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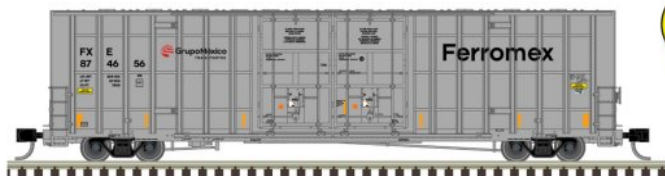
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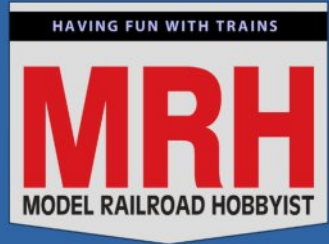


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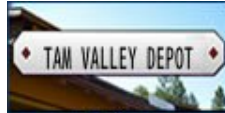
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September 2024 news and events
RICHARD BALE and JEFF SHULTZ



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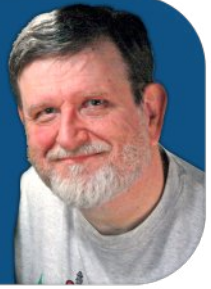


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PUBLISHER'S MUSINGS



Model Railroad Hobbyist | September 2024

JOE FUGATE'S PERSPECTIVE ON THE NATIONAL NARROW GAUGE CONVENTION ...



EACH YEAR WE ATTEND A NUMBER OF CONVENTIONS.

From the first of the year to the end of the year, we typically attend the Amherst Show in January, attend at least one large RPM meet in the summer (most commonly the St Louis RPM), as well as attend the NMRA Convention, the National Narrow Gauge Convention, and TrainFest in Milwaukee.

During the pandemic, these shows have been not held for a year or two from 2020-2022. TrainFest was struggling to find its legs now that Kalmbach had taken over the show but now elected to shutter its business and sell off its publications. TrainFest has moved to new management with the NMRA taking it over from 2025 on.

Of all the shows we attend, my favorite is the National Narrow Gauge Convention. This year, the Narrow Gauge convention is in Pittsburgh, and as of this writing, is underway and will be ending just as this issue rolls out.

While attending all these conventions is fun, most of the event is spent working and I have little time for just enjoying the convention. Whenever a convention format allows me to take off my hobby publisher hat and put on modeler railroader hat for a bit, I'm always thrilled.

Why the Narrow Gauge Convention is my favorite

I especially like attending the National Narrow Gauge convention because of how they format the convention schedule. Vendor rooms are open during the mornings and the evenings, but the rooms are closed in the afternoons.

During the afternoons, the Narrow Gauge Convention has their layout tours. It's our time to just be a modeler and go look at some great layouts.

And I say great layouts not as hyperbole, but as a matter of fact. Narrow gauge modelers are some of the most finicky in the hobby and I have yet to see a narrow gauge layout that isn't absolutely wonderful with superb modeling.

After all, you can't buy a lot of narrow gauge stuff as ready-to-run. Much of it is kitbashed and scratchbuilt. Narrow gauge modelers also tend to have a great eye for scenery and weathering. And most narrow gauge routes have some dramatic scenery – it's the nature of the beast you might say.

There were not a lot of narrow gauge lines running across the prairies, in case you haven't noticed. Narrow gauge allows for cheaper line construction when it comes to fills, cuts, and grades. And the equipment is smaller, lighter, and cheaper. Perfect for that mountain rail line into the woods or going to where the motherlode is located. And that dramatic scenery means lots of neat canyons, rivers, bridges, snowsheds, and tunnels.

But the Narrow Gauge Convention layout tours don't feature just narrow gauge layouts. They also feature some of the best standard gauge layouts as well.

In other words, the National Narrow Gauge layout tours feature some of the best layouts the area has to offer. Since the Narrow Gauge Convention moves around from year-to-year, it's the perfect layout tour vehicle for seeing the cream-of-the-crop as to the layouts in a given area.

I absolutely love the Narrow Gauge Convention layout tours, and I also am delighted vendors get the afternoon off to go tour



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layouts if they want. That not only gives us a break from the convention vendor room demands, but it lets us just be modelers for an afternoon.

Who ever thought up this approach to vendor scheduling and layout tours gets a huge enthusiastic high-five from me. It's an excellent idea that makes the Narrow Gauge Convention hands-down my favorite convention.

MRH has a booth at the National Narrow Gauge Convention as I will be presenting a couple of clinics as well. I hope to see some of you there and have a chance to kibitz with you in person.

Pittsburgh is 15 hours from Tulsa, so it's a pleasant two-day drive cross country in September. Nice!



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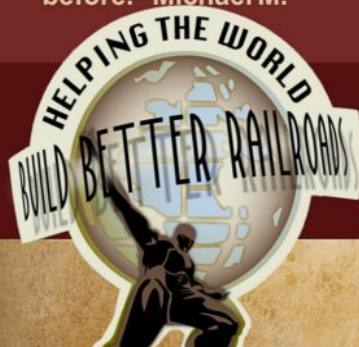
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Thoughts on powering frogs

In my servos for controlling turnout column series, I've discussed various methods of powering frogs using contacts, namely: 1) Microswitch triggered by servo movement; 2) Logic-driven relays controlled by an Arduino accessory driver board; and this month, 3) Second set of contacts on the turnout control toggle by using a DPDT switch.

In a discussion on the MRH Forum recently, the question came up about using frog juicers versus mechanical contacts such as those found on a Tortoise. Some folks ask why would anyone want to go with a frog juicer when you can use the contacts on a Tortoise for no extra cost.

There's actually some very good reasons to *not* use mechanical contacts to control frog polarity. Or at the very least, to take a somewhat unorthodox approach by adding an auto tail light bulb to the frog feeder.

I've run on layouts with the mechanical contacts and on layouts with the frog juicers, so I've seen how an op session goes with each approach.

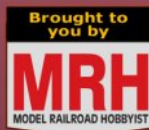
Before we get into the details of each approach, let me remind you DCC layouts don't like shorts – they shut down chunks of the railroad when a short happens, which is anything but fun.

On the layouts with frog contacts, during an op session I regularly see a short every 10-15 minutes or so because somebody ran a turnout thrown against them. Ideally, you need short protection on the frog, like 1156 or 3156 tail light bulbs or something like a PCX short protection board for the sub-district the turnout is in.

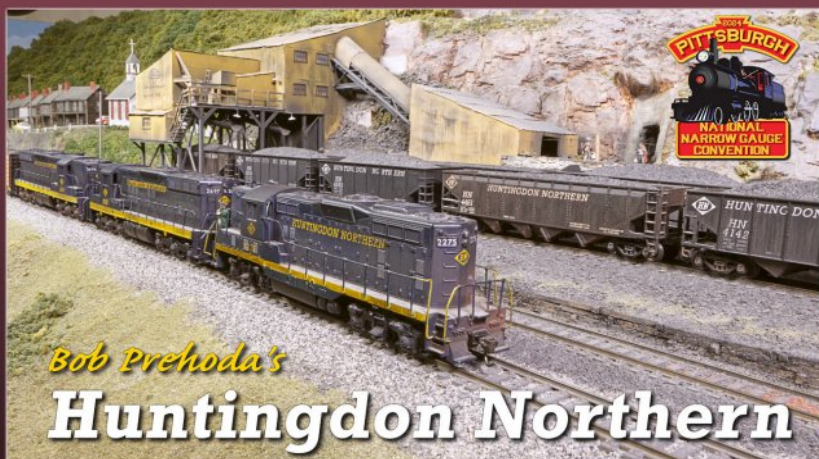
The 1156/3156 bulbs allow you to short the frog and stop there and to fix it you just throw the turnout the right way – but the other operators in that sub-district generally won't notice.

A PCX-style short protection board will, however, shut down the sub-district, potentially annoying other operators.





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Bob Prehoda's Huntingdon Northern layout tour



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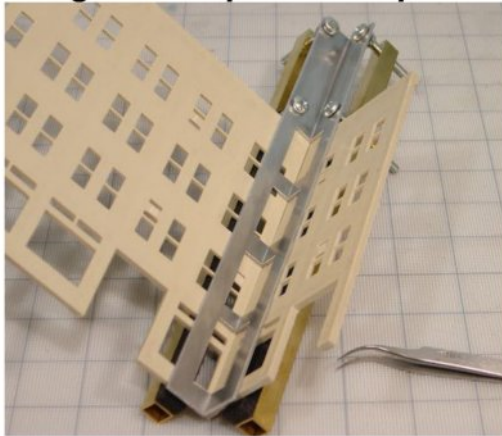
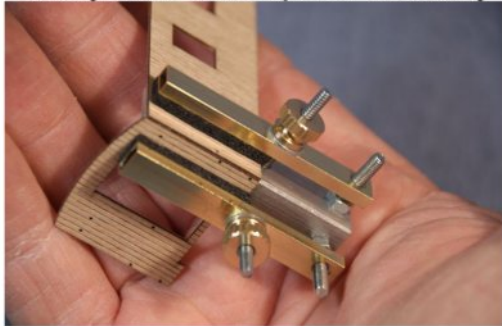
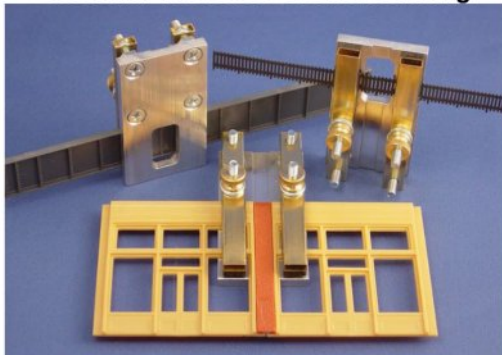


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When running on a layout with frog juicers, things go smoothly with no chunks of the layout shutting down every 10-15 minutes when someone runs a turnout and shorts the frog. True, things are likely to derail at the points, but that's discovered rather quickly and gets corrected by the operators running the train with little fuss.

With the frog juicers, everybody else enjoys smooth operation. It's actually more prototypical to go on the ground if you run a turnout thrown against you. Notice if you do Power-on-board / battery power, you will likewise go on the ground, just as when using a frog juicer!

Powering the frog mechanically with contacts is actually something of a "model railroad anachronism" due to the resulting short when running a turnout thrown against you. The short drops you out of the realism and reminds you: "oh yes, this is a model railroad, isn't it?"

With frog juicers and POB / battery power you will go on the ground just like the



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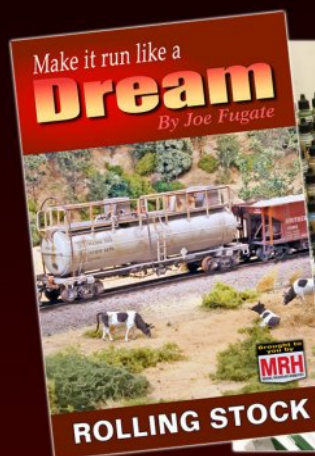
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prototype when running a turnout thrown against you, maintaining the illusion you're running a real train.

Frankly, with many modelers hyper-focused on prototype accuracy with their models, I'm surprised they haven't figured out why frog juicers (and POB/battery power) are actually more prototypically correct as to the behavior of the trains when running a turnout thrown against you.

Frog contacts are very anti-realism and I'd expect them to notice this ops behavior as being out-of-step with their hyper-realism focus in other areas of the hobby.

For me, the real ah-hah moment came when I realized the so-called nirvana of POB/battery power ops will have you go on the ground if you run a turnout thrown against you, just as what happens with a frog juicer.

Shorting the layout with frog polarity contacts is somewhat last century as to how it affects running the trains realistically.

Granted, there are trade-offs with frog-power via contacts vs frog juicers. Using mechanical contacts is generally a lot cheaper – potentially even “free” if you use Tortoises to throw your turnouts.

A frog juicer will cost you \$12-\$17 per turnout, depending on the best deal you can find on frog juicers, so they're not cheap.

But frog juicers do make for a smoother op session and more prototypical behavior when you run a turnout thrown against you in an operating session.

A middle of the road approach is to use mechanical contacts to control frog polarity, but run an 1156/3156 bulb on the frog feeder wire of all your turnouts. Then things will act a bit like a frog juicer in that a short won't stop the other trains in that power district, but your train that has the turnout thrown against you will stop dead on the frog – and light up your feet with the auto tail light bulb!



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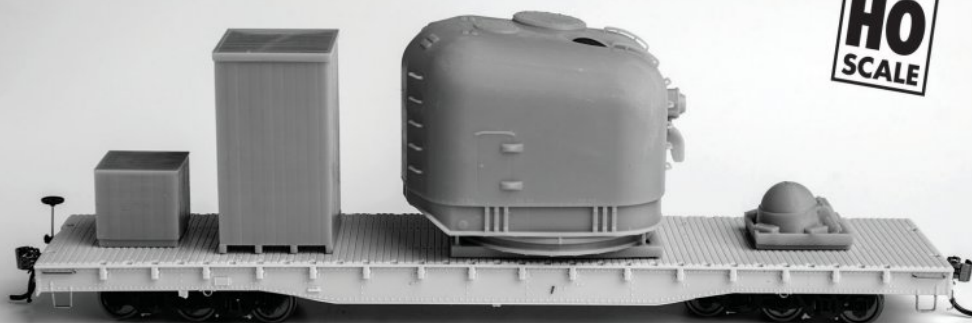
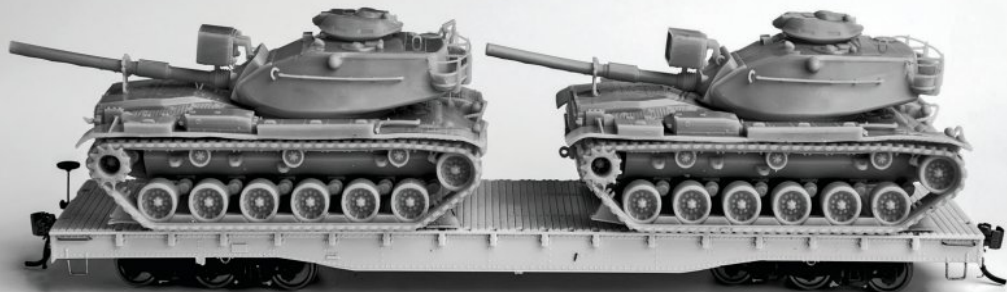
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This give you your heads up the turnout is thrown the wrong way and you can re-align it and proceed on your way. No derailments and no shorting the rest of the layout either!

You can also try dead frogs, which may work okay if you put stay alive in all your locomotives.

While frog juicers are wonderful, they're getting too pricey for me at this point.

On Siskiyou Line 2, I'm thinking strongly of going with the Arduino town hubs and servos to throw the turnouts. I will be using the DPDT toggle to both throw the servo and to route the frog power with a 3156 tail light bulb on each frog feeder.

I like the heads up the turnout is thrown against me so I can throw it the right direction without shutting down the rest of the power district!



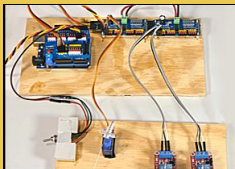
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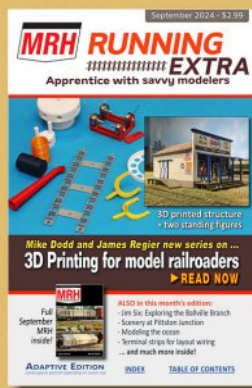
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September issue ...

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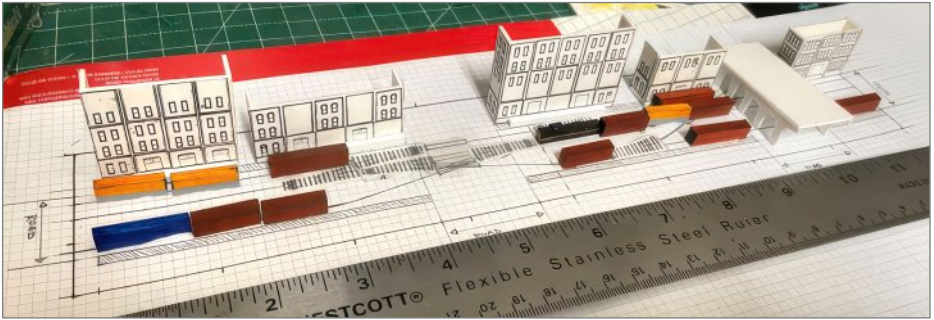
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THIS
MONTH

Model Railroad Hobbyist | September 2024

Compiled by **JOE FUGATE**



Planning a warehouse row switching layout

MRH forum member **porthos** (Kris M.) started a thread on planning a switching layout using 3D scale mockups, complete with tiny cars and locos.

In this thread, Kris posts different ideas about how he might arrange things on this switching layout and then gets feedback from the forum members. It's an extremely entertaining and quite effective way to plan a layout.

Check out this thread on the *MRH* forum for all the details!



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

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



1. *MRH* forum member **thewizard1** (Charles D.) posted this impressive tool he fabricated as a suggestion on an *MRH* forum thread about tool management.

Workbench tool management

MRH author **anteaum2666** (Michael Anteau) started a thread asking for ideas on how to manage workbench tool clutter.

One of the more interesting tool organizer ideas [1] came from member **thewizard1** (Charles D.). Charles says after trying several ideas he landed upon this oblong shape that sits on the base shown. The tool framework actually will rotate on its base.

For this and many other ideas, see this full thread.

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



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2. *MRH* author **Bernd** (Bernd Fanghanel) posted these photos as an answer to a question about how to add all-wheel pickup to a 2-6-6-2 locomotive.

Mantua 2-6-6-2t logging loco power pickup woes

MRH forum member **casper893** started a thread asking about how to improve power pickup on a Mantua 2-6-6-2t logging loco. He asks:

“Has anyone tried to make an all wheel pickup for these locomotives? The problem I have is you have to press down on the front or rear to get it to run. There’s no binding in drive train and they are using the frame for power pickup on one side. Any ideas would be helpful.”

MRH author **Bernd** posted some photos of his solution and he also describes it in full detail on a linked *MRH* forum thread.

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



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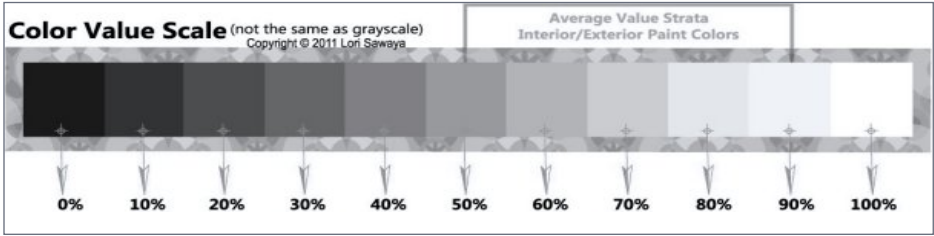
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3. *MRH* forum member **deemery2** (David E.) this gray color value chart and described how he uses it to set black levels on his layout.

Questions about ground cover paint

MRH forum member **Yellow_Dog** started a thread asking about ground cover paint colors. One particularly interesting post came from **deemery2** [3] around a gray color value chart he posted:

“I find 20% to be a good ‘scale black,’ with 30% or 40% to be a ‘weathered black.’ The 10% value looks a bit too dark to me. You really want to avoid absolute black on a model, with the possible exception of a really deep absolute shadow.”

We find this to be extremely helpful insight, especially given the much lower lighting level of our indoor layout lighting as compared to brighter outdoor daylight.

With darker colors especially, you need to lighten them to make them look “right.” David’s suggestion really helps make this idea into something concrete you can implement.

This thread has a lot more useful suggestions, ideas and examples. Check out the full thread on the *MRH* forum for all the juicy details.

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

Recent Weekly Photo Fun threads

This time we have some “dramatic lighting” photos from a recent Weekly Photo Fun thread. Enjoy!

[View list of recent Photo Fun threads](#)



4. MRH author **Joe Thistlewood** posted this latest photo of his Rickety Cove scene with all the lighting done. It's pretty breathtaking, don't you think?

5. MRH Author and Editor Emeritus **Charlie Comstock** walked into the layout room to see this scene without the room light on of Abner Elevator, so he snapped the photo with his cell phone and did a touch of Photoshop tweaking to eliminate some backdrop shadows. Very dramatic!



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WHAT'S NEAT

column



Model Railroad Hobbyist | September 2024

KEN PATTERSON COVERS THIS MONTH:

- BROADWAY LIMITED GP35
- INTERVIEWS AT THE ST. LOUIS RPM
- BACHMANN TRAINS MID-SUMMER ANNOUNCEMENTS



SEPTEMBER 2024

WHAT'S NEAT with Ken Patterson
St. Louis RPM meet report

click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

THIS MONTH, Ken shows off the Broadway Limited Canadian Pacific GP35 in HO scale, the whole crew goes to the St. Louis RPM Meet to interview the participants, and Tyler Haney joins Ken to share Bachmann Trains' mid-summer product announcements.

Broadway Limited Canadian Pacific GP35



1. Ken begins the show out in his backyard overlooking the Mississippi River, where he's taking photos of this new BLI Canadian Pacific GP35 with railroad-specific details.

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The St. Louis Railroad Prototype Modeler's Meet



2. Ken brought the whole crew to the St. Louis RPM Meet to interview the participants. From left to right: James Regier, Daniel Coombs, Joshua Barton, Ken Patterson, and Mike Budde.



3. Mike Budde interviews David Lehlbach of Tangent Scale Models about the Rock Island caboose they released at the show, the 86' high-cube auto-parts boxcar that is one of Mike's favorites, and the new 60' auto-parts boxcar.



4. Tangent's Greenville 86' auto parts boxcars will eventually include 14 variations.

Info: tangentscalemodels.com



5. Daniel interviews Thomas Garza of ScaleSigns.com, which makes prototypical-appearing billboards, plus traffic, street, and business signs in N, HO, S, and O scales.



6. The signs are designed to have realistic fronts and replicate aluminum on the back, just like the prototype.

Info: scalesigns.com

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7. Ken rounded up Matt Stern of Bachmann Trains, George Bogatiuk of SoundTraxx, Joe Fugate of MRH, and Jim Wiggin of Athearn Trains for an impromptu discussion of the St. Louis RPM Meet.

Info: bachmanntrains.com

Info: soundtraxx.com

Info: mrhmag.com

Info: athearn.com

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8. From N scale ModuTrak, Bill Denton explains the background of this modular standard oriented toward realistic scenery and a cohesive theme.



9. This year's layout was assembled with an estimated 73 modules, and measures 60'x35'.
Info: www.modutrak.com



10. Mike interviews Dana Stratton of 3D Model Designs, an early pioneer of 3D printing in model railroading and vehicles. Info: www.facebook.com/hotrucksnparts



11. Aurora Miniatures' Ben Wong shows their new and upcoming releases.



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12. One of Aurora's most recent releases is an HO scale model of a Greenbrier 6276 cu. ft. 50' Plate F boxcar decorated for On Track for a Cure. Ben describes this as their most-detailed model yet. They've made cars from both the 2004 and 2016 production runs, each with unique details.



13. Ken inspects a sample of the upcoming metal-bodied Gunderson well car in HO scale.
Info: na.auroraminiatures.com



14. Mike Budde continues his emphasis on model vehicles with Bob Johnson of MasterBuilt Models.



15. MasterBuilt specializes in vehicle models in 1:87 scale from manufacturers such as Brekina, PCX87, First Gear, BoS Models, and others.

Info: www.masterbiltmodels.com



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16. Kevin Tully, interviewed by James Regier, is the proprietor of two 3D-printing-based companies, Southern-Tier Grain Modelers Supply, and Steel Mill Modelers Supply.



17. Chicago-based 3D-printing manufacturer Southern-Tier Grain Modeler Supply, provides detail parts for grain elevators, feed mills, and related structures. Steel Mill Modelers Supply does the same thing for people modeling blast furnaces and other components of the steel manufacturing industry. Info: steelmillmodelersupply.com



18. HSD (Huron South Detroit) Models, represented by Tom Orlando, is another 3D-printing model company that has been on What's Neat this Week.



19. Beginning with Maintenance-of-Way equipment, they've diversified into cars, trucks, machine tools, shop details, and hot-rod detail parts.

Info: huronsouthdetroitmodelrailroadcompany.com



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20. Mike and Dan Goins discuss the new MKT autoracks being sold as a fund-raiser for the Texas Northern model railroad club. Built by InterMountain Trains, the rack and car numbers are confirmed to match actual prototype car and rack pairs. Only 300 cars in six car/rack numbers will be produced. Info: www.texasnorthern.org



21. Ken joined up with Loren James of Otter Valley Railroad to discuss the new pipe, trash, and scrap loads, as well as new paint schemes on Otter Valley Railroad cars and the Point St. Charles transfer caboose. Info: ovrtrains.com



22. Yelton Models proprietor Dan Notley discusses Yelton's 3D-printed products with James Regier.



23. Yelton Models has recently started producing scale models of modern farm equipment, such as those seen here. Dan claims that with a couple of photos and a good measurement, he can produce a 3D-printed model.

Info: www.yeltonmodels.com

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24. Daniel interviews Nick Santo of NixTrains, the inventor of the Decoder Buddy, and JT Burke of Scale Sound Systems. The Decoder Buddy provides a motherboard allowing most models to use 21-pin DCC decoders, and the Scale Sound Systems speakers are designed to drop directly into locomotive models.

Info: nixtrainz.com

Info: www.scalesoundsystems.com

Bachmann Trains mid-year announcements



25. Bachmann Trains released its mid-year announcements catalog at the National Train Show in Long Beach, CA this month, and the first announcement is the reintroduction of the HO scale B&O EM-1 2-8-8-4 with Tsunami2 sound and DCC. Four road numbers will be available – two early and two late versions.



26. Also from Bachmann is a new run of GP38-2 locomotives, including a new road name, the Long Island Railroad. Equipped with SoundTraxx Econami sound and DCC, the HO scale locomotives will also be available decorated for BNSF, CSX, and UP.



27. Here Bachmann's Tyler Haney shows samples of the Siemens "married pair" coach and business cars. While the prototype cars are semi-permanently coupled, these cars will be available separately.



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28. In large scale, Bachmann will be releasing structure kits such as this station platform. Bachmann's Mid-Year Announcements brochure includes many other announcements in HO, N, On30, and large scale. Info: bachmanntrains.com

For more views of BLI's Canadian Pacific GP35, all of the interviews from the St Louis RPM meet, and more Mid-Year product announcements from Bachmann, click on the link to the video at the beginning of this article.



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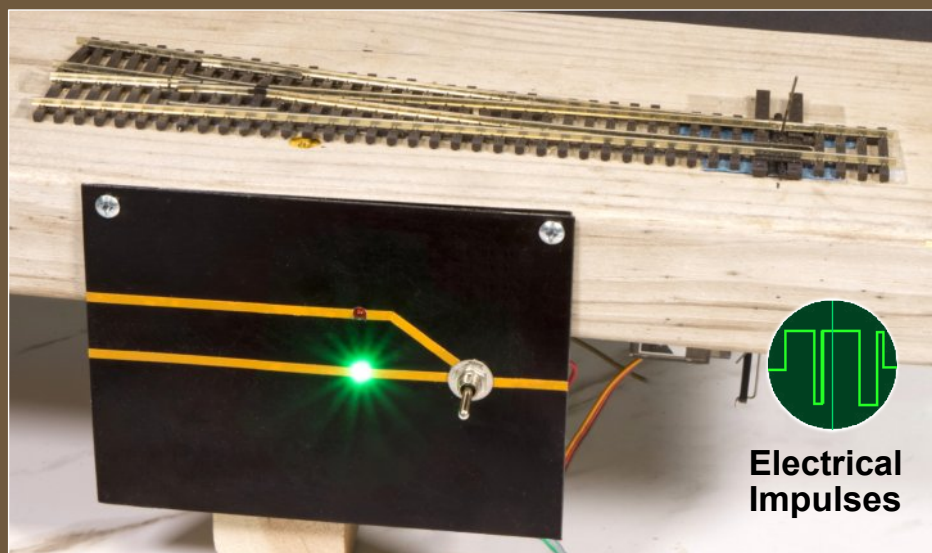


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Servo turnout control retrospective



Model Railroad Hobbyist | September 2024



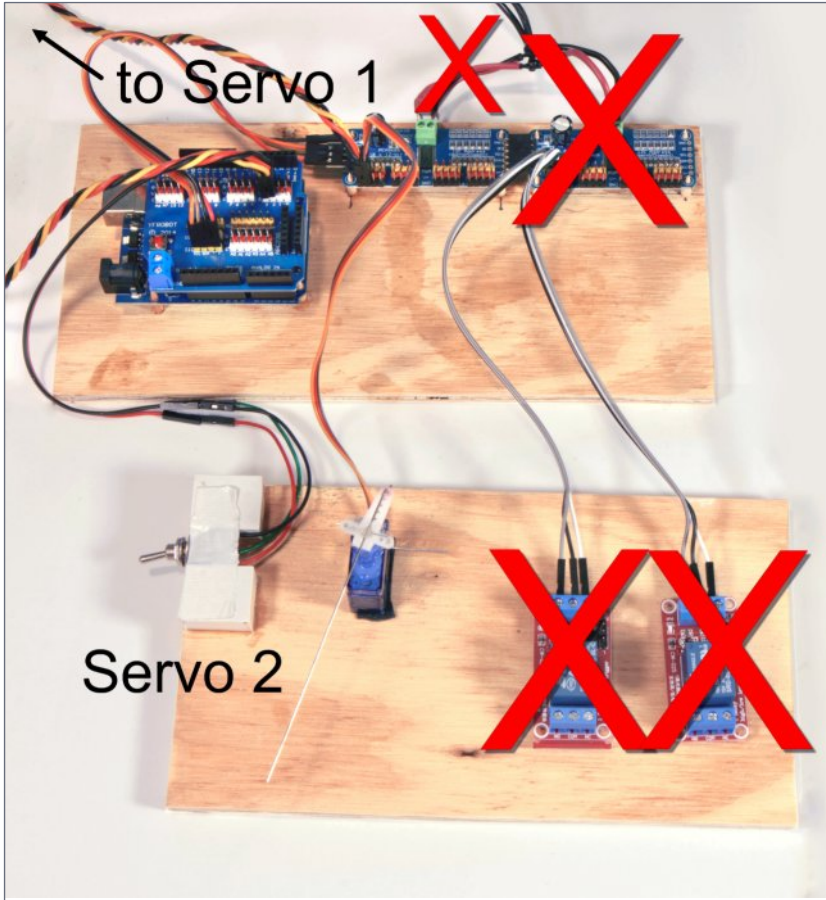
JOE FUGATE MAKES THE SERVO TURNOUT CONTROL CIRCUIT EVEN SIMPLER AND LESS EXPENSIVE ...

THE MODELERS WHO FREQUENT THE MRH FORUM ARE A GREAT bunch of folks. The discussion I had with them about my servos-to-control-turnouts column series (including some critical comments) got me thinking of ways to make my servo turnout control circuit even simpler, and to save more money on long twisted-wire runs.

Let's get started!

SIMPLIFYING FROG POWER ROUTING

In this column series, I presented several ways to power the frog. While a frog juicer is always an option, their \$12-\$17 per-turnout cost can add up. In this series, I presented two frog-powering options: adding a servo-activated microswitch under the turnout, or using inexpensive logic-driven relays.



1. With the frog power routing circuit improvement I present here, I can eliminate the second PCA9685 board and the logic-driven relays.

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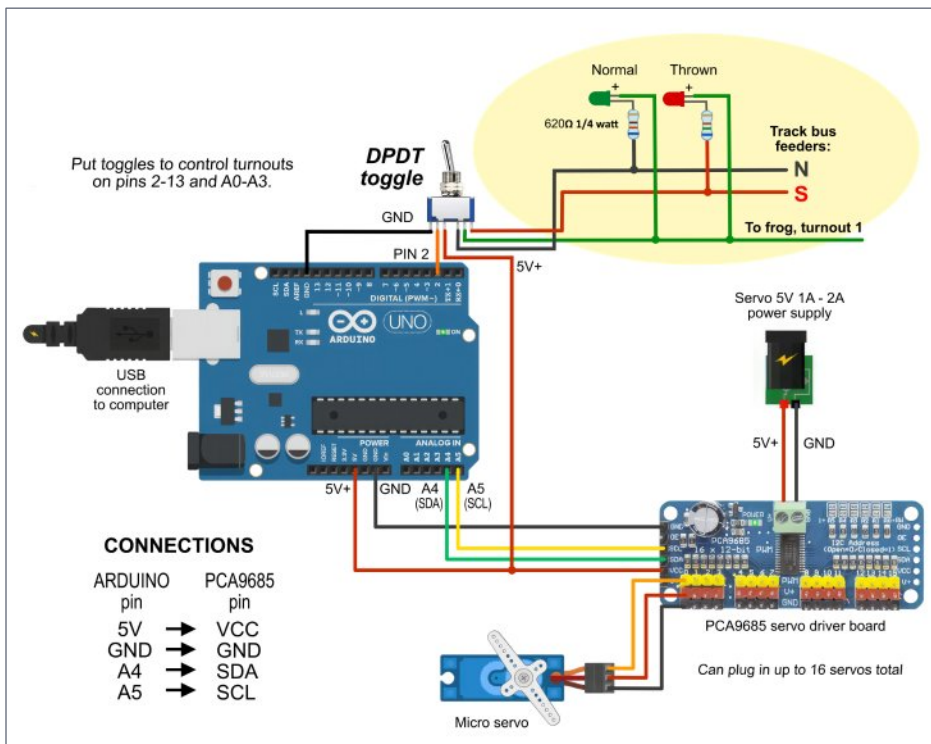
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2. Here's how to wire the DPDT toggle to directly switch frog power. Adding a couple 620-ohm resistors and some LEDs the circuit gives the control panel throw indication as well. Nifty!

There's a third option that not only costs even less, but also simplifies the LED throw indicator wiring. With this third option, you don't need a second PCA9685 board, logic-driven relays, or a separate power supply for the panel LEDs [1], which has the advantage of saving on the cost of the "town hub".

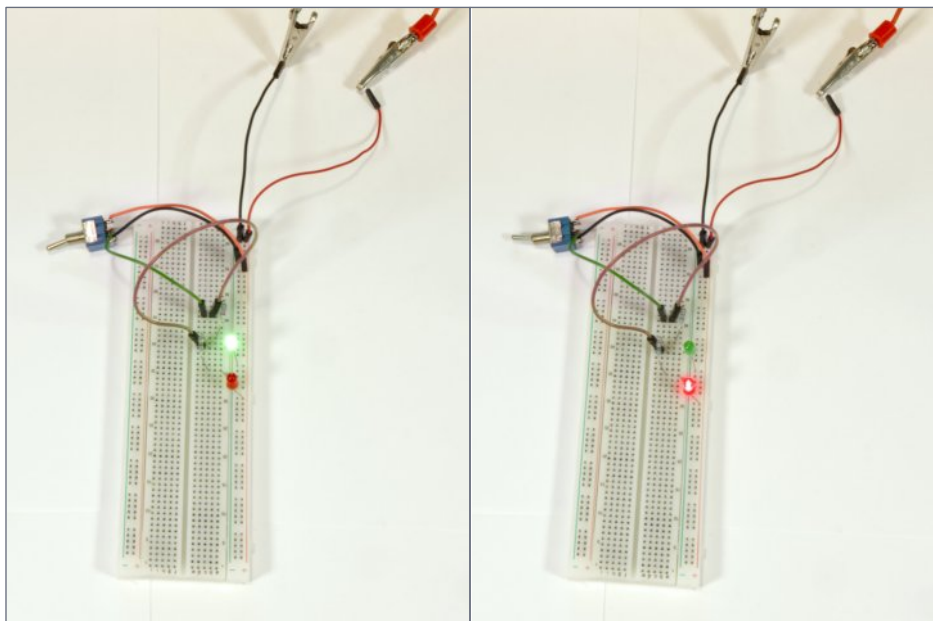
The trick is to use the same DPDT toggle to throw the turnout I showed in part 4, but use the second set of toggle contacts to directly route the frog power. That's an obvious idea once you think about it, and it's also easy to add some LEDs to indicate the position of the toggle on a control panel with a couple resistors.

Another advantage is that the control toggle is likely near the turnout, so the length of wire you need to run from the toggle to the frog is probably not that great.

I breadboarded this circuit to test it, and it works great [3, 4]! I really like how this simplifies the frog power routing still further. Those logic relays were neat, but this makes frog power routing about as simple as it gets.

LESS COSTLY TWISTED WIRE CABLE RUNS

Making your own twisted-pair cables as I showed last month gets the long run cables from the Arduino town hub to the most



3, 4. I set up the yellow highlighted part of the circuit in [2] on a breadboard and connected it up to my NCE Powercab track feeders. As you can see, it works great: it lights green when the toggle is thrown one way, and red when it's thrown the other. The center feed of the toggle is a green wire that also gets routed to the frog to control its polarity.



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distant servos (up to 25 feet away) down to something like 10-15 cents a foot. But I've found an even less expensive option: how does 2 cents per foot sound?

The secret is to use twisted pairs from CAT-5 network cable [5]. Network cable is sold in 1000-foot rolls for less than \$65, and it has four sets of twisted pair cables in it. Cut the outer insulation off the CAT-5 cable, and separate out the four different twisted pair cables.

Add female plugs on one end of a twisted pair, and plug those onto the signal and ground leads onto PCA9685 board pins for that given servo.

On the other end of the pair, add a male plug to the signal wire. Wye-out the ground lead with two male plugs. This will make it easy to plug one ground into the servo, and the other into the feed wire from a USB block (more on that in a moment).

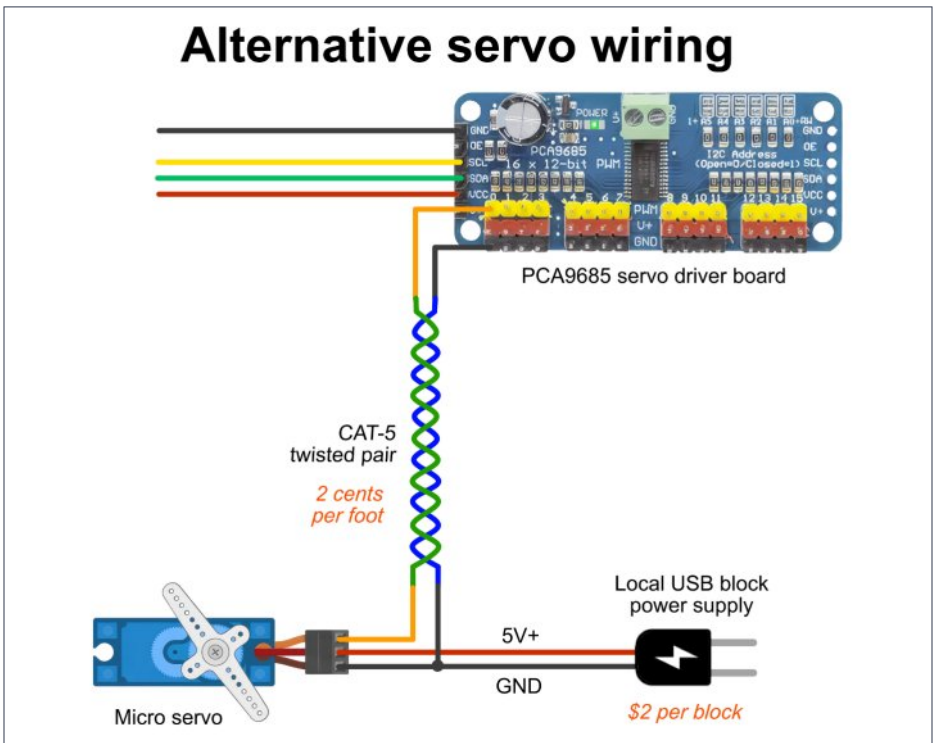


5. CAT-5 networking cable is available in 1000-foot rolls for a very affordable price per foot. CAT-5 has four sets of twisted pairs inside, dividing the cost per foot by a factor of four, making it even more affordable. The final result is twisted pair cable for about 2 cents per foot.

Now plug the signal wire into the signal lead on the servo, and plug one of the ground male plugs into the ground lead on the servo. This sends the signal from the Arduino to PCA9685 board, and on to the servo.

To keep things simple, we now drive the servo with a high-amp USB cable near the turnout. This provides +5V @ 2A to the servo, as well as GND from the USB block power supply. Using a common ground for both the servo signal and for the servo drive power works just fine.

See the circuit diagram [6] to see how this is wired.



6. By using inexpensive CAT-5 twisted pair cabling and an inexpensive USB power block near the servo, it's possible to get the wiring cost for a servo that's 25 feet away from the Arduino town hub to as little as \$2.50 total.



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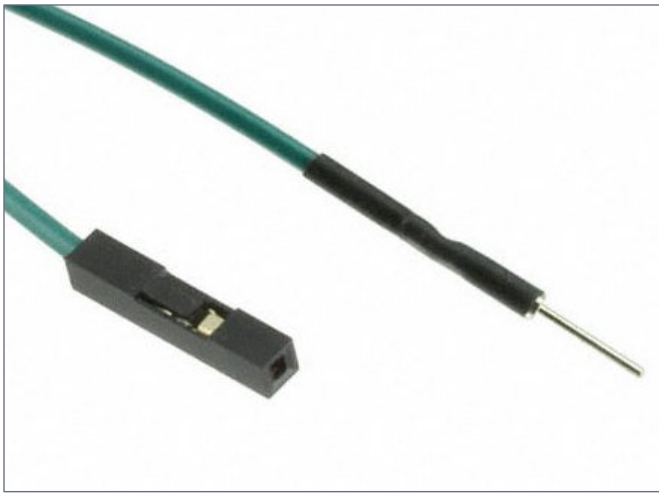
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7. While you can try crimping pins on the CAT-5 cable wires, I find it's easier to just snip off some jumper wire pin/plugs as needed (male or female), add shrink tubing on, and solder the pin/plug wire end onto

the CAT-5 wire – instantly pluggable. Far simpler than fiddling with pin crimping and actually doesn't cost any more either. I also solder these wires with pins/plugs onto the toggles and LED + resistor leads as well.



8. These 2.4A USB power blocks are less than \$2 each, and they provide 5V.

USB SERVO POWER

Rather than run a 5V power bus around the layout, I think it's actually simpler to run some 110 VAC extension cords around the layout with power strip drops at each town. This makes it easy to just plug an inexpensive USB block [8] into the power strip, and get an instant 5V-2A power feed for the servos. Each USB block can take two USB cables, and can power a half-dozen servos in total (three per cable).

I can get a 2.4A USB power block for less than \$2 each. I add a USB cable with a barrel plug [9] on the other end along with a screw terminal adapter [10] and I'm good to go. I just cut off a jumper wire with the desired gender to go with my other connectors and I'm all set.

To make it easy to distribute one USB power feed to several servos, I like to use the power distribution strip in [11]. It's about \$7 on Amazon and it has up to 12 output slots.



9. USB cable with a barrel plug.



WRAP UP

This wraps up the series on using servos to throw turnout. By adding these latest simplifications, wiring is even easier, and the cost per turnout drops to less than \$4.50. In [12] you can see a summary of all the different options and their cost per turnout for an Arduino town hub, toggle, and servo. Then I take these costs and apply them to various sized layouts in [13].

With the CAT-5 cable and providing local high-amp power to drive the servo, even 25-foot wire runs are now less than \$3 per turnout. Compared to Tortoises, servos with this wiring are far less costly.



10. This barrel plug to screw terminal adapter makes it easy to distribute the +5V and the GND leads from a USB power block and cable.



11. To distribute the USB power output to multiple servos, this PCB power strip with screw terminals makes quick work of it.

We plan to collect this series into a book, re-edited to present all the options and costs simply and clearly. The book will be a comprehensive end-to-end how-to on controlling turnouts with servos. It will be available in eBook form as well as in paperback. ☑

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Hypothetical layout: 1 town, 5 turnouts

Tortoise total cost	\$135.70	\$27.14 <-- per turnout
Servos with DPDT for frog	\$25.44	\$5.09 <-- per turnout
Servos with microswitch	\$52.28	\$10.46 <-- per turnout
Servos with relay	\$55.63	\$11.13 <-- per turnout

Hypothetical layout: 1 town, 10 turnouts

Tortoise total cost	\$228.40	\$22.84 <-- per turnout
Servos with DPDT for frog	\$44.97	\$4.50 <-- per turnout
Servos with microswitch	\$75.18	\$7.52 <-- per turnout
Servos with relay	\$81.88	\$8.19 <-- per turnout

Hypothetical layout: 2 towns, 25 turnouts

Tortoise total cost	\$506.50	\$20.26 <-- per turnout
Servos with DPDT for frog	\$109.07	\$4.36 <-- per turnout
Servos with microswitch	\$173.26	\$6.93 <-- per turnout
Servos with relay	\$190.01	\$7.60 <-- per turnout

Hypothetical layout: 3 towns, 50 turnouts

Tortoise total cost	\$970.00	\$19.40 <-- per turnout
Servos with DPDT for frog	\$216.18	\$4.32 <-- per turnout
Servos with microswitch	\$247.14	\$4.94 <-- per turnout
Servos with relay	\$280.64	\$5.61 <-- per turnout

Hypothetical layout: 5 towns, 100 turnouts

Tortoise total cost	\$1,897.00	\$18.97 <-- per turnout
Servos with DPDT for frog	\$430.98	\$4.31 <-- per turnout
Servos with microswitch	\$604.90	\$6.05 <-- per turnout
Servos with relay	\$671.90	\$6.72 <-- per turnout

Hypothetical layout: 10 towns, 250 turnouts

Tortoise total cost	\$4,678.00	\$18.71 <-- per turnout
Servos with DPDT for frog	\$1,075.79	\$4.30 <-- per turnout
Servos with microswitch	\$1,438.80	\$5.76 <-- per turnout
Servos with relay	\$1,606.30	\$6.43 <-- per turnout

12. Here are the revised costs for this simplified wiring as presented in this column. This does not have the cost of the wiring from the town hub to the turnout, which this column has shown can be less than \$3 for the furthest turnout.

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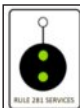
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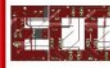


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Building a Central of Georgia Flatcar with a pole load



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**CHARLIE DUCKWORTH MODELS A CLASSIC
FLATCAR, ADDING A REALISTIC POLE AND PILING
LOAD ...**

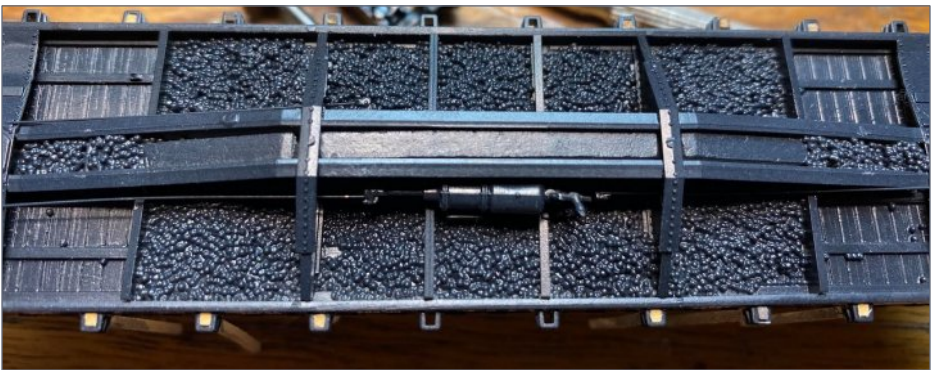


THE TICHY 4021 FLAT CAR CAN BE USED TO MODEL a Central of Georgia flat car. Tennessee Coal, Iron, and Railroad Company built the prototype cars in its Fairfield, Alabama shops in 1925. Central of Georgia assigned the cars to series 10701-10800.

Starting with a Tichy flatcar, I was looking for a railroad I didn't have represented on my layout. I found the Central of Georgia Historical Society had restored one of the prototype cars, and offered decals sets to help fund the project.

The decal lettering is the railroad's standard used after December 1, 1944. The CG used a more-rounded lettering style before that date. The Tichy HO plastic kit is widely available, and is well designed in terms of detail and ease of construction.

After removing the car body and deck from the sprues, I took a fine-tooth razor saw and scribed 'grain' across the deck. Then the model was built following the directions.



1. Underside of the model showing where I added weight using Liquid Gravity.



One drawback to most flatcars kits is getting the weight over three ounces. The kit comes with a metal weight that fits between the large fish-belly underframe. I added weight using Deluxe Materials Liquid Gravity on the bottom of the deck and inside the pole load, securing the small balls with ultra-thin CA glue [1].

The only other deviation I made from the kit was to use straight wire handholds in place of the plastic ones provided. These hold up better during operating sessions.

After the model was built, I sprayed it with Tamiya gray fine surface primer. I then airbrushed a final coat of TruColor black with a few drops of white added.

To replicate a wood deck, I used Vallejo's acrylic black/gray, white, and brown. I mixed up various gray and grayish brown hues, and painted each 'board' with a small brush. After the paint dried, I went over with black and brown pencils to pick up the grain made by the razor saw, and blend in the overall colors [2, 3].



2. The model's wood deck is finished with Vallejo paints and colored pencils. I actually prefer a plastic deck to laser-cut real wood decks, since the real wood's grain is usually out of scale.

I used Andrews trucks from Red Caboose and Kadee 158 semi-scale couplers [4].

Editor note (James Regier): Red Caboose has now been fully integrated into Intermountain Railway Company, and at present, these trucks are not listed. Alternatives are available from Walthers Proto or from Kadee.



3. A closer view of the deck shows how the individual “boards” can be colored with various grays and browns.



4. Andrews trucks from Red Caboose. The chalk marks were replicated with a white pencil.

BUILDING A CENTRAL OF GEORGIA FLATCAR | 6

The pole load was made from Midwest Wood Dowels 1/16x12 (Part number 7903). Each package has 10 dowels, and this project required three packages. Each dowel makes two 34-foot poles.

I slightly sanded the "top" portion of each pole to match the slight taper of the prototype toward the top. The "bottom" of poles was painted a black/gray to represent the creosote application 8' up. Some poles were stained with creosote the entire length, so how the poles are finished is a matter of modeler preference.

The stack needs to fit snugly between the upright 4x4 stakes. I started by making a base of 0.005" Evergreen styrene, then glued a piece of black foam packing to the base [5]. I stacked the poles on both sides of the foam center, and secured them with canopy glue to form the sides of the load [6].

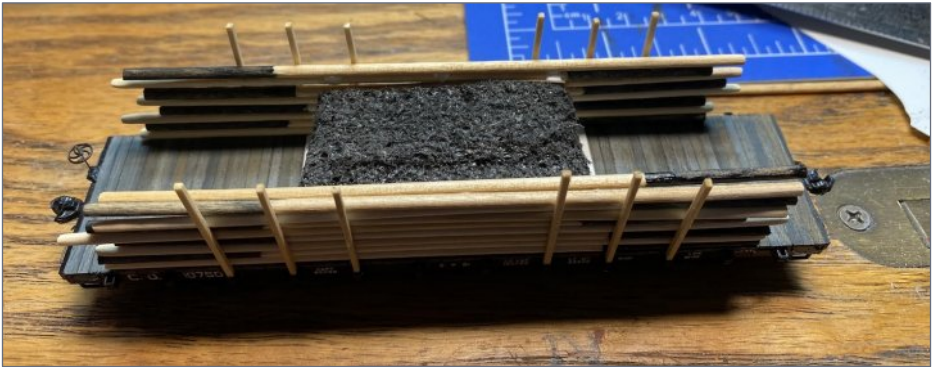


5. Packing foam glued on a piece of 0.005" Evergreen styrene.

Then came the tedious process of cutting the poles in the middle of the pile to accommodate the foam. I had to coordinate their top and bottom ends to simulate each pole's full length [7].

I cut out a piece foam and filled it with Liquid Gravity pellets [7]. I added more weight in the cavities between the ends of the foam and the interior dowel pieces, until the overall car and load came up to 3.7 ounces [8].

I wanted the load to be removable, but not in unplanned fashion. So the load wouldn't easily slide off the car during movement, I used a piece of double-sided tape to secure it in place [9].



6. Poles stacked on both sides of the foam.



7. Bottom layer of poles being added; I added weight to the interior of the foam.



The 12 vertical side stakes are scale lumber 4x4s. I added a little stain to weather them differently than the pole loads. They fit tightly in the kit's side pockets without any glue. If I want to change the car into an empty, it's easily done [10].

I created metal bands for the load using Tamiya masking tape. I colored the tape black with a marker, and then cut it into strips [10]. After adding the strips, I brushed the ends of the load with canopy glue.

This completed my Central of Georgia flatcar with its pole load. I'll use it as an interchange load between the Rock Island and Missouri Pacific [11]. ☑

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8. All the layers of poles are glued in place, and additional weight has been added between the foam and dowels.



9. Underside of the load showing the double-sided tape.



10. The completed load is strapped down using Tamiya tape.



11. Top view of the loaded CG flatcar in service.



CHARLIE DUCKWORTH



Charlie Duckworth retired from Union Pacific after 38 years. He started with the Missouri Pacific in 1974. Charlie is a life member of the MPHS and served as its president on several occasions and on its board for several years. He's has written articles for the Missouri Pacific Historical Society magazine *The Eagle, Mainline*

Modeler, Model Railroader and *Model Railroad Hobbyist*.

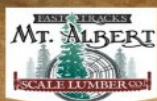
He has also written three books for the Missouri Pacific Historical Society:

- *Down the Iron Mountain Route*
- *The Missouri-Illinois Railroad Missouri Pacific's Route Through the Lead Belt and Little Egypt*
- *Selected Photographs from the Missouri Pacific Historical Society Archives*

His HO layout features the Missouri Pacific Bagnell Branch and Rock Island set in the Missouri Ozarks circa 1954. He and his wife Linda live in Omaha, Nebraska.

They have three grown children and six grandchildren. ■





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Nobody knows the trouble I've seen Part 2



The cover of Joe Fugate's *Make It run like a Dream: Trackwork*.

Model Railroad Hobbyist | August 2024

JEFF PALMER OFFERS MORE UNSOLICITED ADVICE ...

EVERYONE WHO HAS SCHEDULED AN OP SESSION WILL TELL YOU the most important aspect to a successful session is the trackwork. Derailments are an embarrassment to the layout owner, and is frustrating for the operators.

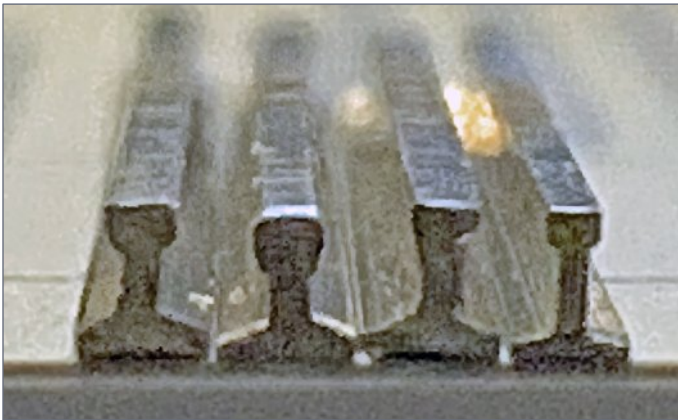
In the previous article, we talked about getting the sub-roadbed and the roadbed right. In this article, we are going to talk about getting the track right.

First let's state a simple truth: Not all track is created equal. Atlas track is not designed the same as Micro Engineering, or Peco, or Walthers. Each of these vendors offers a quality product, but each track has differences from the others [1].

As an HO model railroader, code 83 is my track of choice. In my opinion, code 100 looks too clunky, and Code 70 offered flange challenges for some older rolling stock and engines.

I borrowed a table design from Joe Fugate's book, *Make it Run Like a Dream: Trackwork* to illustrate what I had to learn the hard way. I added a column to his table titled "Track Profile Height (P)."

Over the years, I have worked primarily with four Code 83 track vendors: Atlas, Micro Engineering, Peco, and Walthers. During op sessions, I noticed that at certain joints in the rail, I could hear a "click, click" as a truck passed over, or I would see the car rise and fall like you would see as a car going over a bump, or dropping as it goes through a dip.



1. Railheads from left to right: Atlas, Micro Engineering, Walthers, and Peco.



Upon closer examination, the sound or the motion was where two different rail types were mated. As a result, I decided to create this table to better understand the problem [2, 3].

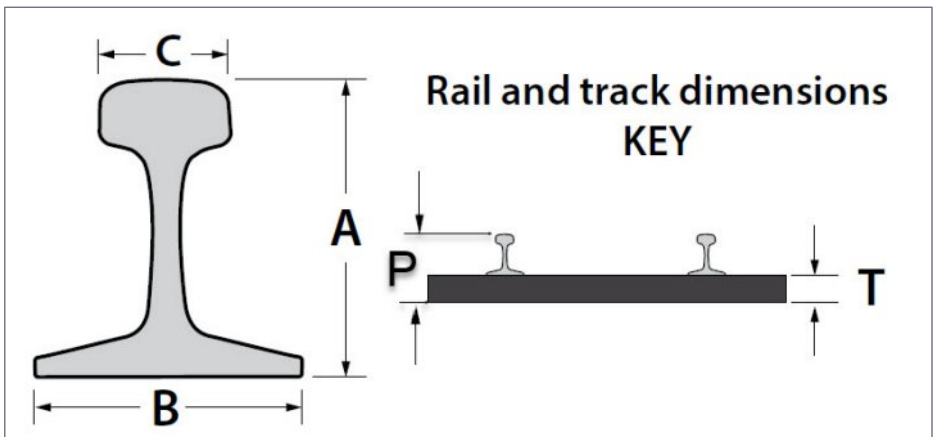
Rail Height (A) is the standard each vendor must meet to have their product in this classification. While the rail height (A) is the same for each of the vendors, the design of the rail and accompanying ties differs.

Base Width (B) matters because of rail joiners, which are used to align the rails and to transmit power and DCC signals.

An Atlas rail joiner fits snugly to Atlas track, but will be loose for connecting Peco, Micro Engineering (ME), or Walthers tracks.

Mfg	Code	Rail Height (A)	Base Width (B)	Head Width (C)	Tie Height (T)	Track Profile Height (P)
Atlas	83	~0.083"	~0.076"	~0.040"	~0.082"	~0.165"
Micro Engineering	83	~0.083"	~0.074"	~0.039"	~0.083"	~0.164"
Peco	83	~0.083"	~0.066"	~0.031"	~0.081"	~0.164"
Walthers	83	~0.083"	~0.074"	~0.040"	~0.065"	~0.147"

2. Track comparison chart.

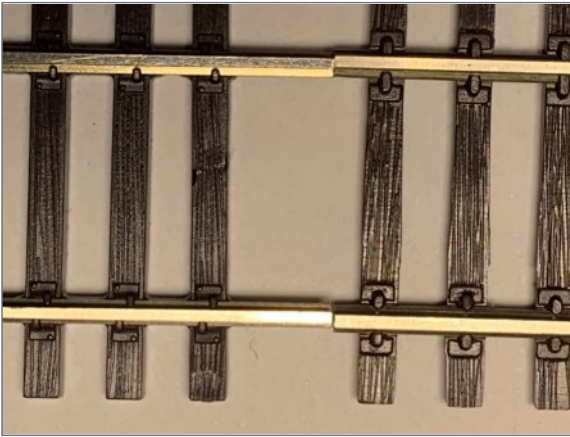


3. Track profile key.

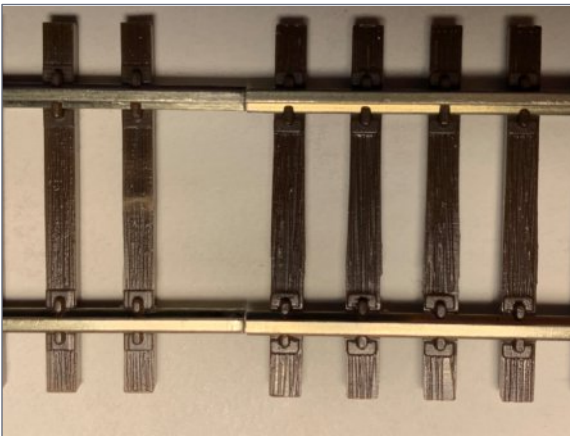
An ME joiner will be a tight and difficult fit for Atlas rails, but a snug fit for those of ME and Walthers. It will be a loose fit for connecting Peco rails.

A Peco joiner will require work to fit Atlas, ME, and Walters, because their rail bases are all wider.

Head Width (C) differs between manufacturers, too. Assuming proper alignment at the rail joiner, if the rail heads are not an exact match between two mating rails, the transition is still rough [4, 5, 6].



4. The railheads differ between Peco (left) and Atlas (right).

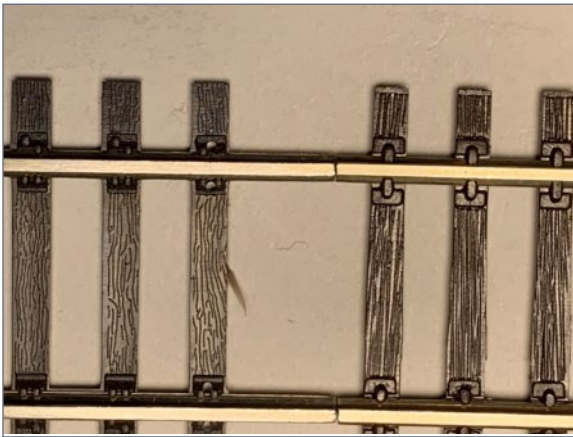


5. Difference between ME and Atlas.



If the rail joints heads are of different width, the only solution is to file. My favorite tool for it is an ignition points file from my favorite automotive store [7]. They are also available from Fast Tracks handlaidtrack.com/product/tl-0016), and on Amazon.

The job here is to reshape the two heads to be matched so there are no ridges or edges. The ignition points file is aggressive, and makes short work of this job. The inside surfaces, where the wheels ride, should be smooth with no protruding edges to catch a flange or cause a bump.



6. Difference between Walthers and Atlas.

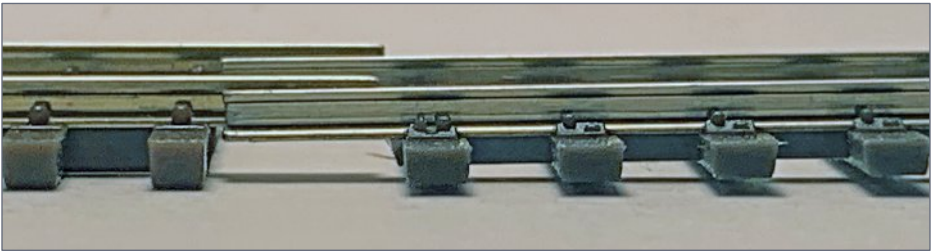


7. Ignition point file.

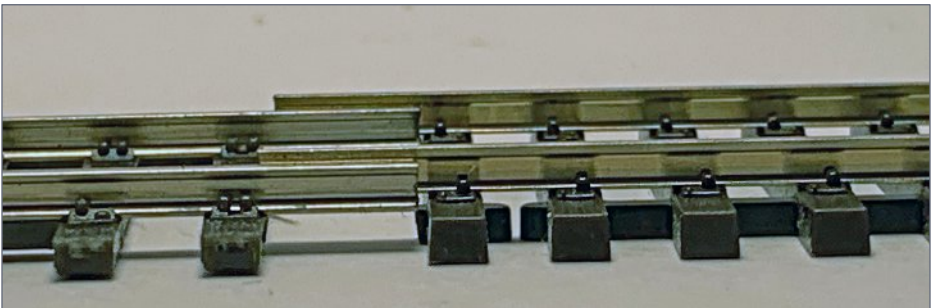
Tie Height (T) – Another engineering difference between track vendors, is rail tie height [8. 9]. As you examine the chart, if you join Walthers track to that of another brand, you must shim the Walthers track to bring it up to level.

Track Profile (P) - is overall track height consisting of rail height plus tie height. The value of the far-left column in [2] is determining if you need to shim a track when joining two different vendors tracks. Anyone who has laid track will tell you track is only as good as the base it is built on.

If one track is shorter in overall height, you must shim that track to bring the shorter track up to the height of the taller track. You don't shim it just at the junction, you need to think of the shim as a short incline. The best solution is to do what Joe recommends, and use the same track throughout the layout.



8. Atlas ties are much taller than Walthers.



9. A comparison between Peco and ME ties.



JOINERS

The purpose of a joiner is to properly align two pieces of track so they can be butted together. Joiners are straight, which is an advantage for straight track, but they can introduce kinks on curved track. In the past, I used to cut Atlas joiners, which are long, in half for use on curves with staggered joints or at soldered joints.



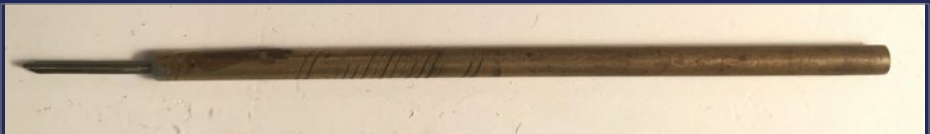
J. Palmer

JOINER TOOL

Rail joiners are designed to fit rail ends snugly, so it can be challenging to install them when laying track. To assist, I made a joiner tool, which is simply a piece of brass tubing with a short piece of the rail soldered into it. Round the tip of the rail for insertion into the joiner [11].

Because each rail manufacturer's base and joiners are a little bit different, I recommend making a tool for each type of track you use.

Use the tool to stretch the joiner prior to use. Push the joiner all the way on the tool, remove the joiner from the tool, and you're ready to go [12].



10. I use this joiner tool to help install rail joiners.

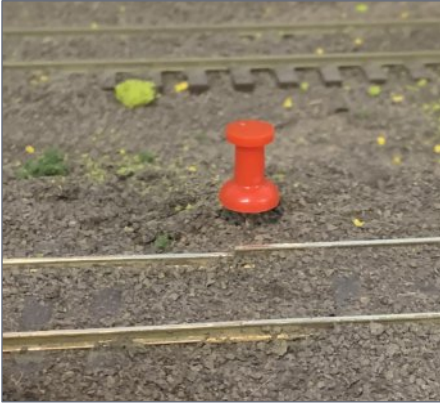


11. Rounding the tip of the rail helps to ease the joiner on.



12. The joiner tool stretches the joiner so it is easier to install on the rails.

An incorrectly installed joiner presents problems. Consider the example shown in [13, 14, and 15].



13. This trouble spot was flagged during operations. The rails were not in proper alignment.



14. Closer investigation revealed that one of the rails was resting on the joiner.



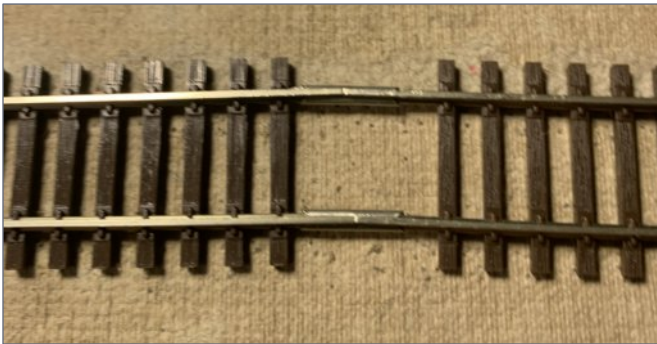
15. Sliding the rail properly into the joiner corrected the problem.



TRACK ISSUES: KINKS

Kinks occur when two pieces of track are not properly aligned, typically on curves or when mating up to a switch [16]. Both are critical junctions where smoothness is vital.

Using track gauges can help lay a smooth curve [17], but they sometimes can't quite overcome kinks at rail joints [18]. This is because the rail joiners tend toward a straight connection, and the ends of the rails may not follow the rest of the curve.



16. This is a kink.

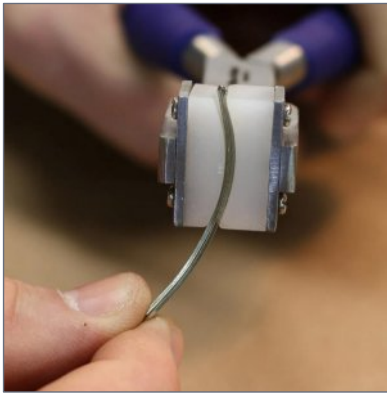


17. An assortment of curve alignment gauges from Ribbonrail.

Micro Mark offers track-bending pliers (90976) [19], which is a handy tool for fixing kinks. Place the pliers on the rail and squeeze [20]. With persuasion from the pliers, the kink blends into the curve [21].



18. Despite using a gauge, there is a kink at the rail joint.



19. Bending pliers. *Manufacturer photo*



20. Applying persuasion with the bending pliers.



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21. With persuasion, the kink disappeared.

GAPS

Gaps as provide electrical isolation for power districts or for isolating frogs. Their other important function is to allow for track expansion.

If your layout is in a climate-controlled environment, minimal gaps are necessary. If your layout is in a garage, outbuilding, or a room where the air and heat are turned off when not in use, then gaps are required.

In theory, rotary tools with cutoff wheels are handy for cutting tracks. The kerf from the cutoff wheel is minimal, at 0.042". However, the cut-off wheels have some pitfalls.

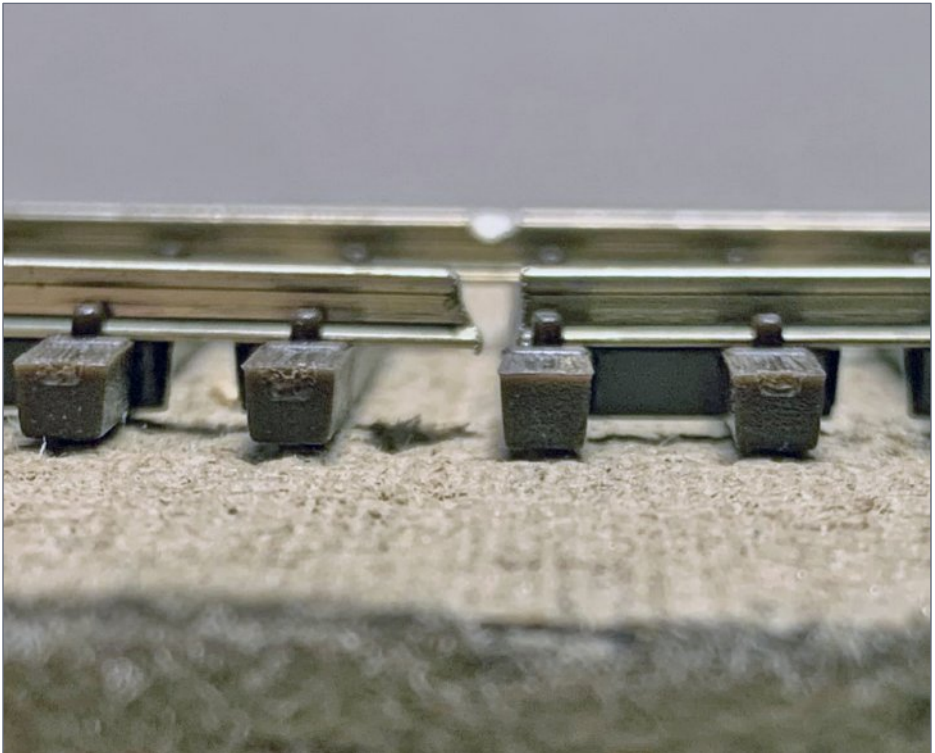
The body of a rotary tool is about the same diameter as the cutoff wheel, and the hand holding it only adds to that [22]. This means that a 90-degree cut is impossible, and the angular cut will be considerably larger than desired [23]. Unfortunately, the wheel is large enough to nick the opposite rail if you're not careful [24].

A better option is to use an inexpensive flex-shaft attachment [25]. It's smaller than the tool, and allows the user to make a clean, perpendicular cut.

Gaps can produce bumps and unwanted noise, but these issues can be corrected by using plastic to fill the gaps [26]. Glue the plastic piece into the gap. I use CA, but epoxy also works.



22. This cutoff wheel is the same diameter as the tool.



23. This angular, wide cut was made with a cutting wheel in a rotary tool.





24. While making the cut in [23], the opposite rail was nicked.



25. This flexible shaft attachment overcomes many of the rotary tool's issues.



26. This piece of plastic has been rough-cut to fit the gap.

Once the piece is in place, carve it to shape [27]. I use a rotary tool with a wire brush to shape the sides of the filler, then file the crown flush with the track using the ignition file. I have used epoxy, gel CA, and solder to fill gaps not being used for isolation.

It is tempting to solder all the rail joiners for improved conductivity and stability. Some gaps are necessary for expansion, especially for layouts that are not under constant climate control. Otherwise, changes in temperature can cause interesting results [28, 29].

Normally, gaps should be made every few sections of track, or every 10'-15'. Do not solder the expansion joints, as you want the track to expand and contract freely. The rail joiners will help keep the tracks in alignment. I prefer Atlas joiners for expansion gaps because of their length.

Expansion gaps should be narrow enough that wheels can pass over them smoothly [30]. They don't need to be across from each other. You can stagger the joints for better operation and more realistic look.

For flex track, slide the rail that moves more freely down about five ties, and use shorter joiners to make the connection [31]. You may need to remove some spikes to accommodate the joiner. Thread the loose rail of the second track through the spikes and join them [32].



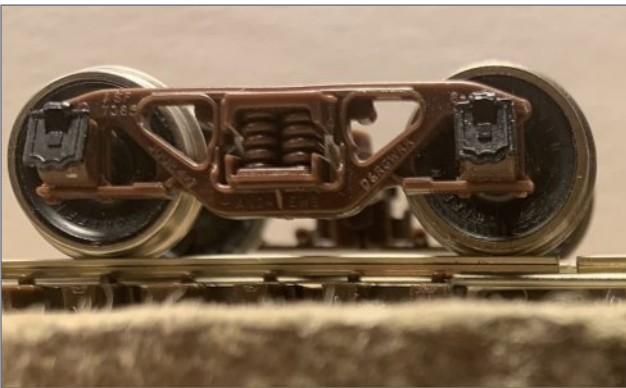
27. After some work, the plastic fillers blend into the rail profile.



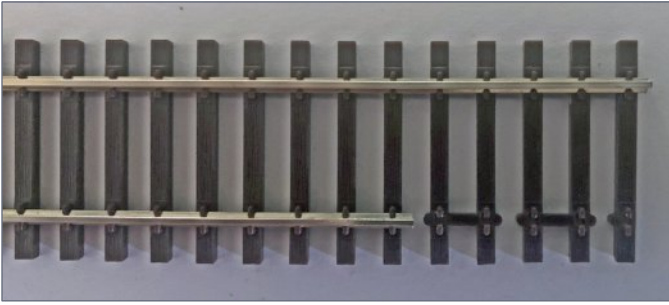
28. Heat expansion differences between the road bed and the track caused the track to bow up.



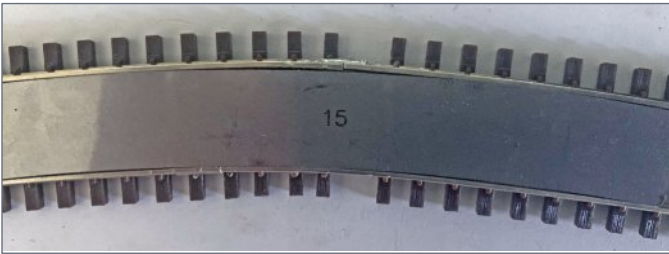
29. Heat kinks have bent these rails out of gauge.



30. I use a truck to test the expansion joints.



31. The rail has been slid back.



32. The rails of the next track have been slid into position for an offset connection on a curve..

SOLDERING

One of the reoccurring issues is poor soldering [33]. Too much solder can foul flangeways. Cold solder joints can cause random electrical problems.

I like my soldering iron hot for quick touch soldering. Using electronics flux can improve solder flow and performance.

FLEX TRACK

Flex track is designed to stay in gauge when curved, but curving the flex track too sharply can cause it to go out of gauge. Terminating a sharp curve abruptly into a fixed straight piece, especially the entry to a switch, can also cause problems, including kinks.

You can use alignment (curve) gauges to make the curve more consistent and keep the track in gauge. Another trick I use to prevent kinks on the curve is to offset the joints by a few ties.





33. The blobs of solder on this turnout will cause problems.

With flex track, one rail is always looser than the other so it slides into the rail ties of the first track and a rail joiner can easily be installed. This process will distribute the pressure of curving the track over a greater distance, and help to eliminate kinks and keep the track in gauge. Always use the NMRA Standards Gauge to validate compliance.

TOOLS

Some of my favorite tools and supplies to work on for switch work includes the point file from Fast Tracks, the small bastard file from PBL, a flush rail cutter from Micro-Mark, and my favorite rail gauge from Simpson Models. Of course, no tool kit is complete without an NMRA Standards Gauge.

CONCLUSION

These two articles illustrate only some of the problems I've experienced and had the opportunity to fix and document. As I gather more material, I will pass the material on in future articles. Be smart. Think through your choices and make the best decision, not necessarily the cheapest. ☑

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JEFF PALMER



Now retired, Jeff spent 50 years developing software, and 25 years as a college professor. During that time, as now, he was a modeler. That means that he loves to build structures, bridges, scenery, and locos. More specifically, his interest is in logging and mining, which by definition means, he likes narrow gauge.

It's the free form, and ruggedness that surrounds logging and mining railroads; the scenery and landscape.

He is always on the lookout for new techniques, and tools that improve the hobby. Model railroading allows him to expand his skill set, work with his hands, and share with his friends the things he has learned.

About 2 years ago, he completed his MMR (Master Model Railroader) certificate from the NMRA. During that journey, he had the privilege of meeting many of the modelers he looked up to like Gil Freitag, Duane Richardson, Chuck Ellis, George Sellios, Marc LaChey, Dave Revelia, Dave Frary, Scott Mason, and others. His goal is to be recognized in this group someday. ■



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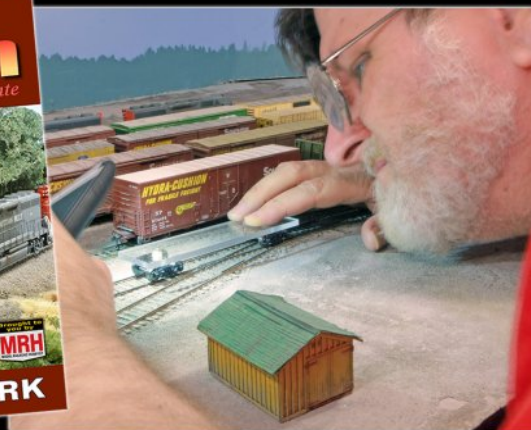
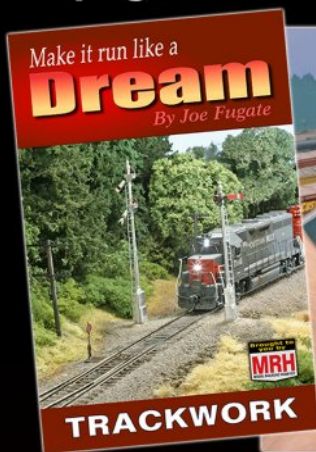
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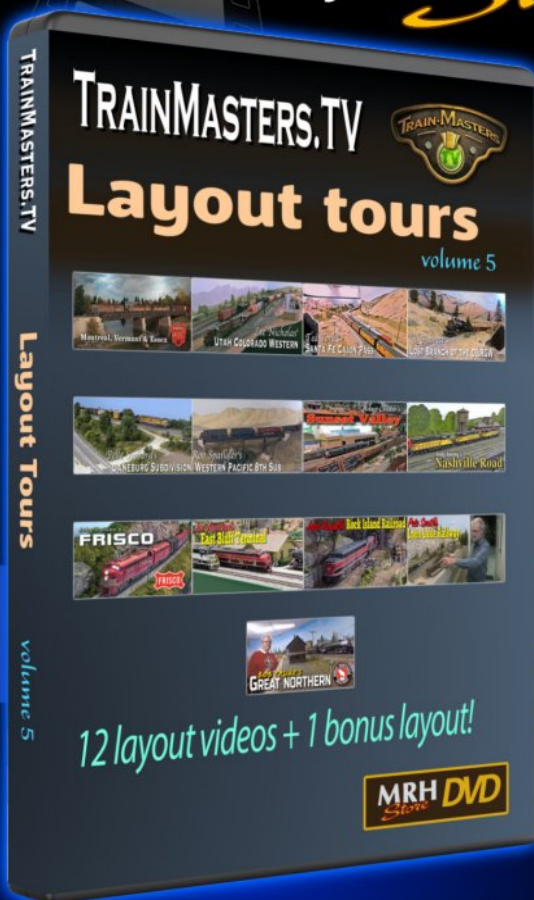
Other books in this series: **ROLLING STOCK** (available now) and **LOCOS** later in 2024)



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East Coast Circuits and Iowa Scaled Engineering

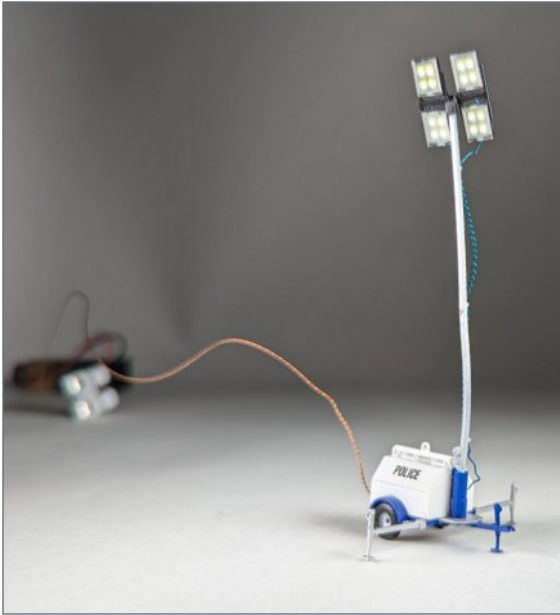
JEFF SHULTZ DEMONSTRATES LIGHTS AND SOUND WITH A PORTABLE LIGHT TOWER AND THE SQUEALER...

EAST COAST CIRCUITS (ECC) PORTABLE LIGHT TOWER

I'M GOING TO CLAIM RESPONSIBILITY FOR THIS ONE – EAST COAST Circuits' Neil Multz had asked me a couple of years ago if I had any product ideas they could make.

A few months later I did. When I was in the Army in the mid-1990s, a crosswalk near my barracks had a portable light tower stationed over it because of a car vs. pedestrian accident shortly before I was stationed there. It was there the entire 2-1/2 years I lived there, so it made an impression.

What I didn't know until recently is that newer models of these towers feature four LED light panels instead of the four "bowl-type" lights that I was used to. ECC has introduced an HO scale model of



1. The light tower. The LEDs are illuminated, but my camera lights overwhelmed them. [3] shows them brighter.

the updated version of the light tower, including a 3D-printed body, tower, and outrigger supports, and 16 LEDs in four panels.

The early sample I was provided is white and blue with “Police” printed on the side. The models they’re currently offering are available hand-painted in orange, yellow, and green, with tires and trailer parts in black.

The outriggers are user-installable parts and are optional. The wires to the LEDs are contained in a curly flexible cable that resembles the one on the prototype, and the mast can be rotated to direct the light to the front, back, or sides of the model.

Like all of ECC’s LED-equipped products, this one requires a 9-12V DC power source. I’ve powered it with a 9V battery and with a Logic Rail Technologies Light EFX-16 card. With the correct connector, it should be able to be run from a Woodland Scenics JustPlug hub as well.

Info: eastcoastcircuits.com

Price: \$75

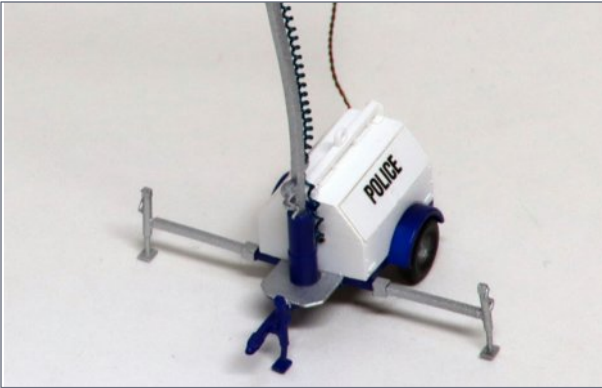


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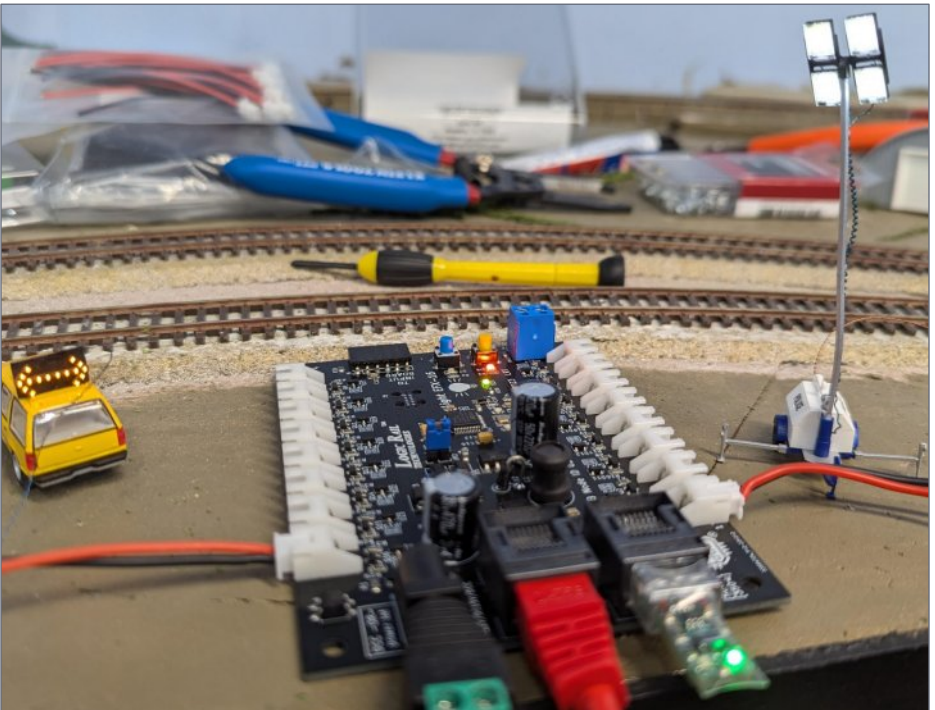
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PORTABLE LIGHT TOWER | 3



2. The body of the trailer with the outriggers attached. This is an early sample.



3. The Light Tower and an ECC animated LED arrow are both connected to the Logic Rail Technologies Light EFX-16 (www.logicrailtech.com/xcart/product.php?productid=16357). I'm still deciding where everything will be permanently located.

IOWA SCALED ENGINEERING'S THE SQUEALER

Iowa Scaled Engineering (ISE) has introduced a series of interesting electronic accessories for model railroads, starting with the ProtoThrottle and continuing through their latest product, The Squealer. The Squealer uses under-track sensors to detect train movement, and plays a flange squeal sound effect on a nearby speaker when activated.

The Squealer is a circuit board powered by either a USB-Micro plug connection or from a separate 5V-24V connection via screw terminals on the board.

The package includes the circuit board, a SoundBytes-style speaker, and one motion sensor. Additional TrainSpotterM motion sensors can be purchased. While ISE says the board can support many sensors, ISE considers four or five the most that make sense, since the sensors should be near the speaker.

Since the sensors are \$25 apiece, I installed only two on each of my Squealers, one at each end of a tight curve. The sensors have to be oriented correctly to the direction of the track to detect motion correctly, and there is a specific illustration in the instructions regarding that.

The Squealer comes with a MicroSD card preloaded with an assortment of flange squeal sound effects. These play randomly whenever one or more of the sensors detects motion above it. You can also record your own flange squeal – or any other – sound effects and use them with The Squealer instead.

www.iascaled.com

Price: \$79 for The Squealer, \$25 for each additional TrainSpotterM detector.

To see a video of the Squealer operating, please click here:
mrhmag.com/magazine/mrh2024-09/video/first-look

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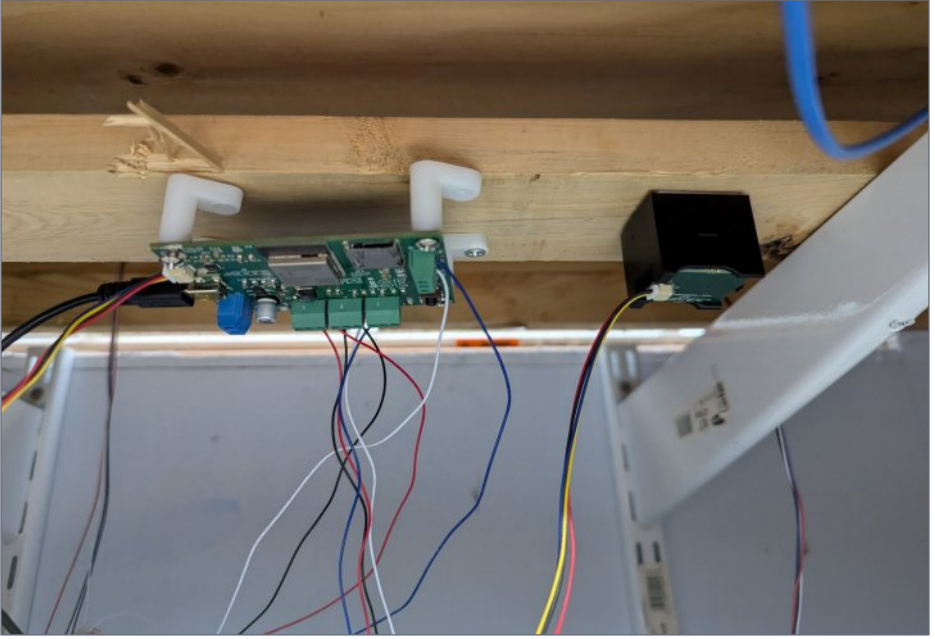
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4. The ISE The Squealer mounted underneath my layout. Adequate amounts of wire are included for connecting the TrainSpotterM sensors and the speaker. The speaker is secured with double-sided foam tape. Mounting hardware is not included.



5. One of the TrainSpotterM motion sensors mounted underneath the track. I'll have to remember to be very careful when it comes to weathering and ballasting near the sensors.

All meat ... no ads.



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- Kevin Rhodes, MRH forum member

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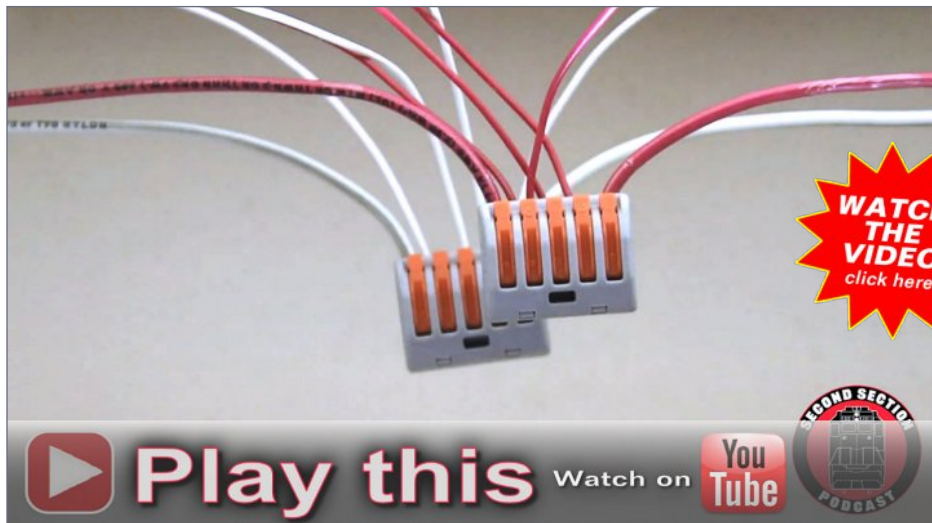


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Solderless layout bus and feeder wiring

YouTuber Mike from **Second Section Podcast** demonstrates how to wire your layout bus and feeder wires with *zero* soldering needed.

In this short circa 5-minute video, Mike explains what he does with modern wire connectors to do his solderless layout wiring. We recommend this for all modern layout wiring.

Buy the connectors he shows at this link: [shopping list](#).

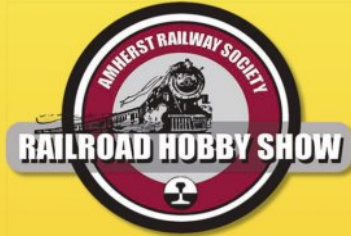


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SEPTEMBER NEWS

column



Model Railroad Hobbyist | September 2024

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



INDUSTRY NEWS



The **Schuylkill River Model Railroad Club** is offering HO scale ACF 10,000-gallon tank cars lettered for Keith Tank Lines (KTX) Publicker Distillery Co. Cologne Spirits and Alcohol. Available in five

road numbers (545, 547, 548, 549, 550) through the club, the cars replicate prototypes built in 1915 that were still in service in the 1950s.



Manufactured by InterMountain Railway Co., the tank cars feature InterMountain metal wheelsets and metal knuckle couplers.

Info: b3good1@verizon.net

NEW PRODUCTS FOR ALL SCALES

New books coming from **Morning Sun** this fall include volume 3 of *1950s Freight Car Color Guide: Hopper, Refrigerator, Stock, Tank Cars & More*, by James Kinkaid and Ken Donnelly. This

THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS



all-color 128 page volume presents the conclusion to the three-part series.

Also scheduled for release this fall is volume 4 of *Chessie System In Color: C&O In Virginia*. Author Kurt Reisweber presents a grand scenic tour of the Chesapeake & Ohio Railway across Virginia as it existed as a part of the Chessie System in the 1970s-'80s. Many out-of-the-way locations in the Old Dominion are featured in this all-color 128 page book. Virginia's C&O presence is covered from the waters of Hampton Roads to the mountains at the West Virginia state line in the Alleghany Tunnel.

Info: www.morningsunbooks.com

0 SCALE PRODUCT NEWS



Atlas is taking orders for 0 scale rebuilt well cars in both 48' and 53' lengths. The prototype

cars were rebuilt from 48 cars that could not fit new 53' domestic containers and were longer than necessary for 20' and 40' ISO standard containers.



Available in both 2- and 3-Rail, the 40' well car comes decorated for

Maersk and three different TTX paint schemes and the 53' well car will be available decorated for Florida East Coast, Pacer StackTrain, and two TTX paint schemes, including the On Track for a Cure scheme. With diecast bodies, the cars feature detailed brake rigging, etched metal walkways, and low friction trucks with rotating bearing caps.

Info: shop.atlasrr.com

HO SCALE PRODUCT NEWS



The latest economy priced HO scale car kits announced by **Accurail** include this Pullman-Standard triple-bay covered hopper decorated for Illinois Terminal. The decorating scheme is based on a prototype built in 1975.



Road names available for ACF twin-bay Center Flow covered hopper kits include Western Maryland and Texas Pacific/Missouri Pacific.



This Pittsburgh, McKeesport & Youghioghney (NYC) 40' single-sheathed wood boxcar is based on a prototype built new during World War I.



Pullman Car followed a Fowler design in building this 36' wood boxcar for The Monon Line AKA Chicago, Indianapolis & Louisville.

All Accurail car kits come appropriate trucks with Delrin wheelsets and Accumate knuckle couplers.

Info: www.accurail.com

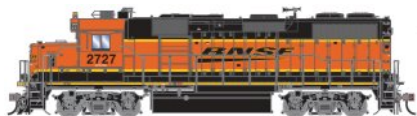
Athearn has announced details on a new production run of Genesis series HO scale EMD GP39-2 diesel locomotives. The deadline for preorders is September 27, 2024, with availability planned for January 2026. New features available on all units include a D&H-style walkway and a new fully detailed fuel tank.



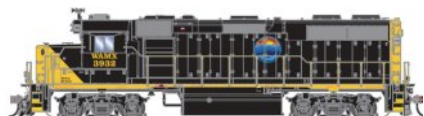
GP39-2 models decorated for Santa Fe feature a large front anti-climber, a small EMD front plow, a Stratolite cab beacon and a Leslie three chime horn.



The UP edition represents ex-D&H locomotives with front ditch lights, a large Sinclair antenna, a small front plow and a Nathan five chime horn.



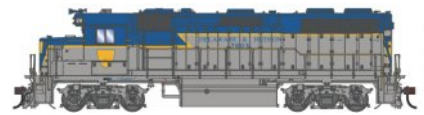
All models in this release have Phase 1 bodies except BNSF units which have Phase 2 bodies. Details on the ex-BN locomotives include a large exhaust stack, a nose electronic brake, front and rear ditch lights and a large fuel tank.



GP39-2 models decorated for Blue Ridge Southern/WAMX (Webb Asset Management a division of WATCO Holdings) feature a small EMD front plow, front and rear ditch lights, an A/C unit on the cab roof and a Nathan three chime horn.



Wisconsin & Southern versions of Athearn's GP39-2 are based on ex-D&H units that have a UP style front plow. Additional details include front and rear ditch lights and a roof top A/C unit. Two road numbers will be available in this release including one with a nod to the road's 35th anniversary.



Distinguishing features on Athearn GP39-2 diesels decorated for Delaware & Hudson include a small EMD front pilot plow, a Leslie three chime horn and a large Sinclair antenna on the cab roof.

Athearn's January 2026 production schedule includes a Genesis series SDP45. Here are the details.



Athearn's SDP45 decorated for Southern Pacific features a modified L cab

window, roof mounted icicle breakers, a Nathan P3 horn, and Gyalights, and a forward emergency light that are both operational on DCC models. SP #3203 features faded paint, removed cab icicle breakers, and painted over class lights.



Models decorated for Burlington Northern represent ex-Great Northern units with steam generator details and a medium sized front pilot plow. DCC models will have an operating Stratolite beacon. A Great Northern version of the SDP45 will have similar features.

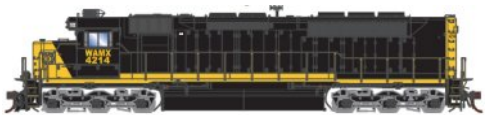


This Wisconsin Central unit represents an ex-EL SD45M with a 5,000 gallon fuel tank and operating front and rear ditch lights.



Athearn's Genesis SD45M decorated for MKCX (Morrison-Knudsen) will have dynamic brake and

radiator fans, a Leslie RS3L low-profile horn, classification lights and a standard EMD low snowplow.



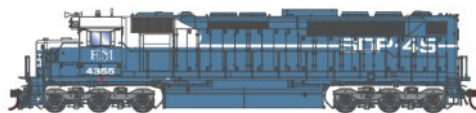
A WAMX (Blue Ridge Southern Webb Asset Management division of WATCO Holdings) SD40M-2

will have operating front ditch lights, an RV-style A/C unit on the cab roof, a Nathan K3LA horn and two Sinclair antennas.



Athearn is offering an SDP45 owned by the SP with a modified L cab window, icicle breakers on

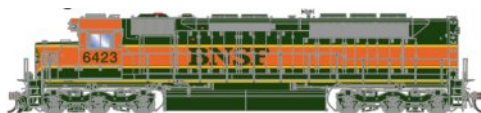
the roof, and steam generator details in classic Daylight colors as part of the Legendary Liveries line.



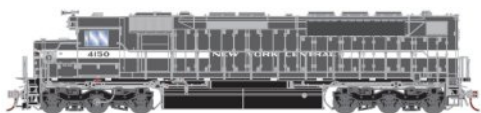
Another Legendary Liveries offering is two EMD demonstrator units in the January 2026 production run. It will have modified L cab windows, a Leslie RS4L low-profile horn, and steam generator details.



Athearn is offering an SDP45 in a UP Legendary Liveries fantasy scheme with icicle breakers, a winterization hatch, a small EMD-style snowplow, a Leslie RS3L horn, and a Western-Cullen Beacon that will function on DCC models.



Also part of the Legendary Liveries is this BNSF SD40M-2, decorated as if it had survived through to the BNSF merger. It will have hinged battery box doors, a K3LA horn and a small EMD pilot plow.



A Legendary Liveries NYC SDP45 will feature steam generator details and an MU Catch with footboards.



Completing this production release is an ex-EL SD45M decorated for HLCX (Helm Leasing). Features include front ditch lights and a small EMD pilot plow.

Details shared by Athearn's GP39-2 and the SDP45 include individual uncoupling levers, trainline and MU hoses, nub-style walkway tread, windshield wipers, lift rings, wire grab irons, fuel tanks detailed with fuel fillers, fuel gauges, and breather pipes, see-through cab windows and detailed cab interior, Celcon handrails, etched metal fan grilles and sanding lines.

Additional features include a Genesis all-wheel driveline powered by a 5-pole skew wound motor with precision machined flywheels.

DC models will be DCC-ready with a 21-pin NEM connector. Sound equipped versions of the Genesis models will have a DCC decoder with SoundTraxx Tsunami2 sound and dual cube speakers. The GP39-2 will come with Blomberg 4-wheel trucks. The SDP45 will come with EMD's 6-wheel HT-C Flexcoil trucks. Both locomotives will handle 18" track radius, however, a minimum track radius of 22" is recommended for the 6-wheel SDP45.



New HO scale freight cars in Athearn's January 2026 production schedule include a Gunderson 60' boxcar with

double plug doors. The model will have separately applied wire grab irons and etched metal end platforms. The remaining details will be cast into the injection molded plastic car body. Athearn suggests a minimum track radius of 18" but recommends 22" for better appearance and reliability.

Road names for this release will be TTX (Red logo), CSX, Kansas City Southern, Northwestern Oklahoma, COER-Crab Orchard & Egyptian and General American in a Primed for Grime scheme.



BethGon Coalporters decorated for BASF, CSX, Norfolk Southern, Canadian National and KCLX-

Kansas City Power & Light are included in Athearn's January 2026 production schedule. The HO scale models will be available singly and in 5-packs with different numbers. The Coalporters will have separate wire grab irons, etched metal coupler platforms and a removable coal load.

Completing Athearn's 2026 production schedule is a 53' Stoughton container. The HO scale model will be available in 3-packs with



different numbers. In addition to Southern Pacific, decorating

schemes in this release will be Hub Group, Schneider, Thoroughbred Direct, a patched EMP and SeaTrain. The SeaTrain scheme is a fantasy since that company went out of business in 1981, almost a decade before 53' containers were introduced.



New Athearn models recently released to dealers include a 40' quadruple-bay coal hopper car with offset sides. The model is being marketed in 3-packs under the Roundhouse brand name. Features include a separately applied brake wheel, 50-ton Bettendorf type plain-bearing or 70-ton roller-bearing trucks.



Road names available on this release include Western Maryland, Missouri Pacific, Denver & Rio Grande Western, Lehigh Valley, Chesapeake & Ohio and Peabody.

All Athearn models mentioned in this report will come with McHenry automatic couplers and appropriate trucks with machined metal wheels.

Info: www.athearn.com

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R. Bale

SANTA FE'S FIRST PASSENGER DIESEL

In 1935 Electro-Motive Corporation (later Electro-Motive Division, General Motors) was starting its transition from a design and marketing company to a locomotive building company. Among its first production units were five experimental passenger hauling diesel locomotives powered by two 12-cylinder 900hp Winton 201-A diesel engines for a total of 1800hp. Two of the experimental units went to Santa Fe as diesel locomotives No. 1 and 1A. The original carbody was manufactured for EMC by St. Louis Car Company. Like most box cabs of the period, they were built with control cabs at both ends and rode on AAR type B two-axle trucks. In 1938 both No.1 and 1A were rebuilt with a single cab, a high bulldog nose and six-wheel trucks with the front axles functioning as idlers.



ATSF N Scale Models is selling 3D HO scale body shells for Santa Fe's No. 1 in its original

form and as rebuilt in 1938. At left is a 3D body shell for ATSF No.1. Etched stainless steel detail parts are currently under development.



3D body shell and truck side frames for HO scale EMC 1 as rebuilt with high bulldog front. A

body shell for an EMC 1 B unit is also available.

All 3D parts are produced in ABS styrene engineering plastic in a 0.05mm layer height. The body shells are also available

in N scale.

Info: www.atsfnscalemodels.com



The 52' flatcar is equipped with rails to hold the load in place and separate plastic wheelsets in an oxide brown color.



Bachmann has released a new HO scale flatcar model equipped with a wheel load.

Road names in this release are Canadian National, New York Central, Pennsylvania, and Santa Fe.

The car is equipped with blackened machined metal wheels with RP25 contours and E-Z Mate Mark II couplers.

Info: shop.bachmantrains.com

Bowser is booking pre orders through October 15 for several versions of a GMD SD40 diesel locomotive. Notable features on the HO scale Executive Line model include operating headlights, classification, ditch, and deck work lights; individual air hoses, windshield wipers, grab irons, coupler lift bars, window glazing, and numerous road specific details.



Leading the list of decorating schemes for Bowser's SD40 are three Canadian Pacific versions in gray and maroon with a

choice of round or square sand fillers.



Models decorated for CP Rail will be available with and without dual flag scheme.



CP Rail (ex QNSL - Quebec, North Shore & Labrador Railway) will have a small multi-mark.



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Bowser GMD SD40s decorated for Canadian National will be available in a choice of wet noodle or sergeant stripes. Both CN schemes will feature dynamic brakes and ditch lights.



Models decorated for Algoma Central and Quebec North Shore & Labrador Railway will be detailed with snow shields.



DM&E (Dakota, Minnesota & Eastern Railway) models will feature the Employee Dedication scheme.



Two road numbers, 5524 and 5542, will be available for an SD40 decorated for the St. Lawrence & Hudson Railway.

The chassis on all Bowser SD40s feature a can motor, machined flywheels, nickel silver wheels and knuckle couplers. DCC sound versions of HO scale model will have LokSound V5 decoder. Analog (DC) versions will have a 21-pin plug.

Info: bowser-trains.com



The preorder deadline for **Broadway Limited's** PRR 0-6-0 switch engine is September 20, 2024 with delivery expected in May 2025. The HO scale brass/cast hybrid

model is based on a Class B6sb prototype PRR built in its Juanita

Shops between 1916 and 1920. Eventually PRR rostered 238 editions of the B6 switch engine. Most were retrofitted with power reversers to make the frequent switching moves quicker and easier for crews that operated them. The 0-6-0 steam switchers were replaced by diesel switchers in the late 1940s and early 1950s.



In addition to prewar and postwar schemes, Broadway Limited will offer the model with Futura lettering and unlettered. The boiler, tender body and chassis are heavy

diecast. Details including the cab are fabricated from brass. Handrails, grab irons, ladders, piping, cab glass, markers, whistle and bell are all separately applied details. The headlight, reverse light, cab light and front marker lights are all separately controllable. One set of drivers is fitted with rubber traction tires. Stealth (silent) versions of the model are available along with Paragon4 Sound and Control System.



R. Bale

UNION PACIFIC 2-8-8-0 STEAM LOCOMOTIVE

The biggest challenge facing the Union Pacific Railroad during the steam era was Sherman Hill west of Cheyenne. What the UP needed was a single powerful locomotive that would end the time consuming need to double head or split west bound trains. The answer came in 1918 with the introduction of a monster 2-8-8-0 Mallet built by Alco. Sixty-four of the engines were added to UP's roster between 1918 and 1924. Though powerful, the 2-8-8-0 was extremely slow. UP developed a replacement in the late 1930s with the faster and equally powerful 4-8-8-4 Big Boy.

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Broadway Limited is developing an HO scale version of a Union Pacific 2-8-8-0 steam locomotive. Delivery of the brass-cast

hybrid model is planned for December 2025. BLI is preparing two versions of the locomotive: The earlier class SA-C-6 in a pre-1944 livery and the class SA-C-2 in a common post-1944 paint scheme. The SA-C-2 will also be available in a UP two-tone gray fantasy scheme.



The locomotives will be available with Paragon4 Sound/DC/DCC electronics and smoke or in BLI's no-sound Stealth Series.

Info: www.broadway-limited.com



HomeShops has released a series of HO scale USRA 40' rebuilt steel boxcars in multiple famous or historic freelance road names. Produced by **Atlas Model**

Railroad Co., 50 cars have been produced in each of seven road names.



Road names include David Barrow's Cat Mountain & Santa Fe, Frank Ellison's Delta Lines, Jim Hediger's Ohio Southern, Ed Stoll's St. Louis

County Railway, Steve King's Virginia Midland, and Allan McClelland's Virginian & Ohio and V&O Miami Valley Railroad.



The models feature a 10-panel body, underbody brake detail, opening side door, separately applied wire grabs and side ladders, and AccuMate couplers.

Info: homeshops.net



InterMountain Railway is booking advance reservations through October 31, 2024 for a new production run of an HO scale GE Tier 4 GEVO diesel locomotive. Four road numbers will be available for BNSF, Union Pacific and Norfolk Southern.

Shared details of note on all units include high number boards, four section cab side windows with sunshades, Wabtec air filter, a short front pilot plow, a vertical rear headlight and high adhesion trucks with rotating bearing caps. A BNSF ET44ACH heavy version will have a window in the nose door and two air intakes behind the cab.



An ETC45AH decorated for Union Pacific will have three air intakes behind the cab.



Completing this scheduled release is a Norfolk Southern unit with a high vertical front headlight and rear ditch lights.



New HO scale models recently released to dealers by InterMountain include cylindrical covered hopper cars with trough hatches in seven paint schemes.



Also available now at dealers is an Evans 100-ton coil cars that include full covers and two diecast steel coils.

Info: www.intermountain-railway.com



Kadee's newest ready-to-run freight car is a PS-2 twin-bay covered hopper decorated for Northern Pacific. The HO

scale model accurately represents a prototype car with eight round hatches as built by Pullman-Standard in 1959. It is painted in alkali resting light gray.



The model comes with Bettendorf-type plain-bearing trucks and Kadee couplers.

Info: www.kadee.com



R. Bale

EMD E8 AND E9 DIESEL LOCOMOTIVE

The E8 was a 2,250hp diesel locomotive built for passenger service by General Motors Electro-Motive Division. In profile the front of the nose of E8 is less slanted than earlier EMD units. Power came from two 12-cylinder 567 diesel engines each driving generators that supplied power to two traction motors on each six-wheel truck. EMD produced a total of 450 E8A and 46 E8B plus 100 of the 2,400hp E9A and 44 E9B units. There are no distinguishing features between E8 and E9 units. EMD's E8 and E9 were the quintessential North American passenger locomotive of the 1950s through the 1970s. They pulled passenger trains from coast to coast, and later became the backbone of Amtrak's fleet in its early days. Many were later used in commuter service and regeared for freight service before being retired. At 70' 3" in length, an E8/E9 was an impressive sight.

Rapido has announced plans to make another release of its HO scale EMD E units. Capturing the correct shape of the prototype car body, including the nose, is assured through the use of a 3D laser scan of a real E unit. Single E8/E9 units will be available for DC silent operation and with DCC sound. An order deadline and release date are TBA.



Rapido's E8 will be available decorated for Amtrak (Seaboard Coast Line patch), Delaware, Lackawanna & Western (GMY scheme), Penn Central (two schemes) and Missouri Pacific (Eagle scheme).



Additional E8 liveries include Boston & Maine (Maroon), Rock Island (Bicentennial) and Rock Island (Red and yellow).



Completing the E8 road names on this release are Seaboard Coast Line, Louisville & Nashville and Atchison, Topeka & Santa Fe (Warbonnet).



An E9 will be available decorated in Southern Pacific's scarlet and gray scheme.

Road name specific details on Rapido's E8/E9 units include 36" and 48" fans or non-dynamic brake options, freight or passenger pilots, variations in side grilles, skirted or non-skirted fuel tanks, single- or dual-headlight configurations and full lighting effects including headlights, classification lights, backup lights, ground lights and cab lights. Car side options include original porthole configuration or rebuilt blanked sides.

Info: www.rapidotrains.com

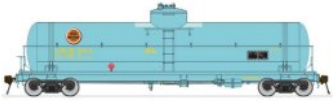


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ROKA Prototype Models is scheduled to complete a third release of its HO scale 16,000 gallon GATC welded tank car in new paint schemes with railroad specific details this fall.



Road names in this release include Chicago Great Western (Light blue, lube oil, 1955-1970) left, CGW (Oxide red, 1955-1970), CGW (Black, 1955-1970), CGW (Oxide red, yellow dome band, 1955-1970), CGW/C&NW (Black, 1968-1995) and Montana Rail Link (Lube oil, 1987-2001).



Santa Fe tank cars in this release include ATSF (Locomotive fuel, orange dome, 1949-1955) left, ATSF (LIX solvent, yellow dome, 1952-1995), ATSF (Domestic water, light gray, 1965-1995), ATSF (Solvent, 1952-1995) and ATSF (Silver, vegetation control, 1960s-1990s),



Fire suppression tank cars include BN (Seattle, pre-2001), ATSF/BNSF (Montana Division, red, 1995-1990), ATSF (Dark gray, pre-1995) and ATSF/BNSF (White, post 1995) above.



Special details on the fire suppression cars include a battery box, electric motor, solar panel, spooled fire hose and a fire ax. ROKA models come with appropriate trucks with metal wheels and Kadee couplers.

Info: www.rokamodels.com

Scale Trains plans to release six General Electric AC44C6M locomotives decorated in unique Norfolk Southern paint schemes. The Rivet Counter series models are scheduled to be available in Spring 2015.



Locomotive No. 4071 will wear an NS Horsehead Sinewave scheme.



No. 4047 displays the NS Horsehead scheme with primer paint on the cab.



NS locomotive No. 4004 has a Black Mane scheme with blue stripes. No.4002 is similar with Tuscan red stripes.



Completing this unusual series is NS No. 4000 decorated in Sonic Bonnet scheme with a blue mane. NS locomotive No. 4011 is decorated

with the familiar Horsehead scheme. The HO scale Rivet Counter model will be available with DCC sound and DC-DCC ready.

Info: www.scaletrains.com



Sunset Models 3rd Rail has partnered with **Third & Townsend Models** to announce preorders for four new HO scale brass 2-8-0 Consolidation models. Southern

Pacific's C-12 will be available with road numbers 2865, 2866, and 2868.



The D&RGW model will be available with numbers 1163, 1146, and 1136. Locomotive # 1146 will feature HO/HOn3 coupler pockets on the pilot and tender. Availability of all

four versions is expected to be Fall 2025.



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Western Pacific C-43 will be available with road numbers #26, #43, and #63. All four models will operate on 22" radius track.



The SSW K class Consolidation will be available with road numbers #751, 755, and 768. Featuring all-brass construction, the chassis will be

CNC milled. The drive will include steel/bronze gearing, sprung drivers, coined brass wheel centers, and optional rubber tired traction drivers. The models will include SoundTraxx Tsunami 2 sound/DCC with LED lighting, operating cab roof vents, cab apron, and hatches, including the tender water hatch. Cabs will be detailed with painted handles and dials.

Info: www.thirdandtownsendmodels.com



Tangent Scale Models has released a new run of Greenville 86' high cube double plug door boxcars. New for this run is the September and October 1969-built Greenville cars, featuring grab-iron and sill details that make them distinct from the 1969 and 1970 releases.



Seven new paint schemes are included in this release as well as an undecorated kit. The road names in the release are Denver & Rio Grande Western, Milwaukee Road, Chicago & North Western, Rock Island, Mississippi Delta (ex-Rock Island patch), Norfolk Southern, and Illinois Central.

The models are equipped with the correct end or center of car cushioning, Kadee metal couplers, flexible rubber air hoses,



brake system variations, prototypically accurate brake stands and wheels, multiple truck options for both 70-ton and 100-ton service, 33" or 36" wheels as appropriate, accurate brake beams, and three rotating roller bearing truck cap options.

Info: www.tangentscalemodels.com



R. Bale

EMD GP 35 DIESEL LOCOMOTIVE

The EMD GP35 is a 4-axle road switcher built by General Motors between July 1963 and January 1966. The GP35 was EMD's first direct challenge to GE highly successful U25B. It was also one of EMD's first diesels to have a modern car body design with a beveled cab. Over 1300 units were built for American, Canadian, and Mexican railroads. GP35s are powered by EMD's 16-cylinder 2,500hp 567D3A engine. Although a low nose is standard, GP35s built for N&W, Southern and Ferrocarriles Nacionales de México have high-hoods. Many railroads traded in EMD F-units and Alco FA units for GP35s, reusing the trucks and traction motors.

Walthers plans to release a new production run of its Proto series GP35 during the winter of 2025.

DCC versions of the HO scale Proto series model will be available with ESU LokSound 5. Standard DC versions will have a pre-installed speaker.



Road specific details for the Atchison, Topeka & Santa Fe version of Walthers GP35 include blanked number boards and classification lights, notched sill at

the corner of the pilot with 4 jack pads and drop step, cab sunshades, a rooftop A/C, dynamic brake hatch, roof beacon and a 2,700 gallon fuel tank.



This Milwaukee Road version of the GP35 feature headlights on the cab and long hood, dummy number boards and classification lights, 8 jack pads (no drop step),

dynamic brake hatch, Leslie RS3LR horn, a Firecracker antenna and a 3,000 gallon fuel tank.



GP35s decorated for the Richmond, Fredericksburg & Potomac Railway have features similar to the Milwaukee Road unit except it has a 2,700 gallon fuel tank and 4 jack pads.



St. Louis-San Francisco and Rock Island versions of the GP35 have the headlights on the cab and long hood, cab window sunshades, and dummy number boards and

classification lights. The Frisco unit has a roof beacon, 4 jack pads and a whip antenna. Details unique to the RI unit include 8 jack pads, a firecracker antenna and a Nathan P5R24 horn.



Walters Southern Pacific GP35 in this release will have the number boards and classification lights blanked out, 4 jack pads, a Gyalite on the cab and a Nathan P3 horn.

The headlight and UDE warning light will be mounted on the short hood.



Details shared by all GP35s in this release include see-through steps, see-through radiator and dynamic brake fans, nose-mounted lever-style handbrake, front and rear (as appropriate)

class lights with clear lenses, lift rings, detailed cab interior with crew figures, uncoupling levers, MU hoses and constant and directional LED headlights.



R. Bale

GE ES44 LOCOMOTIVE

General Electric introduced its GEVO series of modern diesel locomotives in 2002. The first two units were the ES44DC and ES44AC. The ES44C4 followed a few years later. The GEVO series was designed to replace earlier AC4400CW and Dash 9-44CW units, while complying with new emission standards imposed by the Environmental Protection Agency (EPA). The EPA established allowable emission levels, or tiers, based on a locomotive's date of manufacture. Tier 2 took effect in 2005 followed by Tier 3 in 2010. Although EPA Tier 4 standards went into effect in 2015, ES44s continue to be built. This is due to a complicated government formula that allows sharing and redistribution of emission credits between GE and the operating railroad. The external appearance of ES44 locomotives is similar to the AC4400CW with the most significant visual difference being the larger radiator wing structure on the back end of the locomotive. The thicker radiators and related equipment work to cool the exhaust, which reduces emissions. The ES44 has become the best-selling diesel locomotive of all time.



Walthers is planning to deliver an HO scale model of General Electric's ES44AC Evolution Series GEVO Locomotive during the winter of 2025. To

keep the price as low as possible, this Mainline series model will have the exterior details molded on. Details in the injection molded body shell include correct profile radiator grilles and rooftop walkway surface and dynamic brake vents. Drill starter points will be provided for grab irons that can be



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added using Walthers GE ES44 Evolution Series Diesel Detail kit, available as a separate purchase.



Road names on this release will be BNSF, Kansas City Southern, Canadian National, Union Pacific and Ferromex. The

Mainline model uses the same drive as WalthersProto locomotives which includes a five-pole skew-wound motor, all-wheel drive and dual machined brass flywheels – all mounted on a diecast metal chassis.



All road names will have working front ditch lights. DCC units will come with ESU Sound for DCC. 21-pin equipped DC units will also be

available with a preinstalled speaker for an aftermarket DCC/Sound decoder.



weight passenger cars with fluted sides and tinted windows. The HO scale models are based on Budd-built prototypes similar to passenger equipment operated by several railroads.



This release will include a baggage/RPO, baggage/lounge, a coach with small windows, a large window coach, a dome coach, diner and round end observation car. Each of the eight car types will be available decorated for Canadian Pacific, Penn Central, Rock Island, Amtrak, Atlantic Coast Line and VIA.



Walthers offers separate kits for adding wire grab irons in the molded starter holes and an LED interior lighting kit. Both kits are available as separate purchases.



Walthers has included a Proto series 67' Trinity 6351cu. ft. quadruple-bay covered hopper in its 2025 winter production schedule. The HO scale model is based on a prototype introduced in the 2000s and still in service today.



In addition to BRIX-Incobraska Industries, road names available on this release include Archer Daniels Midland, Archer Daniels Midland (Leaf logo), CRDX-Chicago Freight Car Leasing, MWTX-Midwest DDG, TILX-Trinity Industries Leasing Co. (Black), TILX-Trinity Industries Leasing Co. (Vera Sun) and BSEX-Badger State Ethanol.

The Proto model will be available in two styles of trough hatches as appropriate to a specific road name. Details for all road names include separately applied vibrator brackets on the discharge outlets, factory-installed grab irons, see-through etched-metal walkways and end platforms and appropriate trucks with 36" machined metal wheelsets.



Completing Walthers winter 2025 production schedule is a 72' refrigerator boxcar. The HO scale Mainline models is based on a prototypes introduced in 2019. Features include an accurately scaled plug door, prototypically correct ends with separate end-mounted refrigeration units and 100-ton trucks with 36" machined wheelsets.

Decorating schemes will be Union Pacific ARMN (High reporting mark, shield, and slogan), Union Pacific ARMN (Low reporting mark/high shield and slogan), Union Pacific ARMN (Cold Connect logo), Union Pacific ARMN (Building America logo), CGFX-Cedar Grove Logistics, TILX-Trinity Industries Leasing Co., BNSF and CEFX-CIT Group/Capital Equipment Finance.



All Walthers models in this report come with Proto MAX metal knuckle couplers.

Info: www.walthers.com

N SCALE PRODUCT NEWS



BethGon Coalporters decorated for BASF, CSX, Norfolk Southern, Canadian National and KCLX-Kansas City Power & Light are

included in **Athearn's** January 2026 production schedule. The N scale models will be available singly and in 5-packs with different numbers.

The Coalporters will have a removable coal load, body mounted McHenry knuckle couplers and 100-ton roller-bearing trucks with 36" machined metal wheels. The N scale models will be available singly and in 5-packs with different numbers.



Athearn's 2026 production schedule includes a 53' Stoughton container. The N

scale model will be available in 3-packs with different numbers. In addition to Schneider, decorating schemes in this release will be Southern Pacific, Hub Group, Thoroughbred Direct, a patched EMP and SeaTrain. The SeaTrain scheme is a fantasy since that company went out of business in 1981, almost a decade before 53' containers were introduced.

Info: www.athearn.com



HomeShops has released a series of N scale USRA 40' rebuilt steel boxcars in multiple famous or historic freelance road names.

Produced by **Atlas Model Railroad Co.**, 50 cars have been made in each of seven road names.



St. Louis County Railway, Steve King's Virginia Midland, and Allan McClelland's Virginian & Ohio and V&O Miami Valley Railroad.

Road names include David Barrow's Cat Mountain & Santa Fe, Frank Ellison's Delta Lines, Jim Hediger's Ohio Southern, Ed Stoll's



The models feature a 10-panel body, 7-8 or 5-5-5 panel ends, underbody brake detail, Andrews trucks, and AccuMate couplers.

Info: homeshops.net



New N scale models from **Micro-Trains Line** include this Chicago & North Western twin-bay covered hopper. The ready to run model is based on a prototype built in 1994. It comes with Barber roller-bearing trucks.



This ex-EL 50' covered gondola is decorated for Conrail.



Completing the list of new N scale models from Micro-Trains is this plug-door boxcar decorated for Conrail.

Info: Contact a dealer



agencies and by the year 2020, 14 agencies across North

Rapido Trains plans to develop an N scale version of a Bilevel commuter car as designed in the mid-1970s at the request of the Government of Ontario. The cars proved to be very popular with commuter



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America were operating fleets totaling almost 1,500 BiLevel Commuter Cars.

The heart of Rapido's N scale version will be a 3D designed body shell with single or double cab front windows as appropriate. Correctly tinted windows are promised along with an all new inside bearing trucks. Constant track powered interior lighting and controllable cab car lighting will be available in both DC and DCC models.



Road names and decorating schemes will include Altamont Commuter Express (San Jose), Agence métropolitaine de transport (Montréal), CalTrain

(San Francisco Bay Area), Coaster (San Diego), GO Transit (Toronto), GO/Metrolinx (Toronto), Metrolink (Los Angeles), Sounder (Seattle), Trinity Rail Express (Dallas), Tri Rail (Miami) and West Coast Express (Vancouver). An undecorated model will also be available.



To lead the N scale Bilevel commuter cars, Rapido has announced pre-orders for an N scale F59PH locomotive. The

models will feature separate wire grab irons, working headlights, ditch lights, and marker lights, and American-style red marker lights as appropriate.



Roadnames offered include Alamont Commuter Express, AMT Montreal, CalTrain, Coaster, GO Transit, Metrolink,

Metra, Trinity Rail Express, TriRail, and West Coast Express. Both the Bilevels and the F49PHs are conditional announcements with a pre-order deadline of November 15th, 2024. If the minimum number of orders is received by that

date these N scale projects will go into further development with a final order deadline.

Info: www.rapidotrains.com



ScaleTrains has announced a new run of the Rivet Counter N scale GE AC4400CW

locomotives. The locomotives come equipped with either an ESU LokSound 5 Nano decoder and cube-type speaker or as DC/DCC ready with an E24 connector.



Roadnames planned for this release include Chicago & North Western, Kansas City

Southern (two schemes), Ferrormex (three schemes), CEFX, CSX (two schemes), and Union Pacific (three schemes).

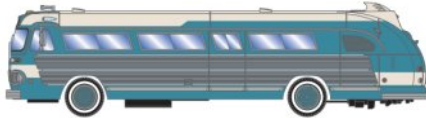
Info: scaletrains.com

STRUCTURES AND SCENIC SUPPLIES



Athearn has released an HO scale model of an intercity bus to its dealer network. The

model is based on the popular Visicoach built in Ohio by the Flexible Company from 1950 to 1956. Many continued in a variety of roles for twenty or more years.



Key features of the ready-to-use model include rubber tires, separate windshield wipers and full interior details.



Decorating schemes include Pacific Electric, Fred Harvey Bus Line, Utah Parks, Bus for sale, Teal and cream without lettering

and two Band on Tour schemes.

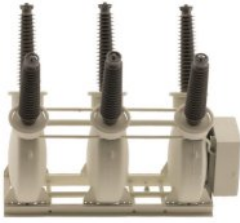
Info: www.athearn.com



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Two new 1950s era HO scale flatcar loads are available from **ClassOneModelWorks.com**. Still used in power substations, the SF6 345 KV Oil-Filled Circuit Breaker is factory painted.



An oval transformer with cooling fins & insulators dates from 1951, and consists of a factory painted transformer and three crates, one of insulators and two of cooling fins.

Info: www.classonemodelworks.com



Frenchman River has announced a new O/On30 scale kit for Downtown Barber/Tobacconists shops. A two-building kit, the outside wall of the smaller building can be the left or right wall, offering the flexibility to put the barber shop on the left or right of the tobacconist. The kit consists of resin walls and details, window glazing materials, and other details in a variety of materials.

The finished kit is approximately 5.5" wide and between 5.25" (Tobacconist shop) and 4.375" (Barber shop) deep.



Another new model in O/On30 scale from Frenchman River is Becky Sue's House of Beauty. Designed by Thomas Yorke, it also features primarily resin construction with assorted details. Dimensions are approximately 2.875" wide by 5" deep, not including the sidewalk or sign.

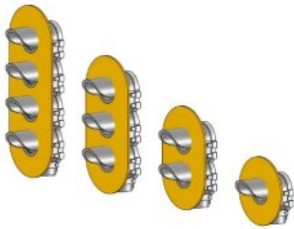
Info: www.frenchmanriver.com



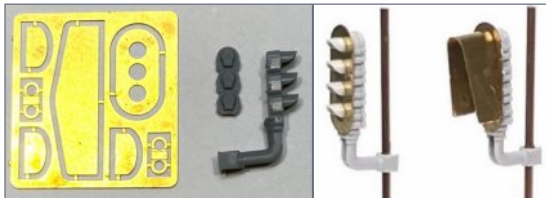
New 1:87 vehicle models introduced by **Oxford Die Cast** include a 1950

Chevrolet Panel truck. The dark green body is decorated for the Railway Express Agency. Also new is a 1942 Chrysler Town & Country station wagon. It is virtually identical to a 1946 postwar edition. The Chrysler features a South Sea blue body, wood side and rear panels, a rooftop rack and white wall tires.

Info: www.walthers.com



Showcase Miniatures continues to expand its selection of HO and N scale multiple aspect signal heads. The signal kits are composed of photo-etched parts and plastic aspect heads with visors that can be cut off and sanded if not desired. Kits are available for one, two, three or four heads.



The N scale heads are designed to use #402 size LED available as a separate purchase from Showcase Miniature.



The HO scale signal heads are designed to accept Showcase Miniature's #603 LEDs.

Showcase Miniatures has introduced both HO and N scale kits for a mid-century gas station named Rallo Henry's. The craftsman style kit features laser-cut parts including pre-printed



Chipped Paint Siding for minimal painting, pewter metal castings and resin details, easy to assemble tab-and-slot construction, peel-n-stick backed windows, high resolution graphics decals plus detailed step by step instructions.



Also new from Showcase Miniatures is an N scale kit for a 1929 International Sixspeed delivery van. The kit includes a resin body and chassis, metal axles and wheels, and decals. Assembly and painting are required.

Info: www.showcaseminiatures.net



New scenic items coming from **Walthers** include a large selection of Blue Yard flags that warn of yard activity and prevent movement of equipment were workers are active. The kit includes 50 photo-etched stainless steel preprinted blue signs, allowing for a total of 18 possible assemblies.



New HO scale structure kits coming from Walthers include a Brick Church and a wood Flag Stop Station. The church features

two styles of printed-paper "stained glass" window treatments, two different front doors, a printed front signboard, diamond shingle roof and injection molded brick walls. The church measures 4.87" x 2.75" x 6.44" tall.

The Flag Stop Station is molded in three colors and clear plastic. The finished dimensions of the station are 3.37" x 3.06". Both structures require assembly and painting.

Info: www.walthers.com

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BRIEFLY NOTED AT PRESS TIME ...

New locomotives coming from **Atlas** include HO scale versions of a U28C and an AEM-7. N scale motive power on the way includes a VO-1000 and a Phase 1 versions of a GP39-2. *MRH* will have road names next month ...

Broadway Limited is developing an HO scale brass-hybrid version of a Santa Fe 2-10-10-2 steam locomotive. A formal announcement is scheduled for later this year ...

Kato plans to release an N scale EMD SD80MAC next spring decorated for Conrail and Norfolk Southern ...

In a surprise move, N scale specialist **Micro-Trains Line** has entered the HO scale market with a series of heavily weathered car kits. The initial release is a Burlington Northern triple-bay covered hopper and a 33' twin-bay coal hopper decorated for N&W and Virginian. Both are unassembled Accurail kits ...

Rapido has published a new 300-page hardcover book by Richard Longpré titled *The Cars of VIA: Heritage Fleet, Volume 1* ... ■

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SELECTED EVENTS



Model Railroad Hobbyist | September 2024

SEPTEMBER

Please submit your event information, including website, to [model-railroad-hobbyist.com/contact/News event - product announcement](https://model-railroad-hobbyist.com/contact/News_event_-_product_announcement)

Ongoing 2024

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

Info: www.opsig.org/Virtual

Archive: www.youtube.com/c/OperationsSIG

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

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 Eastern. “Off the Beaten Track” featuring Narrow Gauge layouts, clinics, and manufacturers.
Info: groups.io/g/NNG

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

September - October 2024

CANADA, ONTARIO, BRESLAU (Kitchner-Waterloo), September 29, 2024. Breslau Train Show, sponsored by Western Ontario Division, NMRA. Breslau Community Centre, 100 Andover Drive.
Info: www.youtube.com/watch?v=sSC-TA_feMM

CALIFORNIA, CROCKETT, October 26-27. Carquinez Model Railroad Society Open House. 645 Loring Avenue.
Info: cmrstrainclub.org

COLORADO, GREELY, September 21, 2024. Colorado Rail Proto Meet. Zoe’s Café and Event Center, 715 10th Street (9am-5pm) and Colorado Model Railroad Museum 680 10th St. (5pm – 8pm).
Info: corpm.org

COLORADO, ESTES PARK, September 21-22, 2024. Rails in the Rockies 27, sponsored by Estes Valley Model Railroaders. Estes Park Event Complex, 1125 Rooftop Way.
Info: railsintherockies.org

COLORADO, PUEBLO, October 10-13, 2024. Rio Grande Modeling & Historical Society joint convention with Missouri Pacific Historical Society. Pueblo Convention Center, 320 Central Main Street.
Info: www.eventbrite.com/e/2024-mphs-rgmhs-joint-convention-tickets-794966836207



ILLINOIS, NAPERVILLE, October 10-12, 2024. RPM Chicagoland 2024.

Info: www.rpmconference.com

INDIANA, FORT WAYNE, October 19, 2024. Train show and swap meet, sponsored by the 3 Rivers Division of the NMRA. Allen County War Memorial Coliseum, 4000 Parnell Avenue.

Info: dehanley665@gmail.com

INDIANA, INDIANAPOLIS, October 5, 2024. Indianapolis Model Train Show, sponsored by the Naptown & White River Model Railroad Club. Burello Family Center, 2345 Pagoda Dr.

Info: www.naptownrr.org

MAINE, LEWISTON, October 12, 2024. The Great Falls Model Railroad Club October Train Show. Kora Shrine Center, 11 Sabattus Street.

Info: www.greatfallsmodelrrclub.org

MASSACHUSETTS, RAYNHAM, September 15, 2024. 24th Annual Old Colony Model Railroad Club model railroad show and sale. Taunton Inn & Conference Center, Myles Standish Industrial Park, Myles Standish Blvd.

Info: dingalls@comcast.net

MICHIGAN, NORTHVILLE, October 10-13, 2024. North Central Express 2024, NMRA NCR Regional Convention, hosted by Division 6 – Motor City Division. Ward Evangelical Presbyterian Church, 4000 Six Mile Road.

Info: ncx24.ncrnmra.org

MINNESOTA, WOODBURY, October 12, 2024. Newport Model RR Train Flea Market. Woodbury High School, 2665 Woodlane Dr.

Info: newportclub.us

MISSOURI, KIRWOOD (St. Louis area), October 5-6, 2024. 33rd Annual Greater St. Louis Metro Area Train Show.

Meramec Community College Gym, Big Bend & Geyer Road.

Info: mvns.railfan.net

NEVADA, SPARKS, October 16-19, 2024. San Francisco Overland, 2024 SPH&TS Convention. Nugget Casino Resort, 1100 Nugget Avenue.

Info: sphts.org/convention

NEW YORK, BATAVIA, October 13, 2024. The Great Batavia Train Show. Richard C. Call Arena at Genesee Community College.

Info: gsme.org

NORTH CAROLINA, DURHAM, October 17-20, 2024.

Piedmont Junction 2024, Mid-Eastern Region NMRA Convention. Raleigh-Durham Marriott.

Info: piedmontjunction.cpd13.org

OHIO, MIDDLEBURG HEIGHTS (Berea), October 5-6, 2024.

50th Annual Great Berea Train Show, hosted by the North Coast Division, NMRA. Cuyahoga County Fairgrounds, Bagley Road entrance only, 19201 Bagley Road.

Info: thegreatbreatrainshow.org

OHIO, CAMBRIDGE, October 27, 2024. Sixth Annual Buckeye Division Train Show. Pritchard Laughlin Center, 7033 Glenn Hwy.

Info: div6-mcr-nmra.org/trainshow.html

OHIO, MARION, October 10-12, 2024. Central Ohio RPM. Marion Union Station.

Info: centralohiorpm.wordpress.com

OHIO, WEST CHESTER (Cincinnati area), October 12-13, 2024. 56th Annual Div 7 NMRA Fall Train Show. Lakota West High School, 8940 Union Centre Blvd.

Info: cincy-div7.org

OREGON, PORTLAND, October 5, 2024. Bridgetown RPM Meet. Sojourn Suites Portland Airport, 11707 NE Airport Way.

Info: www.brpmm.com

PENNSYLVANIA, ALTOONA, September 14-15, 2024. 2024 Mike Phillips' N scale Weekend, presented by the Altoona Association of Model Railroaders. Blair County Convention Center, 1 Convention Center Dr.

Info: www.theaamr.org/n-scale-weekend



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PENNSYLVANIA, HARRISBURG, September 21-22, 2024.

Anthracite Railroad Modelers Meet XII. Reading Railroad Heritage Museum, 500 South 3rd Street.

Info: readingrrmm.com

PENNSYLVANIA, LINDEN, October 19, 2024. Annual Fall Train and Craft Meet. Woodward Fire Company, 4147 N Route 220 Hwy.

Info: www.ccmrr.org/events.html

TEXAS, FOREST HILL (Fort Worth), October 25-26, 2024.

DFW-Red River RPM. Forest Hill Civic Center, 6901 Wichita St.

Info: redriverrpm.org

TEXAS, PLANO, September 28-29, 2024. 5th Annual Fall Plano

Train Show, sponsored by the North Texas Council of Railroad Clubs. Plano Event Center, 2000 East Spring Creek Parkway.

Info: www.dfwtrainshows.com/page/fall-plano-train-show

VERMONT, WHITE RIVER JUNCTION, October 13, 2024.

Upper Valley Model Railroad Show. Connecticut Valley Auto Auction Building, 1567 VT-14.

Info: cvrr.railfan.net/cvmrr

Future 2024 by location

CALIFORNIA, CROCKETT, December 7-8, 2024. Carquinez Model Railroad Society Open House. 645 Loring Avenue.

Info: cmrstrainclub.org

CALIFORNIA, SACRAMENTO, November 2-3, 2024. International Railfair 2024. Cal Expo, Building C, 1600 Exposition Blvd.

Info: internationalrailfair.com

(Hybrid) CALIFORNIA, SAN LUIS OBISPO, March 27-30, 2025.

Daylight Limited – Pacific Coast Region Convention. Embassy Suites by Hilton San Luis Obispo, 333 Madonna Road.

Info: pcr2025.org

CALIFORNIA, TURLOCK, December 7-8, 2024. San Joaquin Valley Toy Train Operators, Inc. annual train show. Stanislaus Fairgrounds, 900 N Broadway.

Info: sjvttoinc.com

MAINE, BREWER, November 23, 2024. 2024 Eastern Main Model Railroad Club show and swap meet. Jeff's Catering, 15 Eventcenter Way.

Info: www.easternmainemodelrailroadclub.org

MASSACHUSETTS, WEST SPRINGFIELD, January 25-26, 2025. 2025 Railroad Hobby Show, sponsored by the Amherst Railway Society. The Eastern States Exposition Fairgrounds, 1305 Memorial Avenue.

Info: www.railroadhobbyshow.com

MICHIGAN, ANN ARBOR, December 1, 2024. Southeast Michigan Model Railroad Show & Sale. Washtenaw Farm Council Grounds, 5055 Ann Arbor Saline Road.

Info: cdjhyoung@yahoo.com

MICHIGAN, EAST LANSING, November 10, 2024. Lansing Model Railroad Club Show and Sale. Michigan State University Pavilion, 4301 Farm Lane (corner of Mt. Hope, Farm Lane, and College Roads).

Info: lmrc.org

MINNESOTA, BURNSVILLE, November 2, 2024. North Star RPM Meet. Burnsville Wyndham Hotel, 14201 Nicollet Ave.

Info: www.facebook.com/events/548423120848758

OHIO, MARION, December 7, 2024. 38th Annual Marion Station Association Train Show & Sale. Marion Ohio Fairgrounds Coliseum, 220 E Fairgrounds St.

Info: mariontrainshow@outlook.com

WASHINGTON, KENT, November 9, 2024. Boeing Employees Model Railroad Club Annual Swap Meet. Ken Commons Community Center, 525 4th Avenue North.

Info: www.bemrrc.com



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WISCONSIN, MILWAUKEE, November 23-24, 2024. Trainfest – America’s Largest Operating Model Railroad Show. Baird Center, 400 W Wisconsin Ave.

Info: www.train-fest.com ■



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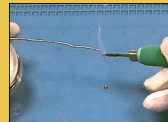
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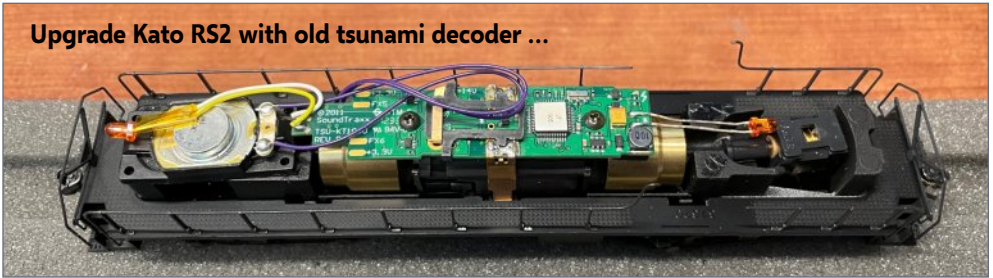
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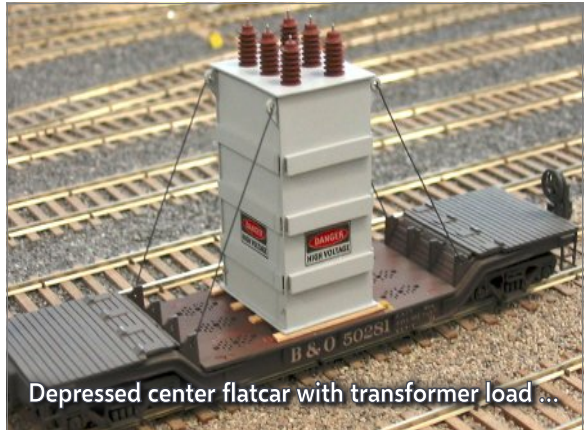
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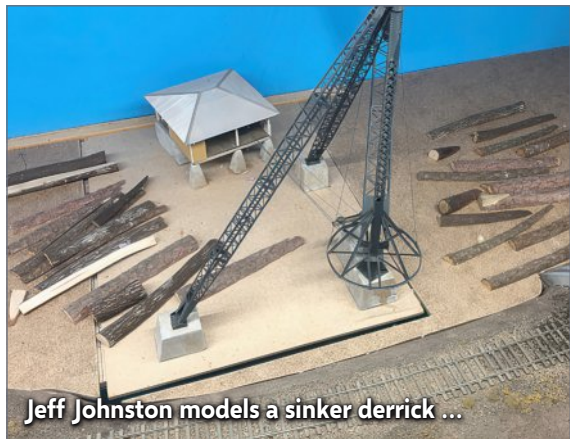
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