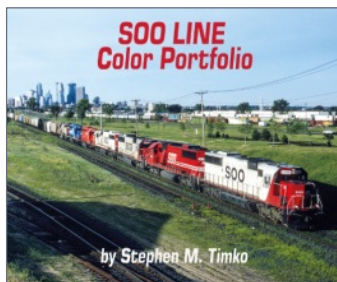
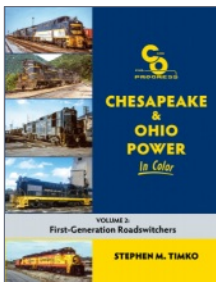


The **River City Modelers** of Spokane, Washington, are selling a specially decorated HO scale kit for an ACF

triple-bay covered hopper car. The model is a basic Accurail kit with the addition of steel wheels and Kadee couplers.

Info: www.rivercitymodelers.org/store.html

NEW PRODUCTS FOR ALL SCALES



New books from **Morning Sun** include *Chesapeake & Ohio Power in Color, Volume 2: First Generation Road Switchers*. Edited by Stephen Timko, this 128 page hardcover book presents the

C&O's large fleet, from over 560 GP7s and GP9s, to a small roster of Baldwin and Alco units.

THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS

Timko has also edited *Soo Line Color Portfolio*, a 96 page softcover book that features the distinctive red and white locomotives, freight cars, and early wine-colored equipment of the Soo Line. Caboosees, passenger and freight trains, and some structures are included in this full-color collection.

Info: morningsunbooks.com

S SCALE PRODUCT NEWS



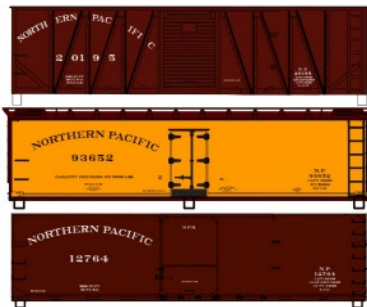
P-B-L is selling an Sn3 kit for a 32' skeleton log car. The model accurately replicates the narrow gauge cars built by Pacific Car & Foundry for the Swayne/West Side Lumber Company. For maximum tracking capability the well-detailed model is cast in zinc.



Also available from P-B-L is an Sn3 scale kit for caboose No. 1 of the Swayne/West Side Lumber Company. The kit includes appropriate trucks and couplers, and pre-formed wire parts including cut levers.

The trucks supplied with both the log car and caboose come with nickel plated brass ribbed-back wheelsets with coined Griffin Denver faces.

Info: www.p-b-l.com



HO SCALE PRODUCT NEWS

Hobbyists who model the Northern Pacific will be pleased with **Accurail's** release of a special 3-car group of HO scale kits for NP cars. The selection of 40' cars includes a single-sheathed wood boxcar with



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steel ends and Youngstown sliding steel doors, and a double-sheathed wood boxcar with wood doors. Completing the trio is a wood sheathed reefer with ice bunkers and 4' swing doors.



Accurail has also released a kit for a 40' single-sheathed wood boxcar decorated for Ann Arbor. The HO scale model is based on

a prototype built in August 1934.



The kit for this 40' riveted steel boxcar with double doors was inspired by a Soo Line prototype built in 1937.

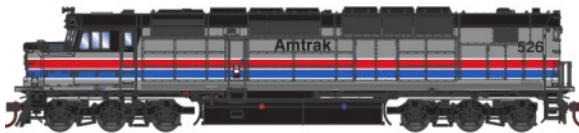


Completing Accurail's recent release of HO scale kits is a USRA twin-bay hopper decorated for the Toledo & Ohio Central, a subsidiary

of New York Central. All Accurail kits come with AccuMate knuckle couplers and appropriate trucks with Delrin wheels. Info: www.accurail.com



Hobby retailers are booking advance reservations for new HO scale locomotives coming from **Athearn** in September 2023. Heading the list is a Genesis SDP40F.



EMD's demo unit and SDP40Fs decorated in Amtrak Phase II scheme will have oscillating headlights, illuminated number board lights and working truck lights.



Southern Railway and Santa Fe SDP40Fs will have similar details plus air conditioning units.



A BNSF locomotive will also be available in this production run.



R. Bale

SD70ACe

EMD developed the SD70 series of diesel-electric locomotives to counter GE's popular Dash 9-44CW.

More than 5,700 SD70 units have been produced since production began in 1992, with most being SD70M and SD70MAC models. The SD70ACe is the successor to the SD70MAC with several design changes to comply with emission standards. The SD70ACe engine features fewer components in the inverter and functions with 15 percent lower internal pressure to significantly reduce emissions. Tier 2 versions of the SD70ACe are rated at 4,300hp. Subsequent Tier 3 models are rated at 4,500hp.



Athearn's September 2023 production schedule includes a Genesis SD70ACe

locomotive. Road names will include Union Pacific units both with and without the American flag.

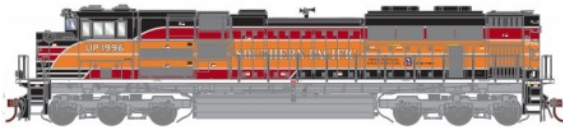
To honor some of the roads it had absorbed, in 2005-2006 the Union Pacific unveiled SD70ACe locomotives with unique heritage paint schemes for Denver & Rio Grande, Chicago



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Tsunami2 sound and dual cube speakers.

North Western, and Southern Pacific. Athearn will offer these locomotives numbered after the years in which the mergers took place, or, in the case of the DRGW unit, the year that Rio Grande Industries acquired the assets of Southern Pacific.

Additional road names will include Norfolk Southern, Kansas City Southern, Montana Rail Link, and Ferromex.

Athearn Genesis sound equipped models of the SDP40F and SD70ACe will have a factory installed DCC decoder with SoundTraxx





R. Bale

DASH 9 C44-9W LOCOMOTIVE

General Electric introduced its C44-9W demonstrator in 1993. Dubbed the Dash 9, the 4,400hp six-axle diesel road switcher proved to be a major success with more than 3,500 units being built through 2004. A new alternator resulted in 4,400hp – thus determining the locomotives designation. The Dash 9 was the first production locomotive to have a wide North American Safety cab as standard equipment. While similar in appearance to its C40-8 predecessor, the C44-9W was built on a slightly longer platform to accommodate a massive 5,000 gallon fuel tank. Another spotting feature is the thicker radiator wings at the rear of the car body. Improvements over the C40-8 include a more reliable braking system, updated electronics, a larger engine radiator cooling system, and improved high-adhesion trucks. The Dash-9 was superseded in the early 2000s by GE's Evolution Series locomotives.



versions of General Electric's C44-9W diesel electric locomotive.



Canadian National, and Hamersley Iron.



Athearn's September 2023 production schedule includes HO scale sound-ready

Road names will be BNSF, BNSF Heritage II, Southern Pacific, Union Pacific,

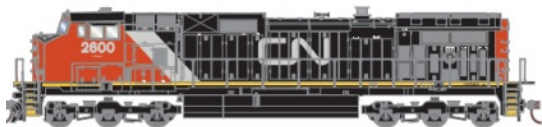
Applied details on Athearn's C44-9W locomotives including horns, pilots, rear



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models will be sound-ready with a pre-installed speaker and a 21-pin DCC plug.



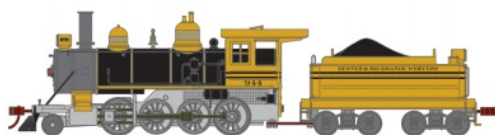
based on an insulated prototype introduced by North American Car Corporation in 1964. The cars were seen nationwide through the 1990s.



Jersey, and Penguin Ginger Ale. The model will have separately applied metal grab irons, etched metal end platforms and 70-ton trucks with 33" machined metal wheels.



HO scale Consolidation is an updated version of a model Horizon Hobby acquired with the purchase of Model Die Casting in 2004. This latest version will have bi-directional constant LED headlights, and a DCC-ready 21-pin plug.



Railway, and Virginia & Truckee.

A 40' stock car will be available from Athearn in September 2023. The HO scale model represents a wood side prototype

grilles, antennas and truck selection will all be road-name specific. The economy priced DC

HO scale freight cars coming from Athearn in the fall of 2023 include a NACC 50' plug door boxcar. The model is

Road names will be Delaware & Hudson, Hamm's Beer, Dresser Magcohar, Alumax, Central of New

Athearn's September 2023 production schedule includes a 2-8-0 steam locomotive. The

Decorating schemes will be Union Pacific, Great Northern, Denver & Rio Grande Western, Southern



with a metal roof, running boards, full height ladders, and steel Dreadnaught ends. Road names will be Santa Fe, Chicago North Western, Denver & Rio Grande Western, Great Northern, Missouri Pacific, and Texas & Pacific. The model will have Bettendorf solid-bearing trucks with machined metal wheels.



Athearn's September 2023 production schedule includes a 50' 5077 cu. ft. box car with double Youngstown sliding doors. The model will come with separately applied grab irons, a photo-etched cross-over platform, and 33" machined metal wheels. Road names will be Southern Pacific, C&O Chessie System, Western Pacific, White City Terminal Railroad, Amador Central, and Longview, Portland & Northern.



Fifty-foot Overland style passenger cars from the truss-rod era with open end platforms and clerestory roofs are included in Athearn's fall 2023 production schedule. The HO scale cars will be available in four-packs that include an RPO, combine, coach, and business car. Individual coaches will also be available. Road names will be Union Pacific, Denver & Rio Grande Western, Great Northern, Southern Railway, and Virginia & Truckee.



Completing Athearn's September 2023 list of new products is a 40' truck chassis. The model will have rubber tires, decorated mud flaps, and positionable landing gear. Carrier names will be American President Lines, Flexi-Van, TRAC Intermodal, Genstar, K Line, and Mitsui OSK Lines.

Info: www.athearntrains.com



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Atlas has announced an HO scale model of the Motive Power Industries MP-36 locomotive. Part of MPI's MPXress line of locomotives, the model will represent the MP36PH-3C, of which 100 were built. 27 MP36PH-3S locomotives were converted to the MP36PH-3C standard.



Road names for the MP36 will be Metra, Metra (Milwaukee Road Hiawatha), Metra (Rock Island Heritage), MBTA, Metrolink, and West Coast Express. The models will be available in both Gold with ESU LokSound Sound and DCC and Silver with pre-installed speakers to facilitate adding a sound decoder.



All models will feature golden-white LEDs, a die-cast underframe, ditch and cab lights, metal knuckle couplers, a detailed cab interior, and separate windshield wipers, metal grab irons, scale hand rails, coupler cut levers, MU hoses and trainline hoses.



To accompany the MP36 models, Atlas is also taking orders for Nippon Sharyo Type 8500 cab cars and Type 6000 trailers. Delivered to Metra between 2002 and 2008, there are 200 of the bi-level cars in its fleet. Other commuter railroads have purchased variations on the two cars.



The cars were designed from prototype drawings with Metra's cooperation and feature

directional LED headlights, ditchlights, and red marker lights. The interior includes seat details and LED lighting. The cab car is detailed with a separately applied air horn and antenna. The cars have a 21-pin plug for an optional DCC decoder, a speaker mount, free-rolling metal wheels, and metal couplers. 22-inch minimum radius curves are recommended.

Info: shop.atlasrr.com



Bowser has released a group of ready-to-run HO scale 40' steel side boxcars. Cars with single Youngstown sliding steel doors will be available for Delaware &

Hudson, D&H (Blue Coal), Boston & Maine, Linde Liquefied Gases, and New Haven.



Cars decorated for Great Northern and the Duluth, Winnipeg & Pacific Railway have double Youngstown doors.



Road names for boxcars with Superior steel doors include Burlington, Chicago Great Western, Western Pacific, and Texas & New Orleans. Three

numbers will be available for each road name. Bowser's HO scale ready-to-run models come with knuckle couplers and appropriate trucks with metal wheels.

Info: www.bowser-trains.com



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R. Bale

GE EVOLUTION SERIES LOCOMOTIVES

The Evolution Series are six-axle 4,400hp diesel electric locomotives specifically designed to comply with the regulations of the US Environmental Protection Agency. The GEVO series replaced GE's Dash 9 and AC4400CW models. The locomotives are similar in appearance to their predecessors, with the main difference being a larger radiator section in the rear third of the engine. The radiator includes a GEVO exhaust particle filtering unit fitted in front of the actual radiator vents. In addition, the radiator extends all the way to the rear end of the locomotive. Several versions of the basic ES44 have been produced including the following:

ES44AC: successor to the AC4400CW.

ES44DC: successor to the C44-9W.

ES44AH: a heavily ballasted ES44AC built for CSX and Union Pacific.

ES44C4: an A1A-A1A trucked version with the center axle unpowered.

ET44AC: Slightly longer Tier 4-compliant version of the ES44AC.

ET44C4: Tier 4-compliant version of the ES44C4.

ES40DC: 4,000hp version custom-built for NS and CSX.



Broadway Limited has released a GE ES44AC equipped with Paragon4 sound and DCC and integral GoPack capacitors. The HO scale locomotives include all-

wheel electrical pickup, and numerous separately applied details including handrails, grab irons, horn, bell, windshield wipers, and etched metal grills. The headlight, rear light, cab light, number board lights, and front ditch lights are all individually controllable.



Road names include BNSF, GE Demo, KCS, Union Pacific.



Three Norfolk Southern schemes are available including NS Pennsylvania Heritage, and NS Southern Railway Heritage.



CSX Pride in Service decorating schemes include Veterans, Law Enforcement, and First Responders.



Broadway Limited also offers the ES44AC in pure fantasy schemes for Great Northern Empire Builder, Canadian National, Union Pacific TTG, Southern Pacific, and two

Santa Fe schemes: Zebra stripe and Black Bonnet.

Info: www.broadway-limited.com



ClassOneModelWorks.com has announced that its first product will be the Thrall TWF10 DTTX standalone well car, a double-stack intermodal car designed to carry 48' or smaller containers on the bottom layer and equal or larger containers

on top. Only 75 of the prototype cars were built, and they used Waggon Union trucks, resulting in a unique low-slung appearance.



The models will be cast metal, with etched metal

detailing and full brake system details. The models, with an anticipated arrival date of Fall 2022, will be available in as-delivered (early 1990s), intermediate (2000s), and late (current) paint schemes. ClassOneModelWorks.com believes there are still 15 of the cars in use.



ClassOneModelWorks.com is also taking pre-orders for Hyundai and Monon 48'

exterior post containers. Available in single or two-packs, the exterior post containers were introduced in 1986. The Monon roof overhangs the top structural channel with the forward corners notched at 45 degrees. The Hyundai container includes an additional water drainage channel near the front end and full-height vertical framing members.

Both containers feature detailed cast door locking bars, latching mechanisms, door bumpers and an angled bar lifter. Info: classonemodelworks.com



Eastern Seaboard Models has announced an October/November release date for HO scale State of Maine XIH

class boxcars. This release will include both the Magor and PC&F body variations. Details include etched brass running boards and brake wheel platforms. ESM reports the red, white and blue models will have more than 100 individual detail parts.



ESM's New Haven New Image PS-1 boxcar, being produced by Atlas, is expected to be available

late this month.

Info: www.esmc.com



InterMountain has released a new production run of HO scale 40' PS-1 boxcars. In addition to MKT, road names are Norfolk

Western, Mississippi Central, Port Huron & Detroit; Central Railroad of New Jersey, Ann Arbor, Lake Superior & Ishpeming, Louisville & Nashville, Columbus & Greenville, and Frisco.

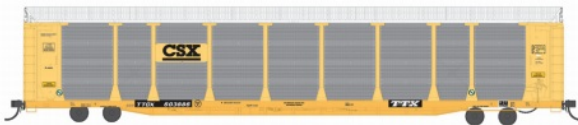


Santa Fe cars will be available wearing slogans for the Chief, Grand Canyon, El Capitan, and Super Chief.



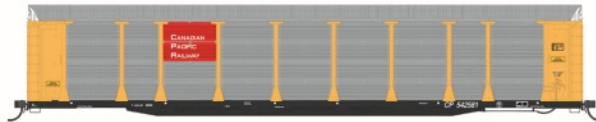
InterMountain Railway is booking reservations for a future release of HO

scale bi-level autoracks. The ready-to-run models feature etched metal see-through side panels, positionable end doors, metal couplers and 33" metal wheels.



Racks mounted on TTGX flatcars will be available for Southern Pacific, CSX,

Ferromex, Conrail and TINX.



Road names with matching flatcars will be available for Canadian National,

Canadian Pacific, and BNSF.

Info: www.intermountain-railways.com



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Kadee's latest release is a 40' PS-1 boxcar decorated for the Central Railroad of New Jersey. The model faithfully replicates a car built by Pullman-Standard in 1957. Like the prototype, Kadee's HO scale version has 8' P-S doors and the distinctive Pullman-Standard ends. Surface details including grab irons, ladders and brake gear are all separately applied. The see-through running board and brake wheel platform are finely detailed castings. The model comes with Kadee couplers and ASF A-3 Ride-Control trucks with 33" metal wheels.
Info: www.kadee.com

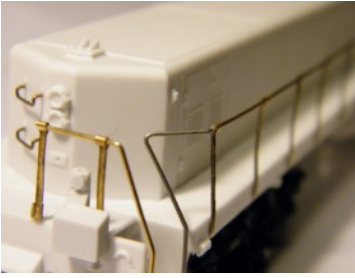


Leadville Designs plans to release a prototypically accurate body kit for a Norfolk & Southern class H-9 twin-bay coal hopper late this month. The body of the HO scale model is composed of etched brass and nickel silver components. The spine, doors, and bay inserts are brass castings. Correct decals are included in the kit. Trucks and couplers are not included in this HO scale kit.

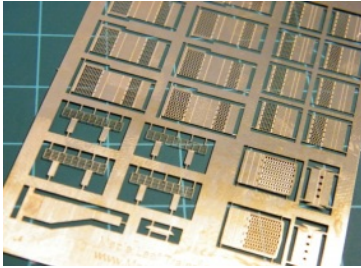
Info: leadvilledesigns.com



Maple Leaf Trains has released a resin body kit for modeling a GP9 slug. The HO scale model is based on Canadian National units numbered 215-241.



The kit includes a resin body shell and individual resin detail parts, etched-metal parts, formed wire grab irons and handrails, frame and underframe components. Special details include two air tanks, air filter, MU power cable connectors, and etched-metal stanchions.

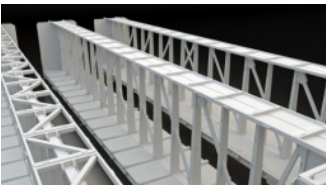


The kit does not include trucks, mechanism or weight.
Info: www.mapleleaftrains.com



Steel Car beginning in 1987 and continuing into the mid-2000s.

Rapido Trains continues to expand its selection of exceptionally well-detailed HO scale freight cars. The latest addition is a 73' centerbeam flatcar that closely replicates prototype cars built by National



Details include rubber air hoses, fully detailed underbodies, metal grab irons and coupler lift bars.



To replicate the minor changes NSC applied over the years, Rapido will offer models with multiple ratchet configurations on the side sill, two deck configurations, two underbody



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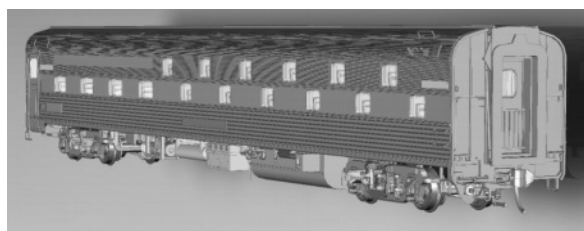
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configurations, multiple end cage variants and brake stand options, multiple top truss configurations including early Z pattern and standard closed pattern with and without tie-down brackets.



Paint schemes available on the initial release will BC Rail, Canadian National, Mississippi Delta – MSDR, Trailer Train – TTX, BNSF, CP Rail, and Northwestern Oklahoma – NOKL. Availability is TBA.



A note from Rapido founder Jason Shron informed *MRH* that the HO scale Budd Slumbercoaches announced last year (see *MRH* October

2021) are in jeopardy of being cancelled. Pre-production reservations were below minimum quantities to justify the cost of completing the production tooling. According to Shron, some people told him "I already have one." While it may be true that almost everything has been done before, you can't compare an inexpensive model made 20 or more years ago with today's state-of-the-art model trains, especially the detail-laden models produced by Rapido. Although a production date is pending, Rapido and Rapido dealers will continue to accept reservations for the HO scale Slumbercoaches.

Info: rapidotrains.com



ScaleTrains plans to release a new production run of HO scale Rivet Counter ET44 GEVO



R. Bale

BUDD SLUMBERCOACHES

The Slumbercoach is an 85' 24 single room, eight double room lightweight sleeping car built by the Budd Company. The Slumbercoach was an effort by the railroads to recapture market share lost to airlines, buses and the automobile by providing upgraded accommodations for non-first class passengers.

Slumbercoaches had a central aisle flanked on each side by one-person and two-person rooms with one or two narrow, six-foot-long beds provided with basic sheets and blankets. Each room featured a fold-away wash basin and private toilet similar in design to contemporary standard Pullman, but on a smaller scale.

To maximize the number of rooms per car, the designers chose a duplex or staggered design for the single rooms such that every other room was accessible by a small flight of steps. This allowed beds in the car to either overlay or underlay the room in front of it and resulted in the unique staggered pattern of the view windows.

Budd built the first Slumbercoaches in 1956 for the Chicago, Burlington & Quincy for service on the Denver Zephyr. Subsequent orders were placed in 1958 and 1959 by Baltimore & Ohio, Missouri Pacific, Northern Pacific, and New York Central. A total of 18 Slumbercoaches were built. In the 1970s and 80s, the entire fleet of Slumbercoaches went to Amtrak where they were upgraded for head end power. Most lasted into the mid to late 90s when they were finally retired and replaced with more modern equipment such as the Superliner II and Viewliners.

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locomotives this month. A late addition in this release is CSX locomotive No. 3440, the *Spirit of Ravenna*.



Included in this release are two CN Veterans locomotives in a camouflage paint scheme honoring both Canadian and American Veterans. One side of

the locomotive reads *Thank You For Your Service*, in French, while the same phrase is repeated in English on the opposite side.



Canadian National units including CN Heritage units decorated for Wisconsin Central, Illinois Central, BC Rail, and Elgin, Joliet & Eastern will have ground lights, front and

rear ditch lights, and GE Hi-Ad trucks.



R. Bale

THE SPIRIT OF RAVENNA

In 2018, CSX sold nearly 50 acres of the former L&N Yard at Ravenna, KY to the Kentucky Steam Heritage Corporation, which is currently working to restore famed Chesapeake & Ohio 2-8-4 locomotive No.2716.

General Electric ET44 locomotive No.3440 was on display in Ravenna when the acquisition of the property was announced. In recognition of the partnership with the non-profit, CSX placed a special *Spirit of Ravenna* herald on No. 3440. The special decal features the Kentucky Steam logo accompanied by the Louisville & Nashville logo.

DISCLAIMER

The opinions expressed in this column are those of the writer and do not necessarily reflect the opinion of Model Railroad Hobbyist or its sponsors. Every effort is made to provide our readers with accurate and responsible news and information, however, neither Model Railroad Hobbyist or the writer of this column can be held responsible for any inaccuracies or typographical errors that may inadvertently appear in this column.



Union Pacific and BNSF locomotives will have ditch lights in the front and C4 A-1-A trucks with an idler center axle.

Additional road names in this release include Norfolk Southern, Kansas City Southern, and a GE Demo ET44 unit. Although similar in appearance to its ES predecessor, the ET44 is slightly longer to accommodate the larger radiator section at the rear of the locomotive. ScaleTrains exceptionally well-detailed Rivet Counter ET44 models will be available equipped with an ESU LokSound5 DCC decoder and two cube-type speakers. Also available are DC units with a 21-pin connector for installation of an aftermarket decoder.



ScaleTrains is developing an HO scale version of a Pullman-Standard 5820 cu. ft. quadruple-bay covered

hopper. The Rivet Counter model is based on a car P-S introduced in 1971 for plastic service. Availability is expected early next year.

Early versions of the nearly 70-foot car had a peaked roofline and 17 exterior posts. Later versions of the prototype featured Pullman-Standard's "clerestory" roof. Models with peaked roofs will be available for PTLX-Northern Petrochemical and PTLX-Norchem Billboard scheme.



Road names for cars with clerestory roofs will be GOCX-Gulf Oil, PLCX-Novamont, PLCX-Pullman Lease, XOMX-

Exxon-Mobil. Both roof styles will be available for gray cars with data only.

Info: www.scaletrails.com



Tangent Scale Models introduced a new HO scale Gundersen 6089 cu. ft. high cube boxcar with double plug doors at the St. Louis RPM held in



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Collinsville, IL July 29-30. The new model is based on a 50' 6" prototype built by Gunderson beginning in 1968.



Tangent has released the model in four road names including Southern Pacific with a bright yellow left plug door. This SSW-Cotton Belt version represents a prototype repainted in 1984.



Additional road names include Denver & Rio Grande Western and Golden West Service. Details on the new Tangent model include a Stanray roof, Dreadnaught ends, Hydra-Cushion underframe with metal brake rods and hangers, rubber air hoses, Kadee couplers, and 70-ton Barber S-2 trucks with 33" machined metal wheels with rotating bearing caps.

Info: www.tangentscalemodels.com



scale Mainline series model will be available with ESU Sound and DCC. DC units will have a 21-pin adapter plug.



Road name variations include 2 or 4 dynamic brake vents, high or low headlight positions, and three types of trucks: standard high-adhesion, steerable, and C4 A1A with center idler axle. Additional features include working front ditch lights, all-wheel drive and a five-pole skew-wound motor.



Walthers' ES44C4 decorated for BNSF represents the latest version of the prototype with C4 trucks and 2-vent dynamic brakes.



The CSX and UP versions in this release are based on ES44AH prototypes that received additional

weight and special high traction software.



Models decorated for Kansas City Southern del Mexico, Canadian Pacific and Canadian National,

including units in CN's 100th Anniversary scheme, are based on ES44AC prototypes with low headlights, 4-vent dynamic brakes, and Hi Adhesion trucks. Walthers' Norfolk Southern version is the only unit in this release with a high headlight.



The economy priced Mainline series model has molded drill starter points for grab irons that a

hobbyist can add using Walthers GE ES44 Evolution Diesel detail kit #910-250 which is available as a separate purchase.



Walthers has scheduled three new freight cars for release next month. First on the list is a Proto series 55' Trinity

30,145 gallon tank car. The model is based on prototype cars updated with reinforced ends, revised end platforms and multi-valve housing to comply with Federal Railroad Administration mandates.



Walthers HO scale version features photo-etched metal end shields, see-through etched-metal walkways and

end platforms, factory-installed grab irons, and roller-bearing trucks with 36" metal wheelsets.



Road names on this release will be TILX-Trinity Industries Leasing (available with both



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white and black tanks), SIOX-Siouxland Ethanol, CGTX-Rail Canada, DPRX-PBF Holding, STAX-Stauffer Chemical, PFCX-First Union Wells Fargo Rail, and BRGX-Bridger Rail Shipping.



Walthers has included a group of 50' Railgon gondolas in its September release. The HO scale Mainline model features

see-through load tie-down loops along the top chord, and 100-ton trucks with 36" metal wheelsets.



In addition to the GNTX-Railgon version, road names will include BNSF, Canadian

Pacific, Union Pacific-Chicago Heights Terminal Transfer, and CSX Transportation.



Mainline series 60' P-S flatcar. The HO scale model is based on the more than 4000 flatcars built by Pullman-Standard beginning in the mid-1960s.

Completing Walthers September release of new freight cars is a



The models are equipped with 70-ton roller-bearing trucks with 33" machined metal wheelsets.



Road names will be Alaska Railroad, BNSF, HTTX-TTX, Southern Railway, Illinois Central, OTTX-TTX, and VTTX-TTX configured for container loading. All Walthers HO scale rolling stock comes with Proto MAX metal knuckle couplers.

Info: www.walthers.com

N SCALE PRODUCT NEWS



insulated prototype introduced by North American Car Corporation in 1964. The cars were seen nationwide through the 1990s.



Penguin Ginger Ale. The model will have separately applied metal grab irons, etched metal end platforms and 70-ton trucks with 33" machined metal wheels.

Info: www.athearn.com

Athearn's September 2023 production schedule includes an N scale NACC 50' plug door boxcar. The model is based on an

Road names will be Delaware & Hudson, Hamm's Beer, Dresser Magcobar, Alumax, Central of New Jersey, and



Centralia Car Shops has released an N scale 4-4-2 sleeper decorated for BC Rail.



Centralia has also released an N scale 56 seat coach in a wide selection of road names including Chicago & North Western in Streamliner yellow.



Chicago, Burlington & Quincy cars are available in the Burlington silver scheme.



Northern Pacific cars are available in the green Pine Tree and Loewy schemes.



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Great Northern Coaches are available in Empire Builder, Big Sky Blue and

the green Cascade schemes. Additional road names are Union Pacific, Spokane, Portland & Seattle; and Ferrocarril Del Pacifico. Centralia's 4-4-2 sleeper and 56 seat coach come with Micro-Trains couplers and trucks with InterMountain metal wheels. Info: www.intermountain-railway.com



Jacksonville Terminal Company

has released several new schemes for the 40' standard corrugated container. In the Evergreen Marine family of containers,

JTC has Uniglory in both green and red, Italia in blue, and two sets of Evergreen containers in green.



Also released is a set of two MSC 40' containers in tan. All of the JTC containers include the JTC magnetic/IBC pin connection system, detailed tooling, and door styles, front

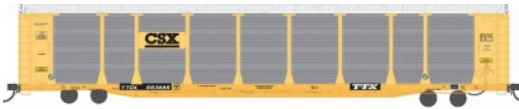
end styles, and roofs to match prototype photos.

Info: www.jtcmodeltrains.com

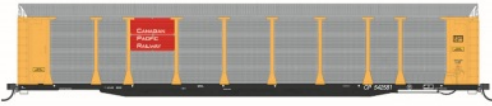


InterMountain Railway is booking reservations for a future release of N scale bi-level autoracks.

The ready-to-run models feature etched metal see-through side panels, positionable end doors, metal couplers and 33" metal wheels.



Racks mounted on TTGX flatcars will be available for Southern Pacific, CSX, Ferromex, Conrail and TINX.



Road names with matching flatcars will be available for Canadian National, Canadian Pacific, and BNSF.

Info: www.intermountain-railway.com



baggage, diner, and sleeper.

KatoUSA has added two four-car sets to its selection of N scale Superliner Amtrak Phase VI/IVb cars. The additions include Set A consisting of a coach, coach-



Set B includes two coaches, a sleeper and a lounge car with overhead windows.



The N scale models have detailed interiors that can be illuminated using an optional LED lighting kit available as a separate purchase. Availability of the four-car sets is

scheduled for September.

Info: katousa.com

Leadville Designs plans to release a prototypically accurate body kit for a Norfolk & Southern class H-9 twin-bay coal hopper late this month. The body of the N scale model is composed of etched brass and nickel silver components. The spine, doors, and bay inserts are brass castings. Correct decals



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are included in the kit. The N scale model is designed to accept Micro-Train trucks and couplers which are not included in the kit.

Info: leadvilledesigns.com



Micro-Trains has released five new N scale boxcars to its dealers.



Forty-foot boxcars that have lost their running boards, but still have full height ladders, are available decorated for Burlington Northern,

Chesapeake & Ohio, and Northern Pacific.



The BN and CO cars have Youngstown sliding doors while the NP car has a seven-panel Superior door.



Fifty-foot boxcars with plug doors, running boards and full height ladders are available decorated for New York Central and Pennsylvania Railroad.



All of the Micro-Trains boxcars mentioned in this report have Bettendorf-type solid-bearing trucks. Info: Contact a dealer.



Rapido Trains continues to expand its selection of exceptionally well-detailed N scale freight cars. The latest addition is a 73' centerbeam flatcar that closely replicates prototype cars built by

National Steel Car beginning in 1987 and continuing into the mid-2000s. Details include fully detailed underbodies, metal grab irons and coupler lift bars.



To replicate the minor changes NSC applied over the years, Rapido will offer the N scale model with multiple end cage arrangements, two deck configurations, two

underbody configurations, multiple brake stand options, multiple top truss configurations including early Z pattern and standard closed pattern with and without tie-down brackets.



Paint schemes available on the initial release will be BC Rail, Canadian National, Mississippi Delta – MSDR, Trailer Train – TTX, BNSF, CP Rail, and Northwestern Oklahoma – NOKL. Availability of the N scale model is TBA.

Info: www.rapidotrains.com

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R. Bale

EMD SD40-2 DIESEL LOCOMOTIVE

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



Scale Trains is booking reservations for a new N scale model of EMD's SD40-2 diesel locomotive.

Availability is planned for early 2023.



Road names will include Union Pacific and B&O Chessie System with corrugated radiator intake grilles and EMD's standard height, 88" long front hood.



With the exception of having a short front plow, a Burlington Northern unit will be similarly equipped.



ScaleTrains SD40-2 decorated for Norfolk Southern will have front and rear operating ditch lights

and be fitted with an Admiral Cab built by Curry Rail Service.



An SD40-2 decorated for Southern Railway will have a full height front hood and tall pilots in both the

front and rear of the locomotive.

Notable features on all ScaleTrains' N scale SD40-2 locomotives include wire grab irons, windshield wipers, trainline hoses with silver gladhands, dual flywheels, all-wheel drive and electrical pickup, and directional LED headlights. DC models will be sound and decoder ready with an E24 connector. DCC and sound equipped locomotives will come with ESU LokSound5 and a cube style speaker.

Info: www.scaletrains.com

NEW STRUCTURES & SCENIC SUPPLIES



Athearn has announced plans to release HO and N scale versions of an intercity bus in September 2023. The

model is based on a Visicoach design built by The Flxible Company between 1950 and 1956. Features of Athearn's models include rubber tires, windshield wipers, and some interior details. Decorating schemes include Pacific Electric, Utah Parks, and Fred Harvey Bus Line. Privately owned paint jobs include a teal and cream scheme, bus for sale, and two band tour busses.

Info: www.athearn.com

Berkshire Valley Models has developed both HO and O scale kits for the Walsh/Duncan Bay Window House. The models are based on one of the most famous structures in the Rocky



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Mountains that still stands in Animas Forks, Colorado. The kits are composed of laser-cut basswood and stripwood, Info: www.berkshirevalleymodels.com



Frenchman River Model Works is offering a 1:48 scale craftsman style kit for Jones Brothers Garage. The kit includes cast resin walls and garage door, tar paper roofing material, and Tichy doors, windows and glazing material. The walls depict mostly brick construction with weathered, broken

and loose bricks, and some stone sections. Details include a car lift, work bench, stacked tires, steel drums and a junk pile. A stencil and printed signage is included along with a neon sign. The assembled model is approximately 4" x 5.375" x 4.5" tall.

Info: [frenchmanriver.com/OOn30-148-Stinkwater-Crik-Kits c 52.html](http://frenchmanriver.com/OOn30-148-Stinkwater-Crik-Kits_c_52.html)



Monster Model Works has released a 1:87 scale kit for three-story brick industrial building called M. W. Tyler Furniture. The HO scale model is based on the H. L. Benbough Furniture Co., located in San Diego, CA.

The assembled model has a foot print of 7.125" x 5". The structure is 5.75" tall. The kit is composed of 3D engraved American Bond brick, cornices and corners; 3D laser-engraved Terra Cotta coping; laser-cut loading bumpers, and laser-cut doors, windows and sills. Painting suggestions and stencils for the signs are included.

Also new from Monster Model Works are kits for pan-type aluminum awnings. Two styles are available for HO, S and O scale structures. The awning kits include a foldable lazerboard



substructure, peel & stick lazerboard top and side louvers, and basswood internal support.

Info: www.larkspurlaserart.com/monster-modelworks-products



Oxford Diecast has released several new vehicles including

a 1942 Chrysler Town & Country station wagon. The metal diecast model is based on a car Chrysler introduced in 1941 and reintroduced in 1946 at the end of WWII. The model features a maroon color scheme, with white ash framing dark mahogany panels. Note the rear fender skirts and wide whitewall tires.

Also new from Oxford is a 1963 Chevrolet Corvair Coupe with both the exterior and interior in bright red. Built from 1960 through 1964, the compact Corvair was America's first mass produced car with a rear-mounted air cooled engine. Note the black wall tires with a thin red stripe.



Oxford has released a 1957 Chevrolet Nomad two-door station

wagon painted black over yellow. The model is of the second generation sport-wagon Chevrolet launched in 1957 when it became more akin to the Chevrolet Bel Air, with long tail fins. The wheels feature a fine yellow rim and medium width whitewall tires.

A model of a 1948 Dodge B-1B pickup represents a ½ ton truck Dodge built from 1948 through 1953. Oxford's version



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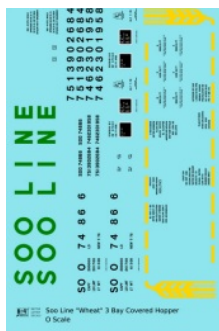
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has heavy duty wheels and wood side rails mounted on the extended height side panels.

Also new from Oxford are a light blue 1954 Buick Century Estate Wagon, a yellow 1965 Chevrolet Stepside pickup truck, a red 1968 Dodge Charger R/T, a pink 1959 Chrysler Imperial Crown two-door hardtop, and a 1946-1948 DeSoto Suburban in dark blue. All of the Oxford diecast vehicles mentioned in this report are 1:87th scale.

Info: www.walthers.com

NEW DECALS, SIGNS AND FINISHING PRODUCTS



K-4 Decals continues to expand its selection of water slide decals. Most lettering sets are available in O, S, HO, TT, N, Z, and G scales. Among the latest additions are decal sets for Northern Pacific mechanical reefers, and Soo Line PS2-CD covered hoppers with yellow wheat scheme. Info: K4decals.com



New HO scale lettering sets from **Mask Island Decals** include Missouri Farmers Association covered hopper.



The colorful decal is based on 50 4750 cu. ft. cars the MFA received from Pullman Standard in June 1974.



Mask Island has also released a decal sheet of Tack Board Placards and Car Stencils for HO scale box cars.

Info: www.maskislanddecals.com



BRIEFLY NOTED AT PRESS TIME ...

Gil Feitag 1936-2022

Gilbert A. Feitag MMR, of Houston, Texas died in late May. Gil was well-known through numerous articles published about his Stoney Creek & Western HO scale railroad. Feitag received the NMRA President's Award in 2003, and the Fellow Award in 2007. He was active in the NMRA's Lone Star Region where he was presented the Loeffker Service Award in 1981, and the President's Award in 2015 ...

Event coordinator Lonnie Bathurst reported that the 16th annual **St Louis RPM Meet** held on July 29-30, 2022 was attended by about 700 hobbyists who displayed close to 5,000 scale models. Forty-nine vendors were also on hand ...

Arrowhead Models introduced a highly-detailed ACF 4600 cu. ft. covered hopper at the St Louis RPM Meet. Company owner Blaine Hadfield had a limited supply of the HO scale models on hand with a promise that production quantities will be available later this month ...

Fos Scale Models has completed another short production run of kits for the HO scale Red Hook Water Front complex. See *MRH* February 2022 for full details ...

KatoUSA expects to have an Amtrack ALC-42 Charger locomotive ready for release in December. In addition to an analog DC version, the N scale locomotive will be available with a choice of Digitrax or Soundtraxx DCC ...

Resin Car Works introduced three new prototypically accurate HO scale cars at the St Louis RPM. Two are acid tank car kits with shorter frames than previously released models. The third new RCW kit is a UTLX class X-3 8,000 gallon tank car with a long frame ...

New HO scale items coming from **Walthers** include a Proto series GP38 with numerous road-specific details, a Mainline series 50' ACF exterior post boxcar with Youngstown sliding doors, and an 89' Bethlehem flush-deck flatcar. Also on the way is a 60' Pullman-Standard bulkhead flatcar and a special pulpwood load from Walthers' Chooch division. *MRH* will have road names and full details next month ... ■



SELECTED EVENTS



Model Railroad Hobbyist | August 2022

AUGUST

Please check with any organization hosting an in-person event for the latest status of the event.

Ongoing 2021

ONLINE, Zoom, dates vary, see website. Operation Special Interest Group Meetups – limited attendance available.

Info: www.opsig.org/Virtual

Archive: www.opsig.org/Virtual/Past

ONLINE, Zoom & YouTube, Wednesday & Saturday, see Facebook page. “New Tracks” Meetup, hosted by Jim Kellow, MMR.

Info: newtracksmodeling.com

YouTube: www.youtube.com/channel/UCMA_VhPb5pjdkAYTdXLceJA

UCMA_VhPb5pjdkAYTdXLceJA

ONLINE, Facebook & YouTube, dates vary, see Facebook page. “NMRax” organized by Gordy Robinson, Martyn Jenkins, Gert Muller, Jordan Kramer.

Info: www.facebook.com/groups/nmragroup

ONLINE, YouTube, every other Saturday. 4th Division, Pacific Northwest Region, NMRA hosts online layout tours and clinics.

Archive: www.youtube.com/c/4DPNRMovies

ONLINE, Zoom, Second Tuesdays, 8pm EST. "Off the Beaten Track" featuring Narrow Gauge layouts, clinics and manufacturers.
Info: groups.io/g/NNG

AROUND THE USA, IN-PERSON, Various dates.
ScaleTrains.com Road Trip.
Info: www.scalettrains.com/roadtrip

August-September 2022

AUSTRALIA, QUEENSLAND, BRISBANE, September 10, 2022.
September Open Day and Table Sale, sponsored by the Union Pacific Model Railroad Club. 49 Abbotsleigh Street.
Info: www.facebook.com/events/132928201167184

CANADA. NOVA SCOTIA, WEST HANTS, WINDSOR, August 27, 2022. Fourth Annual Windsor Railroad & Hobby Show sponsored by Eastern Benders in support of The Windsor & District Food Bank. Royal Canadian Legion, 35 Empire Lane, Windsor.
Info: www.facebook.com/events/458062749485961

CANADA, ONTARIO, BRESLAU (KITCHNER-WATERLOO), September 18, 2022. 2022 Breslau Train Show. Breslau Community Centre, 100 Andover Drive.
Info: www.youtube.com/watch?v=B2iMihfR0GE

CANADA, ONTARIO, HANOVER, September 10, 2022. 22nd Model Railroad Garage Sale, sponsored by County Line Caboose. 14121 County Road 10, R.R.#1.
Info: www.facebook.com/events/529316915340636

UNITED KINGDOM, CRAWLEY, September 17, 2022.
Seaboard Southern Railroad Show, The Charis Centre, West Green Dr.
Info: www.facebook.com/events/402107138604975

CALIFORNIA, SAN DIEGO, September 7-11, 2022. Back on Track in 2022, Pacific Southwest Region convention. Four Points by Sheraton San Diego, 8110 Aero Drive.
Info: web.cvent.com/event/1474b6bc-b18a-49ec-9b4e-9f58fb4665cd/summary



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CONNECTICUT, WINDSOR, September 15-18, 2022. Connecticut Yankee, Northeastern Region Convention 2022. Marriott, Hartford/Windsor Airport, 28 Day Hill Road.
Info: ner-conventions.org/connecticut-yankee

GEORGIA, DULUTH, August 27, 2022. 61st Atlanta Model Train Show and Sale. Gas South Convention Center, 6400 Sugar Loaf Parkway.
Info: www.facebook.com/events/560920512398359

ILLINOIS, WHEATON, September 4, 2022. Great Midwest Train Show, Dupage County Fairgrounds, 2015 Manchester Rd.
Info: www.trainshow.com

INDIANA, FRANKLIN, August 27-28, 2022. NMRA CID Franklin Train Show. Johnson County Fairgrounds, 250 Fairground St.
Info: www.cidnmra.org

MASSACHUSETTS, GARDNER, September 24, 2022. Southern New England Model Railroad Club Open House. Chestnut Street United Methodist Church, 161 Chestnut Street.
Info: snemrr.org/train-show--open-house.html

MASSACHUSETTS, ORLEANS, Wednesday evenings, July-August, 2022, Nauset Model Railroad Club Open House. Rear of Hilltop Plaza, 180 Route 6A.
Info: www.nausetmodelrrclub.com

OHIO, FOSTORIA, September 24, 2022. 20th Fostoria Rail Festival. 1001 Park Ave.
Info: ohio.org/festivals-and-events/events/20th-fostoria-rail-festival

OHIO, MARION, August 20, 2022. Everett's Train Show and Swap Meet, 532 West Center Street.
Info: www.cleveshows.com/PDFS/2022%20Marion.pdf

OHIO, YOUNGSTOWN, September 24, 2022. Iron and Steel Autumn Leaves Railfest. 356 S. Belle Vista Ave.
Info: www.cleveshows.com/PDFS/2022%20Iron%20City%20Sept.pdf

OREGON, BEND, September 17, 2022. Eastern Cascades Model Railroad Club 25th Annual Open House. 21520 Modoc Ln.
Info: www.facebook.com/events/447651223835336/447876803812778

PENNSYLVANIA, HAMBURG, September 16-18, 2022. Reading Railroad Modelers Meet X, hosted by the Reading Company Technical & Historical Society and the Anthracite Railroads Historical Society. Reading Railroad Heritage Museum, 500 S. Third St.
Info: readingrrmm.com

PENNSYLVANIA, STRASBURG, August 20 & 21, 2022, Model Railroading Days, The Railroad Museum of Pennsylvania, 300 Gap Road • PA Route 741.
Info: rrmuseumpa.org

TEXAS, AUSTIN, August 27, 2022, 2022 Austin Area Train Show, Palmer Events Center, 900 Barton Springs Rd.
Mailto: info@austintrainshow.org

VIRGINIA, CHANTILLY, August 20-21, 2022. Greenberg's Great Train & Toy Show, Dulles Expo Center, 4320 Chantilly Shopping Center.
Info: www.trainshow.com/shows/chantilly-08-22

WASHINGTON, BATTLEGROUND, September 24, 2022. 50th Annual Model Railroad Swap Meet, sponsored by Southwest Washington Model Railroaders. Battle Ground High School, 300 East Main St.
Info: www.facebook.com/events/1191095515044290

WASHINGTON, KELSO, September 10, 2022. Fall Model Railroad Swap Meet & Train Show. Three Rivers Mall, Exit 39, Interstate 5.
Info: www.facebook.com/events/655937072118018

WASHINGTON, TACOMA, September 1-4, 2022. 42nd National Narrow-Gauge Convention, Hotel Murano, 1320 Broadway.
Info: www.seattlengc.com



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WISCONSIN, WEST BEND, August 20-21, Kettle Moraine Ballast Scorchers Open House, 215 N. Main St. Suite 60 .
Info: www.facebook.com/events/249999943918195/249999953918194

Future 2022-2023 by location

UNITED KINGDOM, CREWE, November 4-6, 2022, Crewe North Junction 2022, British Region NMRA Regional Convention. The Heritage Center, Emperor Way, Crewe Business Park, CW1 6BD.
Info: convention.nmrabr.org.uk

MARYLAND, HUNT VALLEY (Timonium), October 13-16, 2022. Mid-Atlantic RPM meet. Delta Marriott Hotel and Conference Center, 245 Shawan Road.
Info: www.marpm.org

MARYLAND, TIMONIUM, October 15-16, 2022. Great Scale Model Train and Railroad Collectors Show, Maryland State Fair, 2200 York Rd.
Info: www.gsmts.com

MISSOURI, KIRKWOOD, October 8-9, 2022. Greater St. Louis Metro Area Train Show. Kirkwood Community Center, 111 S. Geyer Road.
Info: www.seetrains.com/See_Trains%21/See_The_Trains%21.html

NEW YORK, ALBANY, December 4, 2022. Great Train Extravaganza. Empire State Convention Center, underneath The Egg.
Info: gtealbany.com

NEW YORK, HAMBURG (Buffalo), November 19-20, 2022. WNYRHS Train & Toy Show. Fairgrounds Event Center, 5820 South Park Ave.
Info: www.trainweb.org/wnyrhs/trainshow.htm

NORTH CAROLINA, CHARLOTTE, October 20-23, 2022. Carolina Special Look South 2022, Mid-Eastern Region Regional Convention. Hilton University Place, 8629 M Keynes Drive. Info: www.carolinasouthern.org/MER2022.html

OHIO, CAMBRIDGE, October 23, 2022. 4th Annual NMRA Buckeye Division Train Show. Pritchard Laughlin Center, 7033 Glenn Hwy. Info: div6-mcr-nmra.org/trainshow.html

OHIO, MARION, October 13, 2022. 2022 Central Ohio Railroad Prototype Modelers Meet. Marion Union Station, 532 W Center St. Info: www.facebook.com/events/394841682028478

OHIO, MIDDLEBURG HTS., 1 October 2022. The Great Berea Train Show. Cuyahoga County Fairgrounds, 19201 Bagley Rd. Info: thegreatbereatrainshow.org

OHIO, WEST CHESTER (Cincinnati), October 8-9, 2022. Cincinnati Model Train Show sponsored by the Cincinnati Ohio Division 7 NMRA. Lakota West High School, 8940 Union Centre Blvd. Info: cincy-div7.org/2022%20Show%20Flyer%20v2.pdf

PENNSYLVANIA, DUNMORE, October 9, 2022. The Great Northeast Model Train Show by Bernie's Model Railroad. Holiday Inn Scranton East, Intersection of I-84/380/81. Info: www.facebook.com/events/1895028337365344

TENNESSEE, MURFREESBORO, October 8, 2022. Music City Mini-Meet hosted by the Cumberland Division, SWR, NMRA. Rutherford County Agricultural Building Auditorium, 315 John R Rice Blvd #101. Info: hansmanns.org/mini-meet

TEXAS, GRAPEVINE (Dallas Area), Summer 2023. NMRA National Convention, Gaylord Texan Resort & Convention Center, 1501 Gaylord Trail. Info: www.2023texasexpress.com



VERMONT, WHITE RIVER JUNCTION, October 16, 2022. Upper Valley Model Railroad Show, sponsored by the Connecticut Valley Model Railroad Club. Connecticut Valley Auto Auction Building, 1567 VT-14.
Info: cvrr.railfan.net/cvmrr

WISCONSIN, WEST BEND, October 9, 2022, Kettle Moraine Railroad Heritage Assn. 20th Annual Show/Swap. Washington County Fair Park, Hwy 45 & Pleasant Valley Rd.
Info: www.kmbsrrclub.org/id3.html

WISCONSIN, MILWAUKEE, November 12-13, 2022. Trainfest. Wisconsin State Fair Park.
Info: www.train-fest.com ■



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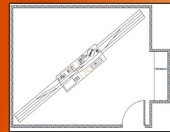
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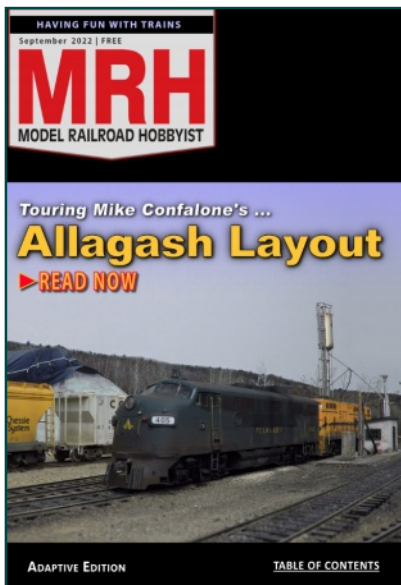
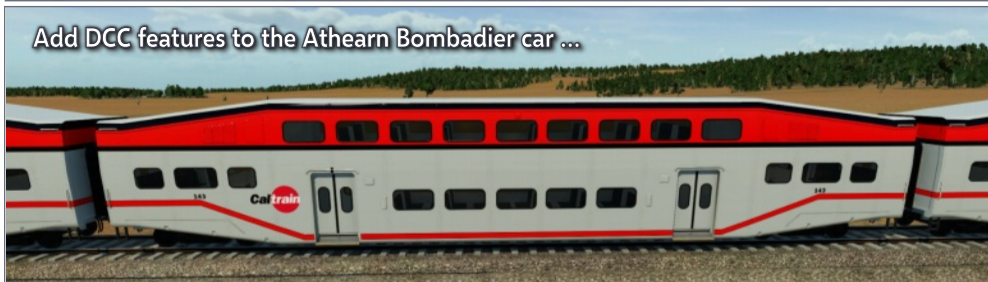
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