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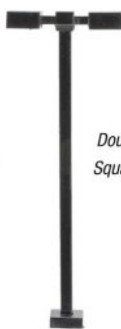
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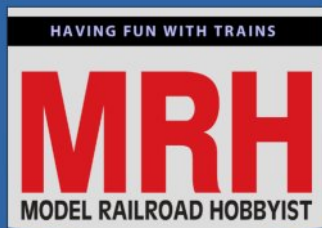


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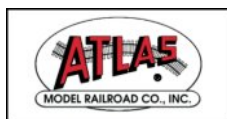
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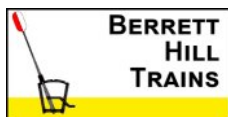
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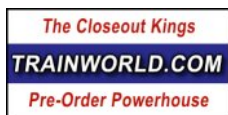
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Compiled by JOE FUGATE



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KEN PATTERSON



Electrical Impulses: Bullet-proof turnouts

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Build a hydrocal structure kit

PETER VASSALLO



Why NMRA conformance warrants matter

ANDY ZIMMERMAN



Savvy Modeler online: Background texture adds depth

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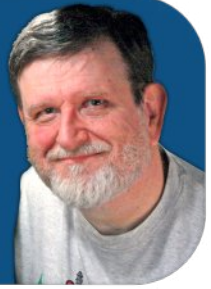


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PUBLISHER'S MUSINGS



Model Railroad Hobbyist | November 2025

JOE FUGATE: WHAT ABOUT A MISSION STATEMENT FOR YOUR LAYOUT?



I SEE IT OFTEN: A MODELER BUYS THE LATEST RELEASE BECAUSE IT “LOOKS COOL.” Another brass locomotive. A structure that caught his eye. A few more freight cars. All beautiful models. All destined for the storage shelves – because that’s what his layout room has become: a small warehouse, not a railroad.

Here’s what I’ve learned after decades in this hobby: the most satisfying layouts aren’t built around the biggest collections or the most expensive equipment. They’re built around a clear purpose. They have a *mission*.

Are you a historical modeler or a collector?

Walk into more than a few layout rooms and you’ll see this: modern intermodal cars sitting next to a 1950s roundhouse. Steam locomotives sharing the roster with modern diesels. A coal mine in orange grove country. Industries that make no geographic or economic sense together.

The owner will tell you he likes variety. He may be telling you he’s never defined for himself if he’s into historical modeling or if he’s a collector who may at times model to grow his collection.

If you’ve never spelled out your mission, how do you know where you’re going when you don’t have a destination? How do you know when you’re wasting precious time?

If you're less of a historical modeler and more of a collector who also models, that is fine if you know that's what you want, but if you want to be a historical *model* railroader, what does that look like?

What is a layout mission statement?

A layout mission statement for historical modeling is a clear, written description of what you're modeling. It answers five questions:

What era are you modeling? What type of traffic moves on your railroad? What is the geographic setting? What's your primary purpose – operations, display, or switching puzzles? What makes your railroad unique?

Here's an example: "I model the Southern Pacific Coast Line through San Luis Obispo in the fall of 1953, focusing on the agricultural traffic and helper operations over Cuesta Grade."

See how that works? Now decisions become easy. Someone offers you a container car? Doesn't fit – containers didn't exist in 1953. Considering adding an orange grove? Perfect – that's exactly what moved on this line. Should you buy that Amtrak locomotive? Not unless you're changing your entire mission.

How a mission statement changes things

A layout mission statement for historical modeling is a clear, concise description of what your railroad does and why it exists. It answers fundamental questions:

- What era does your railroad operate in?
- What type of traffic does it handle?
- What is its geographic setting?
- What is its primary purpose (bridge route, local switching, logging, passenger service, etc.)?
- What makes it unique or interesting to you?

Once you have a clear mission statement, something magical happens: decision-making becomes easy.





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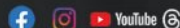
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Locomotive purchases: Instead of buying whatever looks cool, you ask, "Did my prototype railroad run this locomotive during my era?" If the answer is no, you save your money for something that fits.

Structure selection: That beautiful Victorian station might be gorgeous, but if you're modeling 1970s Conrail in industrial New Jersey, it doesn't belong on your layout. Your mission statement gives you permission to say no to things that don't fit, no matter how attractive they are.

Track planning: Your mission statement should directly influence your track plan. If you're modeling a bridge route focused on through traffic, you need long mainline runs and minimal switching. If you're modeling a short line focused on local industries, you need lots of switching opportunities and shorter trains.

Operating scheme: Your mission statement defines how you'll operate your railroad. A 1950s passenger-focused railroad operates

very differently from a modern unit coal train operation. Knowing your mission helps you design operating sessions that feel authentic and satisfying.

Scenery and details: Even your scenery choices flow from your mission. A desert railroad in Arizona requires completely different scenery techniques and materials than a logging railroad in the Pacific Northwest.

With a clear mission, every decision has a framework. You stop being a collector and become a historical modeler. You also will spend less money on the hobby overall and you'll get more accomplished with the time you have for the hobby.

But if historical modeling isn't your thing, that's fine as long as you're sure you don't care about limiting your historical scope.

Quality over quantity: the scope factor

Here's a key truth that can really help you focus if you're just starting out: a smaller, well-executed layout beats a large, unfocused one if you want the hobby to be as satisfying as possible. Now there have been some awesome large layouts built, but it takes deep pockets and a huge time commitment to pull that off well.

I'm speaking of where to start out – you should start small, but you can certainly dream big.

And here's another very focused truth: become an expert at turnouts. Believe it or not, most commercial turnouts do not comply with the NMRA specifications for flawless turnout performance. Due to mass production tolerances, a batch of turnouts can be off several thousandths of an inch one way or the other.

The answer? In this issue, we give you step-by-step instructions on each of the key NMRA turnout specs. We show you how to check a commercial turnout and upgrade it to be totally in-spec and give flawless performance.

Sometimes a turnout can also have electrical issues and be more short-prone than it should be. We show how to fix that too. See the electrical impulses column for details.



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And here's where the mission statement comes in: when you have a clear mission, you can invest the time on quality because you're focused.

You're not building a hundred turnouts for a sprawling empire. You're building twenty perfect turnouts for a focused railroad that runs flawlessly.

The era question

If you want to try more focused historical modeling, pick an era that excites you. Not just "transition era" – be more specific. Fall of 1956. Spring of 1972. August of 1984. Or at the very least, pick a single year or a span of a few years. The more specific, the easier things get.

Why? Because now your research has boundaries. You're not trying to model fifty years of railroad history. You're modeling a well-defined period of time.



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What's new on TMTV

Some recent shining examples ...

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**Modeling with light
... Part 3**

Modeling with light (Bunza on LEDs), pt3



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Qualmans' Michigan
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You know specifically what photographs you need. You can identify the correct equipment. You can model what actually existed.

The era-swapping approach

Here's where I'll share something that might surprise you: your mission statement doesn't have to be inflexible. One really fun approach with a smaller layout: design it so you can swap eras.

This approach gives you more variety without losing focus. You still have a clear mission – it just has multiple time settings.

The important thing is that each era is fully developed and researched, not just a random collection of equipment. If you ever find yourself torn over which era you prefer to model – with a small layout, era swapping can be a great solution to your era-choice dilemma.

The critical point is that you're still being intentional and focused. You're making a conscious decision to operate in a specific era, with appropriate equipment and details.

We delve into era-swapping and other small layout fun factors in this month's *MRH Running Extra*.

Getting started: Writing your mission statement

Step 1: Answer the basic questions. What railroad? What location? What specific era? What type of operations?

Step 2: Identify what excites you most. Is it the locomotives? The industries? The scenery? The operations? Build your mission *around your passion*.

Step 3: Write it down. Two to four sentences. Be specific. Make it clear enough that anyone reading it understands what your layout is.

Step 4: Test it. Before you buy anything, ask: "Does this fit my mission?" If the answer is no, don't buy it.



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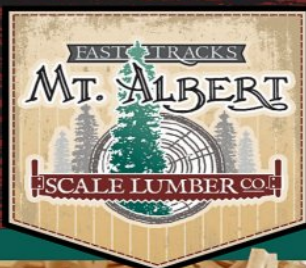
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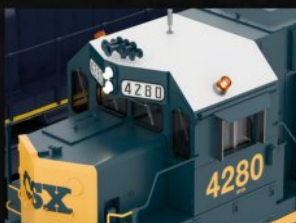
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Step 5: Share it. Tell other modelers. Post it in your layout room where you'll see it. Let it guide every decision you make.

Toward more hobby satisfaction

The modelers with the most satisfaction in this hobby typically know what they're trying to accomplish. They have a vision. They have a plan – a mission if you will.

Are you doing the hobby wrong if you don't do this? No, I'm not saying that. My only question is: are you sure?

Please hear me: if you prefer *not* to nail down a specific time period (or to era swap) but instead want to collect, model, and run trains that strike your fancy from whatever era, prototype, or location, that's fine. After all, we can't forget rule #1: It's *my* railroad!

But if you feel overwhelmed, stymied, or find your passion for the hobby waning, then look at pinning down your modeling with a mission statement!

It could be more liberating than you think. ☒



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- 1st** Electrical Impulses: Track feeders that disappear
- 2nd** Publisher's Musings: AI for model railroaders
- 3rd** Let's talk ops: A realistic ops mindset

Most liked articles in [October 2025 issue](#) of *Running Extra* ...

- 1st** Siskiyou Line 2 layout update
- 2nd** Getting Real: Tools to transform your builds
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Limited Modeler: Old prototype photo layout inspiration

JIM SIX



Getting Real: Doing dress rehearsal ops sessions

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Best of the

MRH FORUM



Model Railroad Hobbyist | November 2025

Compiled by **JOE FUGATE**



Cleveland & Eastern N scale layout

MRH forum member **mike.h** has a number of fascinating blog entries about his N scale layout [photo above]. A well done N scale layout always looks so good and we love following the progress.



In his recent blog post, Mike discusses a slight layout space reduction he needs to make that will mean a bit of rethinking. He's talking about using this opportunity to upgrade/rework some parts of his layout.

We're looking forward to seeing what Mike comes up with!

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

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



1. *MRH* forum member **ednadolski** is experimenting with Proto:87 turnout construction. Here he tests a number 10 turnout next to an ME #6.

Scratchbuilt Proto:87 turnout

MRH forum member **ednadolski** says:

“Here is a #10 turnout made to P:87 standards with code 70 rail. This was done using soldered PCB tie construction and an SP prototype turnout as a template. As you can see, a #10 in 1:87 scale is quite long, here it is next to a conventional Micro Engineering #6 HO scale turnout.”

Proto:87 guru Andy Reichert points out that proto:87 equipment is very sensitive to variations in track gauge, so he recommends Ed solder some more PC ties on the turnout to give it more anchor points to ensure the gauge never wanders later.

Visit the *MRH* forum more on this interesting turnout build.

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



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2. *MRH* forum member modeler **GN67** (Brian M.) posted an example of how he's using brick paper he printed out to model this passenger station. Nice work!

Paper print structures?

MRH forum member **BBQdave** started a thread to discuss the viability of using printed paper structures on your layout.

Many folks posted examples of their own paper print structures that look surprisingly good – you would never think they're not a "real" structure model. GN67 (Brian M.) posted one of the best examples of such a structure [2], a large brick passenger station on his N-scale Great Northern layout.

See the full thread for more great examples of paper print structures.

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



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Recent photo fun thread

These images posted on a recent *MRH* forum Photo Fun thread show some some nice caboose photos.

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

3. *MRH* forum member **SouthlandModeler**

(Chris B.) posted this bridge scene on his Chessie layout. The photo backdrop of the fall trees fits nicely with the foreground trees. All-in-all, a very attractive scene.



4. Forum member **Dom Bourgeois** posted this layout photo. Studying this photo brings out a lot of small details that really make this scene pop. Traction sand around the turnouts, grass on the spur, all the varying ballast treatments – excellent modeling. ✓



Introduction to Track Warrants, part 1

If you want a more realistic method for routing trains, Track Warrant Control (TWC) is one simple way. Yes, track warrants look intimidating at first glance, but they're actually straightforward once you understand the logic behind them.

I used track warrants for approximately 20 years of monthly operating sessions on my Siskiyou Line 1 layout from 1995 to 2016, and I can tell you from experience: they become second nature with a little practice and they add tremendous realism to train movements.

A track warrant is a short form with pre-defined statements about train movement. Instead of writing out lengthy train order instructions, the dispatcher simply dictates which boxes to check.

Understanding named points

Track warrants use a term called "named points." Most towns on your railroad have passing sidings alongside the main track.

But here's the key question: when a track warrant says "Proceed from Roseburg to Dillard," exactly which siding track switches does your authority include? The railroad has specific rules:

A. First Named Point

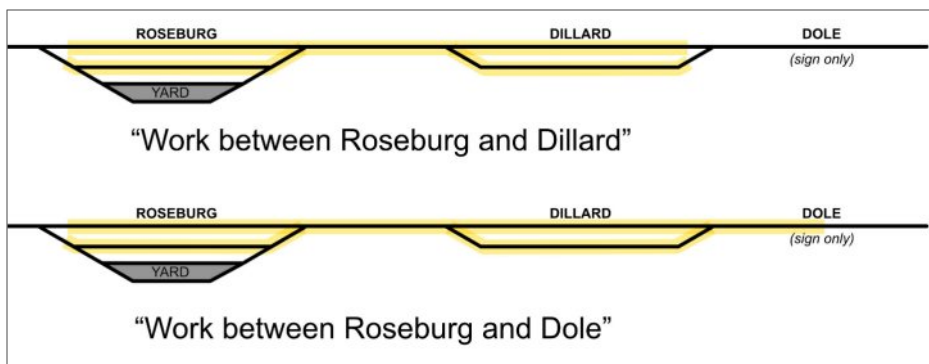
When a station name designates the first named point, authority extends from and includes the last siding switch. Authority extends from the station sign if no siding exists.



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1. A key concept with track warrants is the idea of a “named point.” As you can see illustrated here, you only get access to one siding turnout at each named point, you do not get both siding turnouts. If you need both turnouts such as you need at Dillard to switch the town, then you need a named point beyond Dillard, which here is “Dole” – a location on the railroad that is a sign post only.

B. Last Named Point

When a station name designates the last named point, authority extends to and includes the first siding switch. Authority extends to the station sign if no siding exists. At the last named point, authority extends to but does not include the last siding switch when the track warrant states, "Hold main track at last named point."

Here's the essential takeaway: **the track granted between two named points A and B doesn't include the turnouts at both ends of the siding at each location** – only the turnouts that face each other at each end of the named point sidings, but *not* the switch at the far end of the siding at each named point.

To grant access to *both ends* of a siding at a named point, the dispatcher needs to select a named point *past* the location where they want to permit full siding access at both ends. This keeps tight control on siding turnouts and prevents trains from quietly wandering off further down the main by accident – which is the whole point.

In part 2, we will look at a sample track warrant and how to get authorization from dispatch with it. ☑

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Who's who in model railroading

A tribute to individuals and companies who
have influenced the model railroading hobby

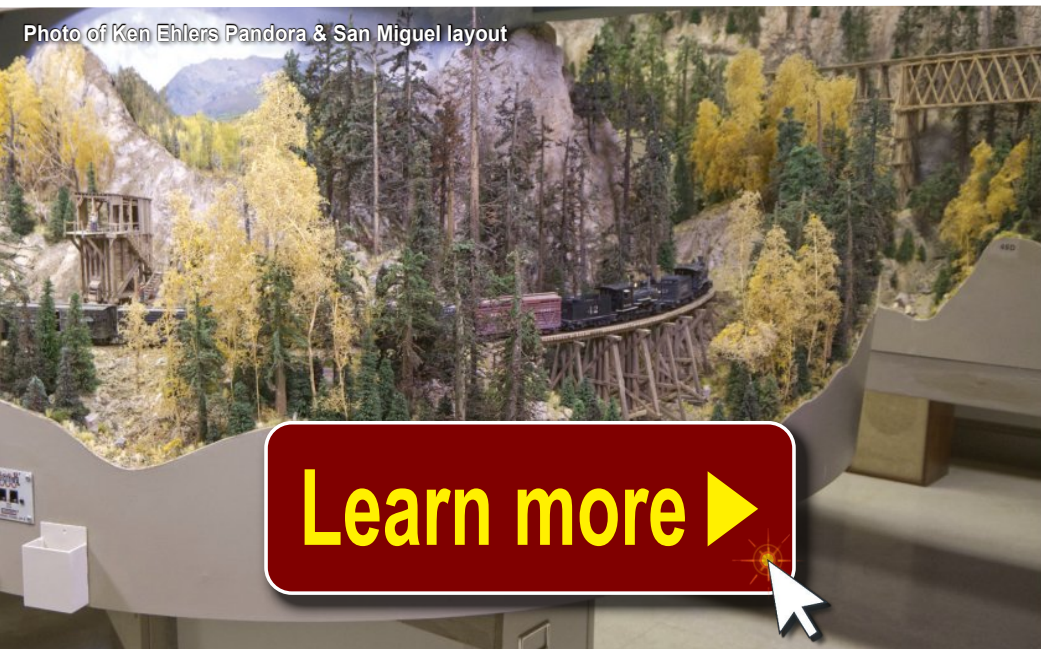
RICHARD H. BALE



Charlie Getz, past president of the National Model Railroading Association ...

"Richard Bale's monumental *Who's Who* should appeal to anyone who cares and is curious about the hobby and its history. There is an amazing amount of information about many pioneers who shaped and created the hobby of scale model railroading we enjoy today. Even if you do not think you need to know about them, you will be fascinated by the stories and connections of these individuals and the products and features we know and use. This book is a monument to some truly great people who are responsible for what we have today."

Photo of Ken Ehlers Pandora & San Miguel layout



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WHAT'S NEAT

column



Model Railroad Hobbyist | November 2025

KEN PATTERSON COVERS THIS MONTH:

- SD40-2 LOCOMOTIVES IN N SCALE FROM BLI
- SAFE MODEL TRANSPORT AND STORAGE WITH MODEL TRAIN BOX
- INSTALLING NIGHT LIGHTING EFFECTS IN THE BASEMENT
- BACHMANN'S NEW SIEMENS VENTURE CARS IN HO AND N SCALE



VIEW READER COMMENTS



NOVEMBER 2025

WHAT'S NEAT with Ken Patterson
Installing night lighting effects

click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

FOR THE NOVEMBER “WHAT’S NEAT,” Ken shows an example of BLI’s new N scale SD40-2 locomotives and talks about the new storage and transportation boxes from Model Train Box. Ken also shows how he installed remote control multi-color LED lighting in the basement to simulate night and then shows off Bachmann’s upcoming Siemens Venture cars in HO and N Scale.



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1a. b. c. (Left, and above) BLI's new N scale SD40-2 includes road name specific details. The Rock Island, Milwaukee Bi-centennial, and Union Pacific Desert Storm units include Paragon4 DCC/Sound, and a unique road number is offered for each paint scheme in the DCC-ready Stealth Series.

Info: broadway-limited.com

Safe model transport and storage with Model Train Box



2. Ken is using ModelTrainBox.com's transport and storage boxes to move cars and locomotives from the basement to the backyard. He's particularly impressed by the Attache Case version.

Info: modeltrainbox.com

Installing LEDs in the basement for night effect lighting



3. Ken started by wanting to replace the halogen puck lights mounted to the bottom of the cabinets above the new tracks across the washer, dryer, and sink. Then the project grew.



4. Beginning with an LED rope light and an LED strip light he bought during a late-night trip to Walmart, Ken had to determine how he wanted to mount the lights. He started by mounting the LED strip light against the inside of the track lighting system.





5. Ken also decided to standardize on a different brand of strip lights he bought at a big-box home improvement store because he could control them all with one remote control.



6. The lights worked so well that Ken is now using them instead of the track lights most of the time, which will save on his electric bill.



7. It also let Ken appreciate the Atlas and Woodland Scenics lights he's installed on the layout.



8a. b. (Above, top-right) Ken decided to use L-shaped wood molding to mount the LEDs beneath the cabinets, but faced a decision – should he mount them at the front of the cabinet, where the sagging from 20 years of use had made the base of the cabinets a little wavy, or farther inside, where they would be hidden by the front of the cabinets?

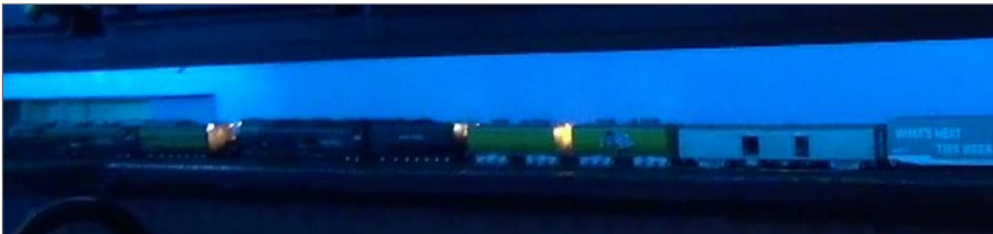




9. The front of the cabinets won, with Ken accepting that there would be a little waviness along the bottom. Here Ken takes advantage of the time needed for the stain on the inside of the molding to dry by using camouflage spray paint to weather the rails on the Micro Engineering flex track he used. The track wasn't glued down yet, so Ken was able to pull material to protect the rest of the area underneath it.



10. After a false start using a USB-powered strip light under the cabinets, Ken installed two sets of lights in the molding, an LED strip light that matched the others he'd used in the room, and a white seamless tape light. Here he is installing one of the strips.



11a. b. The two strips evenly light the area underneath the cabinets with both white and blue (night) light.





12. With the blue night lighting on, buildings and cars equipped with lights pop.



Bachmann's HO and N scale Siemens Venture Cars



13. Ken presents some of Bachmann's second run of Siemens Venture cars in HO scale, decorated for VIA Rail Canada and Amtrak Midwest. Amtrak Midwest Married Pair coach and business cars will be shipping by the end of the year, with VIA Rail Lumi cars arriving in the spring. The Lumi cars are decorated in a scheme based on that worn by the Turbo Trains in the '70s and '80s.



14. A run of San Joaquin Hills Venture Cars feature car-specific tooling, and will arrive later in 2026.



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15. The first run of N scale Amtrak Midwest and VIA Rail Canada Ventures will arrive in early spring 2026, featuring the same details and lighting as the HO scale cars.

Info: shop.bachmanntrains.com

Click on the video link at the beginning of the article to see the full video, including N scale BLI SD40-2s, the Model Train Boxes, Ken's full lighting installation, and the Bachmann Siemens Venture cars. ☒

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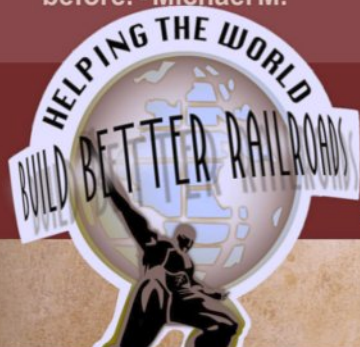
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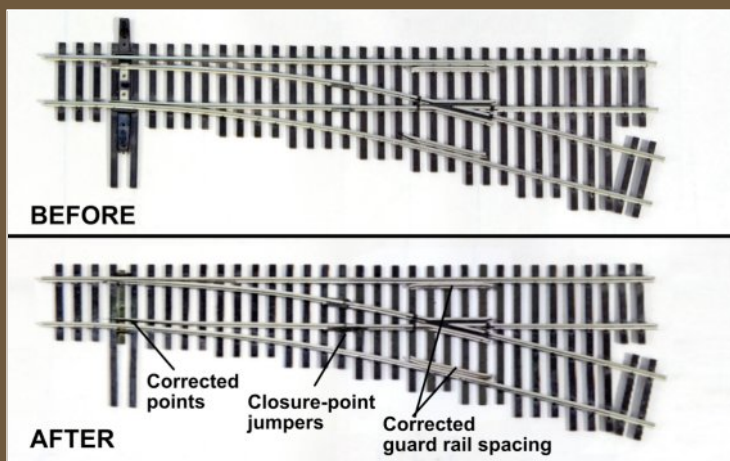


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Bullet-proof turnouts



Electrical
Impulses

Model Railroad Hobbyist | November 2025

JOE FUGATE UPGRADES COMMERCIAL TURNOUTS FOR FLAWLESS OPERATION ...



YOU'RE RUNNING YOUR FAVORITE LOCOMOTIVE THROUGH THE YARD, and suddenly – everything stops. Your DCC booster has shut down again. You trace the problem back to that same turnout that's been giving you grief for months. Sound familiar?

Commercially made turnouts tend not to perform as well as a carefully built handlaid turnout that's in spec. Until recently, many commercial turnouts were not very short-proof either. Shorts on a DCC layout can shut down an entire booster district – a jarring speed-bump in any operating session.

In this article I focus on upgrading commercial turnouts to run reliably, with intermediate-level skills and some patience. It's

faster and less demanding than full-on handlaying turnout, yet you can get the same performance.

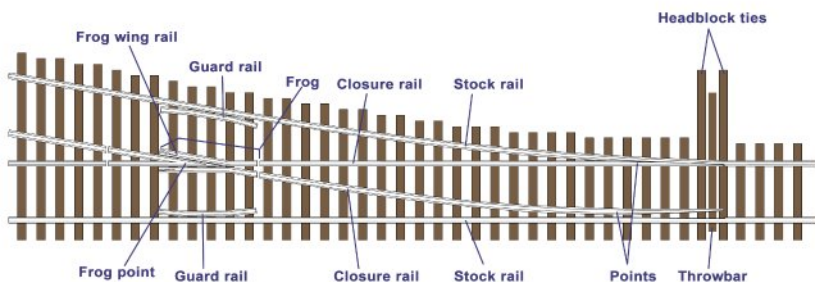
First, a thought about handlaid turnouts. There are two approaches: the old-school cut-and-fit method (building the turnout directly in place on your layout), or build at your workbench using jig systems from Fast Tracks, Roadmaker/Oak Hill, Central Valley turnout tie strips, or Proto:87 Stores turnout kits.

If you construct your handlaid turnouts with a gap-isolated frog, points continuous with closure rails, and jumpers from stock rails to adjacent closure rails, you'll get DCC-friendly turnouts. The beauty is the jig systems ensure NMRA compliance for gauge and dimensions guaranteeing in-spec turnouts.

But let's be real: handlaying turnouts takes more time than upgrading a commercial turnout. This article focuses on the faster route – upgrading factory turnouts for smooth flawless tracking and more “DCC-friendly” operation with far fewer shorts.

So, what exactly makes commercial turnouts problematic, and what do we need to fix?

Model Railroad Turnout terminology



1. Turnout terminology used in this article.



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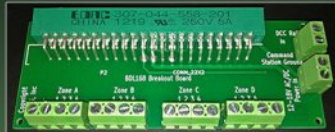
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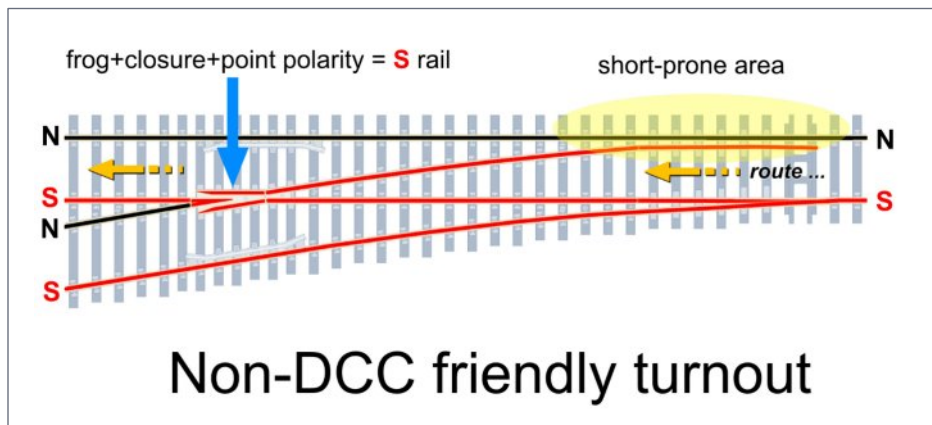
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WHY AND WHEN TO UPGRADE YOUR TURNOUTS

The history of commercial turnout and DCC is a story of gradual improvement. Turnouts from decades ago – think classic Shino-hara and similar brands – were designed for DC operation and rarely met what we'd call "DCC-friendly" standards today. In these older designs, manufacturers typically wired the points, closure rails, and frog to the same polarity [2, 3]. While the frogs were often plastic or came isolated with gaps, the overall electrical configuration was a recipe for shorts, a not-so-great situation for DCC.

As DCC started catching on in the early 2000s, manufacturers realized that matching each closure rail's polarity to its adjacent stock rail – and wiring each point to match its closure rail – dramatically reduced shorting frequency. Isolating the frog with gaps made it easier to power it with the correct polarity.

In the last couple decades, many manufacturers have embraced fully DCC-friendly wiring. A notable example is PECO's recent debut of their Unifrog design, which addresses these electrical issues nicely.

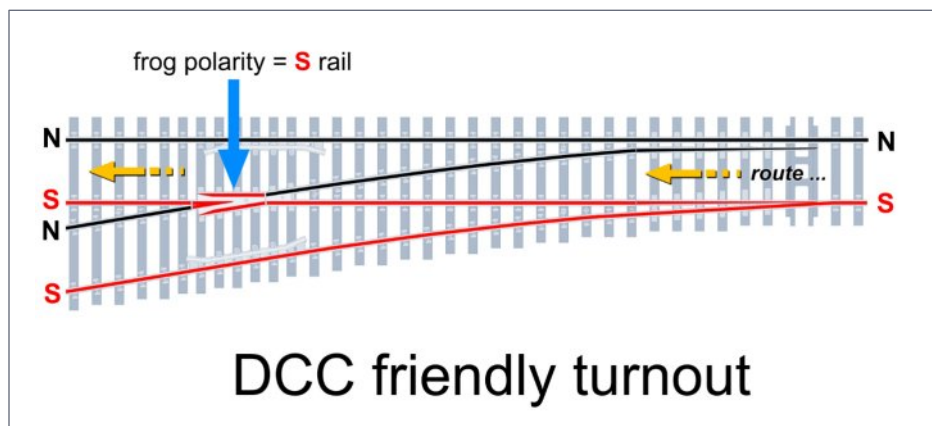


2. Non-DCC-friendly turnout set to normal route. The point rail contacting the stock rail carries the stock rail's polarity to all the interior rails of the turnout, making it particularly short-prone around the open point.

What's the problem with non-DCC-friendly wiring? In the old configuration, when a wheel back touches the open point (the one not against the stock rail), that is a short just waiting to happen [2]. If anything tracks a bit rough on the turnout, the odds of creating a short dramatically increase. And if you throw the points against an approaching train, the frog polarity suddenly becomes wrong for the wheels crossing it – another short.

Each time this happens, your DCC booster shuts down to protect itself, stopping all the trains in that power district. It's not just annoying; it makes your entire layout feel unreliable.

A DCC-friendly turnout only changes the frog polarity when the points are thrown – the closure rails and the points are hardwired to their adjacent stock rail, virtually eliminating shorts at the point end [3].



3. DCC-friendly turnout set to normal route. Only the frog polarity is altered. The turnout closure rails and points are connected electrically to their corresponding stock rail, resulting in more reliable electrical performance and near-zero shorts at the point end.





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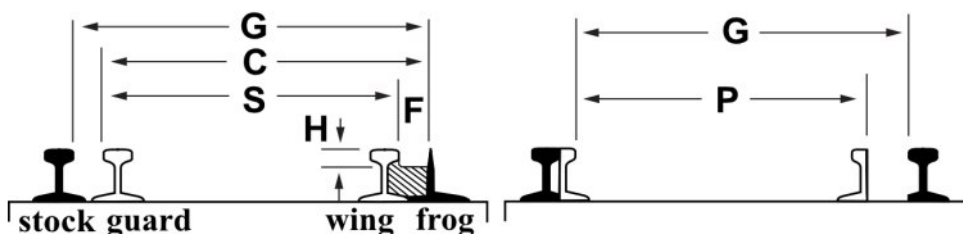


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Scale	Scale Ratio	Standard S3.2 Guarded using Target and Asym									
		G			C			S			T
		Gage at Frog			Check Gage			Span			
		Target	Plus	Minus	Target	Plus	Minus	Target	Plus	Minus	
1"	1:12	4.752	0.060	0.002	4.586	0.011	0.004	4.366	0.004	0.002	
3/4"	1:16	3.502	0.038	0.002	3.353	0.014	0.004	3.172	0.004	0.002	
F	1:20.3	2.783	0.014	0.002	2.683	0.013	0.004	2.583	0.013	0.004	
Fn3	1:20.3	1.772	0.010	0.006	1.652	0.010	0.004	1.550	0.005	0.015	
LS	Varied	Large Scale Standards on									
O	1:48	1.252	0.012	0.002	1.181	0.013	0.002	1.102	0.002	0.002	
On3	1:48	0.752	0.012	0.002	0.707	0.010	0.002	0.654	0.002	0.002	
On30	1:48	0.651	0.010	0.002	0.607	0.007	0.002	0.557	0.002	0.002	
On2	1:48	0.502	0.009	0.002	0.457	0.007	0.002	0.407	0.002	0.002	
S	1:64	0.885	0.010	0.002	0.841	0.007	0.002	0.791	0.002	0.002	
Sn3	1:64	0.565	0.010	0.002	0.521	0.007	0.002	0.471	0.002	0.002	
Sn2	1:64	0.415	0.008	0.002	0.379	0.004	0.002	0.339	0.002	0.002	
OO	1:76.2	0.752	0.009	0.002	0.707	0.007	0.002	0.657	0.002	0.002	
HO	1:87.1	0.651	0.010	0.002	0.607	0.007	0.002	0.557	0.002	0.002	
HOn3	1:87.1	0.415	0.008	0.002	0.379	0.004	0.002	0.339	0.002	0.002	
HOn2	1:87.1	0.278	0.007	0.002	0.248	0.004	0.002	0.215	0.002	0.002	
TT	1:120	0.473	0.006	0.002	0.439	0.003	0.002	0.403	0.002	0.002	
TTn42	1:120	0.355	0.004	0.002	0.325	0.001	0.002	0.295	0.001	0.002	
TTn3	1:120	0.302	0.004	0.002	0.272	0.002	0.002	0.242	0.002	0.002	
N	1:160	0.355	0.004	0.002	0.325	0.001	0.002	0.295	0.001	0.002	
Nn3	1:160	0.258	0.003	0.002	0.232	0.003	0.002	0.207	0.002	0.002	
Nn2	1:160	0.179	0.002	0.002	0.152	0.006	0.002	0.127	0.002	0.002	
Z	1:220	0.259	0.008	0.002	0.238	0.004	0.002	0.213	0.002	0.002	



The Span, **S**, is derived by knowing **S = C-F**.
C is the primary controlling dimension.

metric Imperial (inch) Tolerance							
F			P			H	Wheel
Flangeway			Points				
Target	Plus	Minus	Target	Plus	Minus	MIN	CODE
0.218	0.002	0.065	4.561	0.004	0.004	0.140	1/2"
0.179	0.002	0.046	3.325	0.004	0.004	0.094	13/32"
0.096	0.004	0.006	2.656	0.004	0.004	0.084	284
0.115	0.002	0.023	1.628	0.004	0.004	0.066	250
Separate Page							
0.077	0.002	0.021	1.156	0.002	0.004	0.045	145
0.051	0.002	0.018	0.685	0.002	0.004	0.026	116
0.048	0.002	0.013	0.588	0.002	0.004	0.025	110
0.048	0.002	0.012	0.438	0.002	0.004	0.025	110
0.048	0.002	0.013	0.822	0.002	0.004	0.025	110
0.048	0.002	0.013	0.502	0.002	0.004	0.025	110
0.038	0.002	0.008	0.363	0.002	0.004	0.023	88
0.048	0.002	0.012	0.688	0.002	0.004	0.025	110
0.048	0.002	0.013	0.588	0.002	0.004	0.025	110
0.038	0.002	0.008	0.363	0.002	0.004	0.023	88
0.031	0.002	0.007	0.234	0.002	0.002	0.020	72
0.034	0.002	0.005	0.426	0.002	0.002	0.023	79
0.028	0.002	0.001	0.314	0.002	0.002	0.020	72
0.028	0.002	0.002	0.260	0.002	0.002	0.020	72
0.028	0.002	0.001	0.314	0.002	0.002	0.020	72
0.023	0.002	0.002	0.219	0.002	0.002	0.016	54
0.023	0.002	0.004	0.136	0.002	0.002	0.016	54
0.023	0.002	0.008	0.224	0.002	0.002	0.016	54

4. The NMRA turnout specifications, S3.2, outlines all the critical dimensions for flawless turnout operation.



THERE'S ALSO TRACKWORK SPECS

The NMRA turnout specs S3.2 outlines the proper measurements for turnouts to have flawless performance [4].

I have randomly selected turnouts from various manufacturers, and out of a half-dozen turnouts, all but one (more than 80%) were out of spec by several thousandths of an inch.

The problem is, an out-of-spec turnout may perform okay most of the time, but all it takes is one derailment due to sloppy conformance to specs to mess up an otherwise delightful operating session.

Flawless zero-derailment performance is possible if you make sure all your turnouts are perfectly in-spec before installing them.

I look at it this way: is it worth it to spend an extra 30+ minutes fixing an out-of-spec turnout to avoid a lifetime of random derailments with that turnout? I say yes!

One critical note: I prefer a turnout with a metal frog and metal guard rails. A turnout with a plastic frog and/or plastic guard rails cannot be upgraded using the techniques in this article. If you're shopping for turnouts that you expect to upgrade if needed, make sure they have metal frogs and metal guard rails.

Here's the expert tip: correct these problems and upgrade your turnouts before you install them on the layout, not after. It's very difficult to upgrade a turnout that's already laid in place.

In fact, it's often easier to rip up a problematic turnout and replace it with a handlaid turnout or a properly upgraded commercial turnout than to try fixing it on the layout.

This means that when you purchase a new turnout, don't assume it's ready to install. Thanks to mass-production variation, most commercial turnouts are not in perfect spec.





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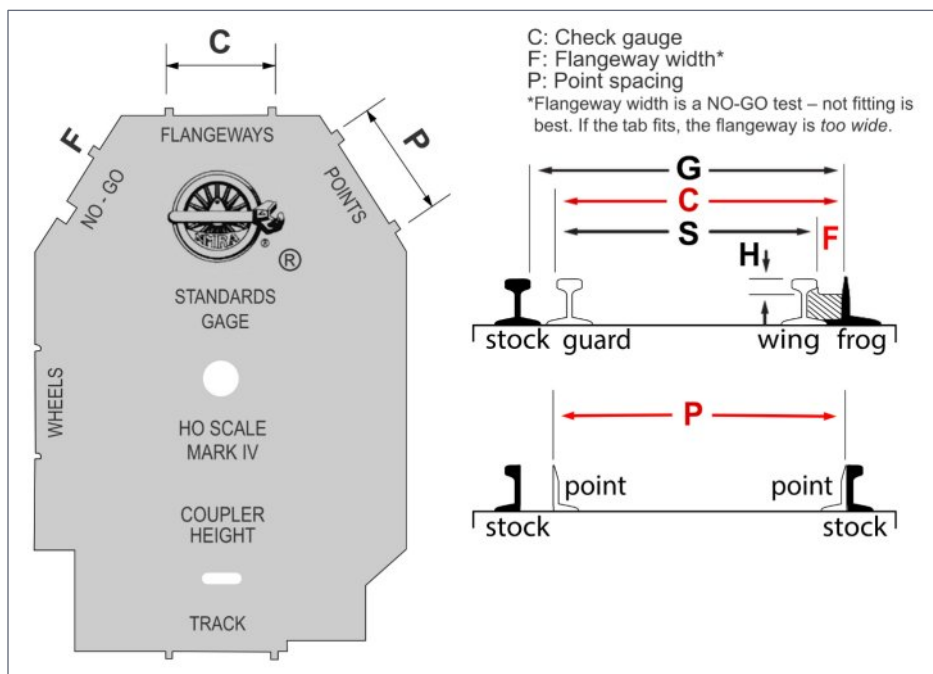
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CHECKING A COMMERCIAL TURNOUT FOR COMPLIANCE

Here's your best practice workflow: First, use a multimeter set on continuity to verify the turnout has DCC-friendly electrical characteristics. Check that each closure rail matches its adjacent stock rail polarity, that each point is electrically tied to its closure rail and that the frog is properly isolated.

Second, grab your NMRA gauge and check that both the frog area and the points area conform to the NMRA turnout S3.2 specifications (see the next section *Understanding NMRA turnout specs*). If a turnout needs upgrading to get it in spec, do that at your workbench before installation.

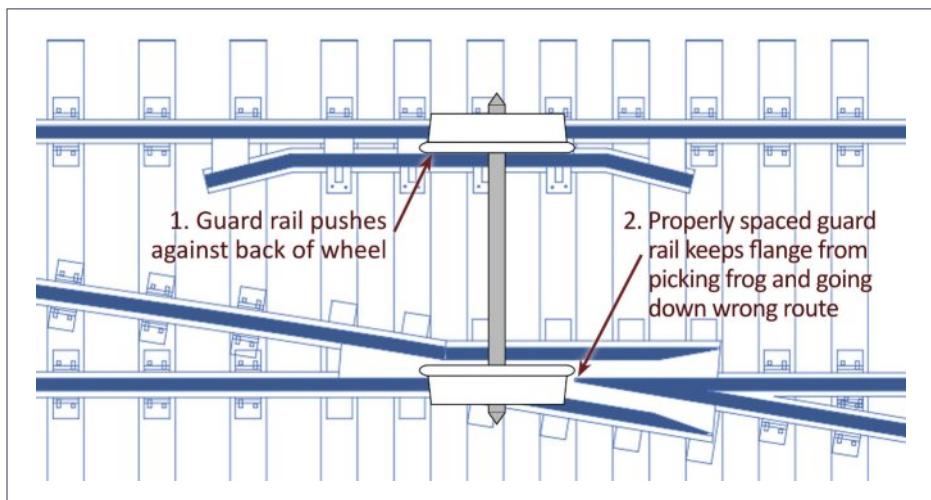
Trust me, it's much better to spend an extra hour at your workbench now than to discover problems months later when fixing them means tearing up ballasted trackwork.



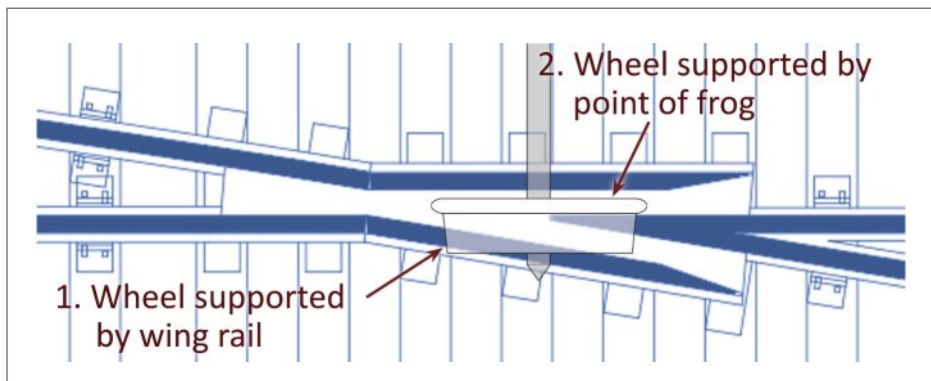
5. Use the NMRA gauge to check the turnout dimensions of C, F, and P.

UNDERSTANDING NMRA TURNOUT SPECS

Better turnout performance starts with using the NMRA turnout specs S3.2 to check that your turnout completely complies [4].



6. This diagram illustrates what a correct check gauge dimension (C) at the frog does to ensure proper wheel behavior on the turnout frog.



7. When the flangeway width dimension (F) at the frog is correct, the wheel is completely supported all the way across the frog gap.



With in-gauge wheels and proper track gauge, an in-spec turnout should perform flawlessly.

Critical frog dimensions: The critical frog dimensions are check gauge (C) and the frog wing rail flangeway width (F).

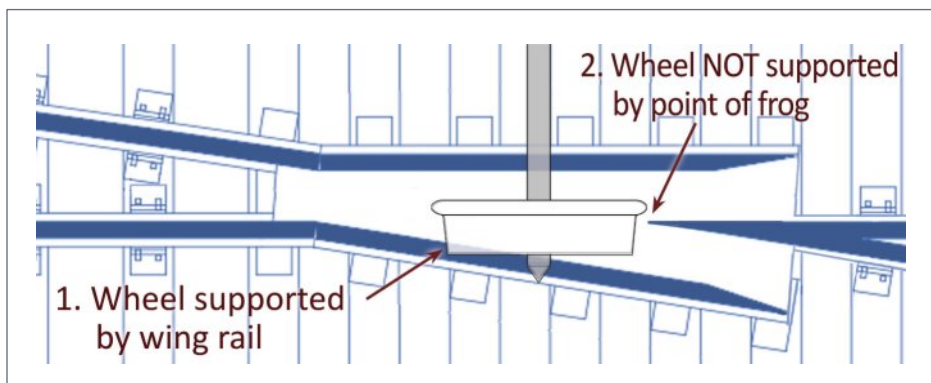
Check gauge (C): The check gauge controls the route of the wheels through the frog.

Flangeway width (F): The flangeway width dimension (F) is the width of the flangeway between the frog wing rails and the frog center point.

With the appropriately narrow flangeway width, the wheel tread is supported by both the wing rail and the frog center point across the frog flangeway gap, allowing wheels to roll very smoothly across the frog.

WHEN F IS TOO WIDE

If the flangeway gap (F) is too wide, the wheel may not be supported by both the wing rail and the frog center point, allowing the wheel to drop into the frog gap and cause a significant bump or lurch across the frog, possibly leading to a derailment.



8. When the flangeway width dimension (F) at the frog is too wide, the wheel can drop into the frog gap and derail.

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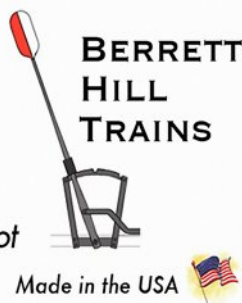


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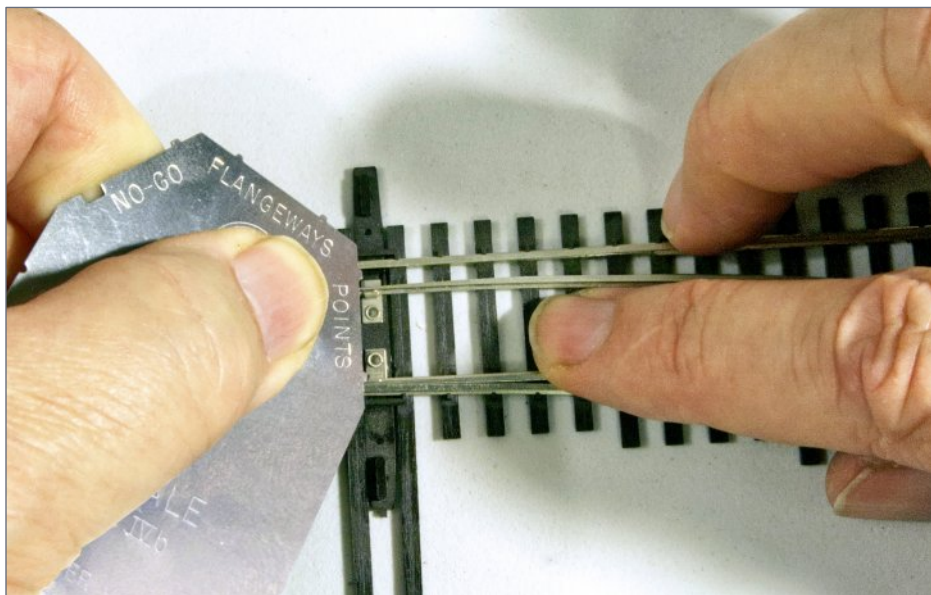
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As long as the turnout follows the NMRA specs with a wing rail flangeway width (F) that is appropriately narrow, even turnouts with a large frog gap such as a number-12 turnout will still have the wheel completely supported across the frog flangeway gap.

The real problem is *when F gets too wide*; a slightly too narrow value for F isn't a problem as long as the flange doesn't bind in the frog. That's why the flangeway tab on the NMRA gauge is a NO-GO check. Too wide is far worse than too narrow.

WHEELSET CONSIDERATIONS

This all assumes in-gauge wheelsets with standard-width wheel treads. In HO, we're talking about code 110 wheels. Narrower semi-scale wheelsets such as code 88 wheelsets in HO run the



9. The point spread (P) on this Walthers/Shinohara turnout is far wider than the NMRA spec, even though this turnout is DCC-friendly. See [10] for why conforming to P improves turnout performance.

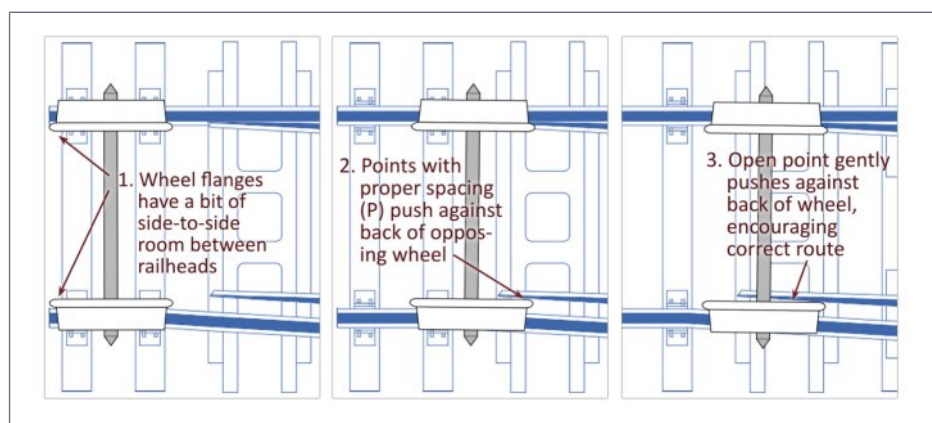
risk of not being fully supported at the frog gaps on turnout of #8 or larger. The narrow tread can allow the wheels to drop into the frog gap.

POINTS SPREAD DIMENSION (P)

The other important dimension on a turnout is the points spread, which is dimension P on the NMRA specs.

Most commercial turnouts do not follow this standard [9] – *not even a little bit*. This is a holdover from the pre-DCC days when the electrical polarity of the points and closure rails was often switched along with the polarity of the turnout frog when throwing the turnout points.

This simplified “all one electrical polarity to match the frog” practice on a turnout means the open point has a polarity opposite to



10. The NMRA point spacing (P) is no accident. Turnouts with the tighter point spacing per the NMRA Standards actually use the open point to help guide the wheelset down the selected route and reduces any attempts to climb the closed point. By making the points (and closure rails) the same electrical polarity as the stock rails, you can use this recommended tighter point spacing (P) to give your equipment's wheels even more help to avoid climbing the closed point and derailing. Wheels must be in gauge for this to work!



that of its adjacent stock rail. If the points were spaced close to the stock rail, then a short could occur when the back of the wheels touched the open point.

In modern DCC-friendly turnout, the polarity of the points matches its nearby stock rail, which means a tighter point spacing using dimension P becomes practical. The tighter point spacing does more than make the turnout look less toy-like – it also helps guide the wheel down the correct route by discouraging it from climbing the closed point rail [10].

Commercial turnouts not spacing the points to match the P spec are missing a huge opportunity to reduce the likelihood of in-gauge wheelsets from climbing the points.

TESTING YOUR TURNOUTS

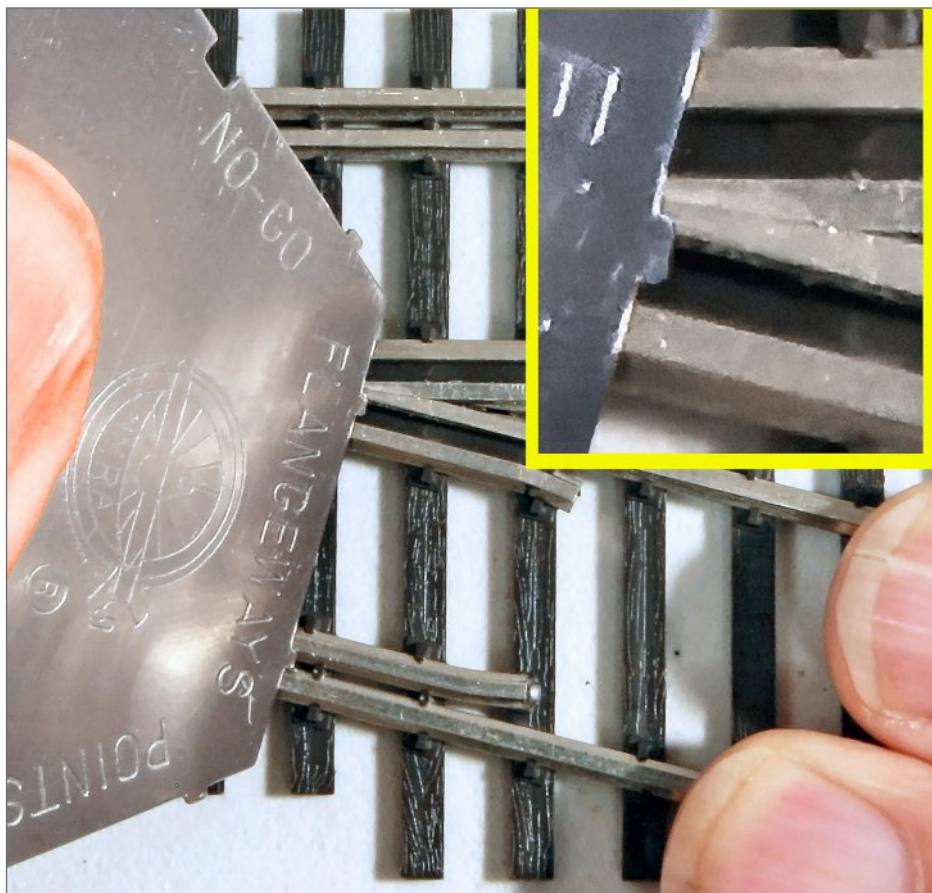
Using an NMRA gauge, you can test dimensions C, F, and P for compliance. If the turnout is out of compliance, the techniques in this article show you how to upgrade the turnout to be completely in-spec and fully DCC-friendly as to its electrical characteristics. If you don't have an NMRA gauge, you can check dimensions C, F, and P using some calipers and the values from NMRA S3.2 [4].

THE DCC-FRIENDLY ELECTRICAL SOLUTION

Let's look at how to make a turnout DCC-friendly. The fix involves electrically isolating the points, closure rails, and frog so they are less likely to short.

First, you want each closure rail to match the polarity of the stock rail it is adjacent to, regardless of point position. You accomplish this by adding jumpers that connect each closure rail directly to its adjacent stock rail.

Next, address the points themselves. Add fine wire jumpers (AWG 28 or 30) connecting each point to its corresponding closure rail (like to use a single copper strand from stranded wire).



11. The NMRA check gauge is too narrow in this Walthers/Shinohara turnout, which allows properly in-gauge wheelsets to pick the frog and maybe derail. It is worth upgrading to NMRA spec [12].



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12. Here is how the NMRA gauge fits into the frog after correcting the guard rails. Notice in the enlarged view the gauge tab now easily clears the frog point. This guarantees the wheel flange will no longer pick the frog point. This now in-spec frog should give zero derailment performance with in-gauge wheelsets. Compare this to the gauge tab location in [11].

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This ensures each point matches the polarity of the adjacent stock rail and does not depend on unreliable point-to-stock-rail contact for conductivity. Alternatively, you can make the closure rails and points into a continuous single rail, with the same effect.

The frog requires special attention. Isolate it with gaps on both ends, then power it separately. You can use mechanical contacts on your switch machine, or – my preferred method – use a frog juicer. These clever devices detect a short and flip the frog polarity in milliseconds, faster than your booster can react. The train just rolls through without hesitating.

GAUGE ISSUES AT THE FROG

While you're upgrading the electrical side, check the gauge at the frog too [11, 12]. Out-of-gauge frogs are surprisingly common due to mass production tolerances. The NMRA specifications didn't help matters, because they used to be confusing, but that has been corrected in the last decade or so.

Check dimension (C) between the frog point and the guard rails, then verify the flangeway (F) width at the frog.

If **C** is too wide, wheels can bind or climb the rails and cause derailments. Too narrow, and wheels can wander down the wrong route and cause derailments. If the flangeway **F** is too wide, wheels can drop into the frog gap or take the wrong route. Too narrow, and flanges hit the frog point, causing a visible "bump" as the wheel climbs over and derails.

You'll notice these problems as derailments, visible bumps, or trains taking the wrong route. The goal is simple: wheels should roll through as if the frog isn't even there.

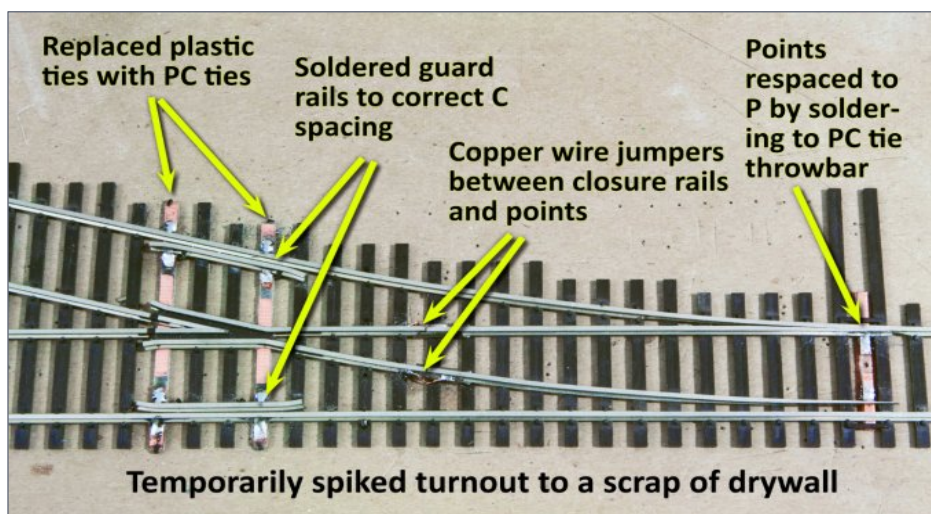
Do note: old power-routing turnout are generally unnecessary with DCC. DCC allows you to run locomotives independently, so there's little need for any dead track on your layout.



TOOLS AND MATERIALS YOU'LL NEED

Before you start, gather these supplies:

- PC ties (printed circuit ties)
- Solder – I strongly recommend Tix low-temperature solder to avoid melting plastic ties
- No-clean flux
- Temperature-controlled soldering iron set to 500°F
- NMRA gauge
- Calipers (optional but helpful for precise measurements)
- Multimeter for testing continuity



13. Here are all the modifications I made to this older Walthers/Shinohara turnout to upgrade it. The frog was already isolated with insulating gaps, so Step 1 was not needed. Note the gap in the copper on the PC tie throwbar, added in Step 3 of the upgrade process. Also note the PC ties have gaps isolating the guard rails from the frog, those are added in Step 5 of the upgrade process.

I've included a link to a complete shopping list at the end of this article to make sourcing easier.

THE UPGRADE PROCESS

Now let's walk through the actual upgrade. Take your time with each step – rushing leads to mistakes. I like to temporarily spike the turnout to a scrap of drywall for this process [13]. To illustrate these upgrades, I am using an older Walthers/Shinohara turnout.

Step 1: Isolate the frog. Use a cutoff disk or razor saw to create gaps on both sides of the frog, separating it electrically from the closure rails and the diverging rails past the turnout. Make clean cuts, and fill these gaps with black styrene glued in with super-glue. Next day, trim the styrene using a hobby knife with a fresh blade.

Step 2: Add closure rail jumpers. Solder a wire jumper from each closure rail to its adjacent stock rail. Optionally, you can



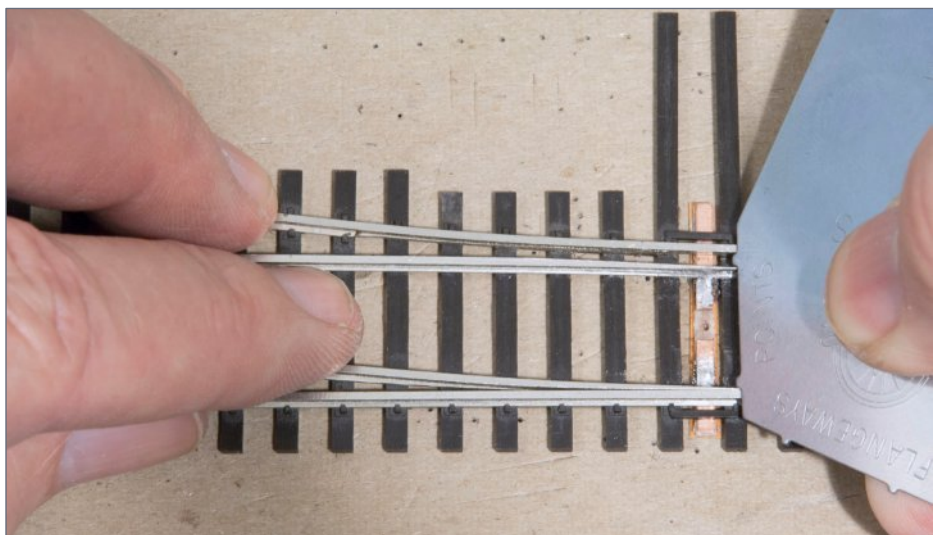
14. Note this older Walthers/Shinohara turnout already has jumpers between the stock rails and the closure rails, so I did not need to add them.



remove one plastic tie and solder a PC tie in its place to create this electrical connection. Gap the foil so that the stock rail and its nearby closure rail are electrically connected, but so that each closure rail + stock rail pair are electrically separate. These jumpers ensure each closure rail always matches the correct polarity, no matter which way the points are thrown.

The older Walthers/Shinohara turnout already has jumpers between the stock rails and the closure rails under the ties [14].

Step 3: Deal with any metal throw bar. Most factory turnouts use a metal throw bar that electrically connects both points. You'll need to unsolder the points from this throw bar, and/or remove any rivets and cut off the metal with a motor tool cut-off disk. Create a new throw bar using a PC tie, cutting the copper foil to isolate each point and then soldering the points to the new throw bar. This gives each point independent polarity.



15. The points spacing on this Walthers/Shinohara turnout is now set to the correct (P) spacing. Compare to before [9].

I like to spike one point against its stock rail then spike the throw bar so it won't move. Add a bit of aluminum foil between the point stock rail just before you spike it. Solder won't stick to aluminum, so this reduces the chance you will accidentally solder the point to the stock rail from solder seeping under the point.

Once one point has been soldered, then I un-spike the point and the throw bar, move the point distance P from the stock rail, then spike the throw bar in place, spike the loose point in place against the stock rail (remember the aluminum foil trick), and solder the other point to the throw bar.

Un-spike the point and throw bar and test its throw. It should move back and forth easily. If it's sticky, a bit of graphite on the throw bar between the point and stock rail often loosens things nicely.

Step 4: Add point jumpers. Solder fine copper wire jumpers (I take a single strand from stranded wire) from each point to its corresponding closure rail. This ensures each point matches the polarity of the stock rail it touches. Keep these wires neat and low-profile so they don't catch on wheel flanges. Paint them black, and they will disappear.

Step 5: Re-gauge the guard rails if needed. Use your NMRA gauge to check the spacing between the frog point and each guard rail. If it's off, replace a couple plastic ties in that area with PC ties. Cut the foil to isolate the guard rails electrically from the stock rails, then position and solder the guard rails at the correct spacing. This is fiddly work, but it makes a huge difference in reliable operation.

TESTING YOUR WORK

Before you install the turnout on your layout, test the electrical upgrades you've made. (We'll discuss frog-powering options in the next section.)

Use your multimeter set on continuity mode to verify:



- Each closure rail is electrically connected to its adjacent stock rail.
- Each closure rail and its corresponding point are electrically connected (and you haven't cross-wired them)
- Each guard rail matches its adjacent stock rail
- The frog is completely isolated from all other rails

Check with your NMRA gauge that point spacing (P) is correct. The points should fit snugly against the stock rails with zero gap where the sharp end meets the stock rail. Use a needle file to sharpen the point if it is at all blunt.

Check that the frog check gauge (C) is correct on both routes. Check that flangeway width (F) is correct. Of the two dimensions, C is the most critical. Dimension F can be off a few extra thousandths, and it won't hurt anything with code 110 wheels and a turnout of #8 or sharper.

Test-roll some trucks through both routes. They should glide through smooth as silk, with no bumps, hesitations, or derailments. If you feel any resistance or see any wobbling, identify and fix the problem now.

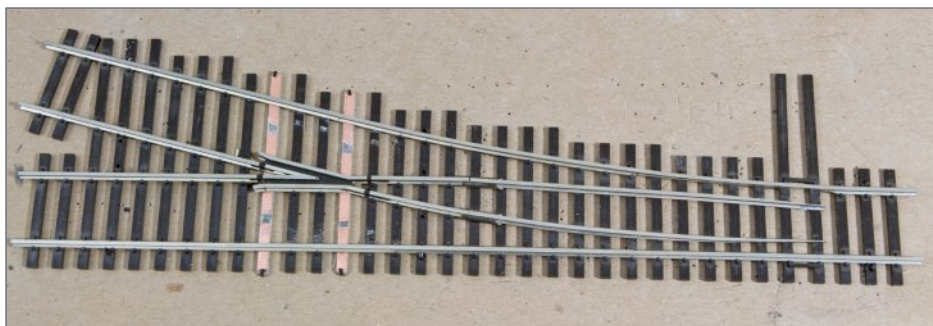
Verify that the points throw smoothly through their full range. They should move without binding.

If you detect any shorts or rolling problems during testing, correct them before installation.

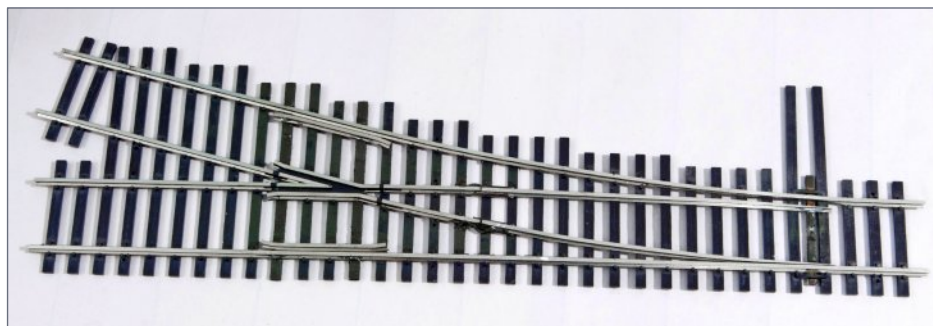
POWERING THE FROG

Once you've completed and tested the upgrades, you need to decide how to handle frog power. You have several options: mechanical contacts on your switch machine, frog juicers, or leaving the frog dead.

For longer turnouts with long dead frogs, you may experience problems with short-wheelbase locomotives, or sound decoder dropout. On a DCC layout, I recommend powering the frog for reliable operation.



16. I have removed the guard rails and two plastic ties under the frog and replaced them with PC ties. Note I have cut the foil to electrically isolate the frog from the guard rail location on both sides. Also notice I have removed the throw bar and unsoldered the points from the metal throw bar tabs.



17. Here is the upgraded turnout, with the PC ties brush-painted dark brown and the closure-point jumper wires painted black. See [13] for how the turnout looked when finished before painting the PC ties and jumpers. Now you can't even see the modifications unless you know what to look for. This turnout is ready to install on the layout, and should give many years of flawless performance.

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Frog juicers are my preferred solution. They're automatic, reliable, and eliminate any timing issues between point position and frog polarity. Install one, connect it to the frog, and forget about it.

CONCLUSION

Upgrading your turnout eliminates those mysterious shorts and booster shutdowns that can plague operating sessions. Your trains will track reliably, and you'll spend less time troubleshooting and more time enjoying your layout.

These techniques work for all scales from Z to O, though I've used HO in this example. Smaller scales require more care and precision due to the tiny parts, but the principles remain the same.

With practice, these upgrades become routine. Your first turnout might take an evening, but soon you'll be knocking them out in less than an hour. The investment in time pays off in years of near-zero derailment operation. Imagine the only derailments being due to operator error, not trackwork failure!

Now get out there and fix those troublesome turnout before you install them. Your layout will thank you for it. ☑

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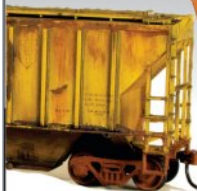
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1. The finished structure, Addams Avenue (kit part 1), by Downtown Deco.



Model Railroad Hobbyist | November 2025

I RECENTLY BUILT A HYDROCAL PLASTER KIT FROM DOWNTOWN DECO.

I had come across an advertisement for their Addams Avenue Part 1 in a 1998 issue of the *Narrow Gauge and Shortline Gazette*. It was effective advertising – I liked the look and character of the brick and stone comprising the four stores in the block [1].

I went online, and found the kit was still available along with many others from Downtown Deco, including four more in the Addams Avenue series. I purchased the Part 1 kit, and received it 10 days later.

Everything was intact, but I immediately noticed some warp to the castings, including the front wall's upper-right cornice, which was tilted slightly upward instead of being horizontal [2]. There was other warping as well, but nothing bothered me as much as the cornice.

I contacted Downtown Deco's owner, Randy Pepprock, who graciously sent me another casting of the front wall with the hope that it would be better. Unfortunately, it was exactly the same.

Although the new casting didn't solve the problem, it allowed me confidence to modify the original since I had a backup. I cut out the cornice using a razor saw, filed the top wall so it was horizontal, and glued the cornice back on with Aleene's Tacky glue.

The operation was a success, and I was much happier with the appearance. I learned it's not hard to cut out sections of plaster with a razor saw, and you can fill any gaps by mixing a small batch of light-weight Hydrocal and applying it to the gaps.

Here are the steps I used to build the kit.



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STEP 1: ASSEMBLY

I adjusted and assembled the four walls. For the front wall, I again used a small file and X-Acto knife to remove the excess plaster and obtain proper clearances for the plastic windows and doors [3].

I narrowed the side walls by $1/2''$ with the razor saw. This made the overall footprint $8-1/4'' \times 4-1/4''$. I used a flat file to minimize the gaps at the joints, and used tacky glue to attach the walls together. I added $1/8''$ basswood pieces to the inside corners for extra strength.

STEP 2: PRIMING

I painted the entire structure with Apple Barrel Country Gray [4]. Apple Barrel is a line of craft paints I regularly use. The kit instructions recommended spray painting with white enamel to prime the plaster, but I don't have a good facility for spray painting, and I don't like the fumes.

STEP 3: PAINTING

I painted the various components of the four stores [5]. For the pawnbroker and liquor store bricks, I used a mixture of Harvest Orange and Brown Oxide paints.



2. Original front plaster wall. The upper-right cornice is slanted.

For the tattoo parlor, I used straight Brown Oxide. I also painted the corresponding sections of the side walls and back wall with the appropriate colors.

To weather the bricks, I used alternating washes of dilute-white and India ink mixed with isopropyl alcohol. The white wash fades the color and provides a mortar effect, while the black wash adds further texture and contrast.

Where necessary, I touched-up gray concrete areas, such as the sills and lintels.

For the bar's stone facade, I used the black wash with some follow-up dry-brushing. I applied the black wash to the gray concrete areas as well.



3. Front wall after adjusting the right upper cornice, and cleaning the door and window openings for proper fit.



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4. Front wall after painting with gray acrylic paint.

STEP 4: SIGNS AND AWNINGS

I added the shop signs and awnings [6]. The signs are cut from a paper sheet supplied in the kit. I glued some manila file folder



material to the backs of each sign to increase thickness before gluing them to the buildings with white glue.

There was insufficient wire in the kit for all the awnings, so I used some of my own for the pawnbroker and liquor store. I drilled small holes into the brick surfaces at the appropriate angles for the anchor points of the wires.

One of the bar signs protrudes from the stone wall on a small section of thicker wire; this can be better viewed in [1]. I chose not to add two other protruding signs, for the liquor store and the pawnbroker. I added the tip of the protruding pawn shop sign to the left edge of the building. To weather the awnings and signs, I lightly applied black chalk to my finger and worked it in.

STEP 5: ADDING THE WINDOWS AND DOORS

The clear styrene provided in the kit for the windows was too thick for my liking, so I used thinner acetate left over from a previously built Foscale kit. I placed some small signs behind the windows as appropriate for the stores.

I added a simple frame to the pawnbroker window, made out of 1/32" square basswood. I used manila folder material for the blinds behind the pawnbroker windows. I also used a piece of a paper napkin for window curtains.

STEP 6: ROOFING

A sheet of black paper came with the kit to be used for roofing panels, but I chose to model a tar-and-gravel roof instead [8]. I used a sheet of 100-grit sandpaper for this, painting it gray, and working black chalk into it for color variation. I applied the chalk



6. Front wall after adding signs and awnings.



BUILD A HYDROCAL STRUCTURE KIT | 6

in various spots using a dry brush, then used a wet brush to spread the color around.

I used rubber cement to glue the sandpaper to a piece of styrene sized to fit just inside the building. I made a ledge on the inside walls from 1/8" basswood to support the roof 1/4" from the top. I added rooftop details provided in the kit: plaster vents, chimneys, an access door, and styrene strips to simulate false



7. Front wall after adding windows, doors, and associated details.



8. Roof details, including false walls, vents, chimneys, access door, and billboards.

walls, I made the billboards by gluing paper signs to thin cardboard, with legs from 1/16" square basswood strips.

STEP 7: PAINTED BRICK SIGNAGE

For the left side pawnbroker wall [9], I dry-brushed a large black square over the bricks, then dry-brushed the white "Fast Loans" sign using the supplied stencil. The right edge of the black square helps to hide the wall joint. A few more signs related to the pawnbroker completed this wall.

STEP 8: ADDITIONAL SIGNAGE

I applied relevant signs to the liquor store's right-side wall [10]. Also, I added a leftover piece of wire from the kit to simulate conduit, concealing the gap between the front and side walls.



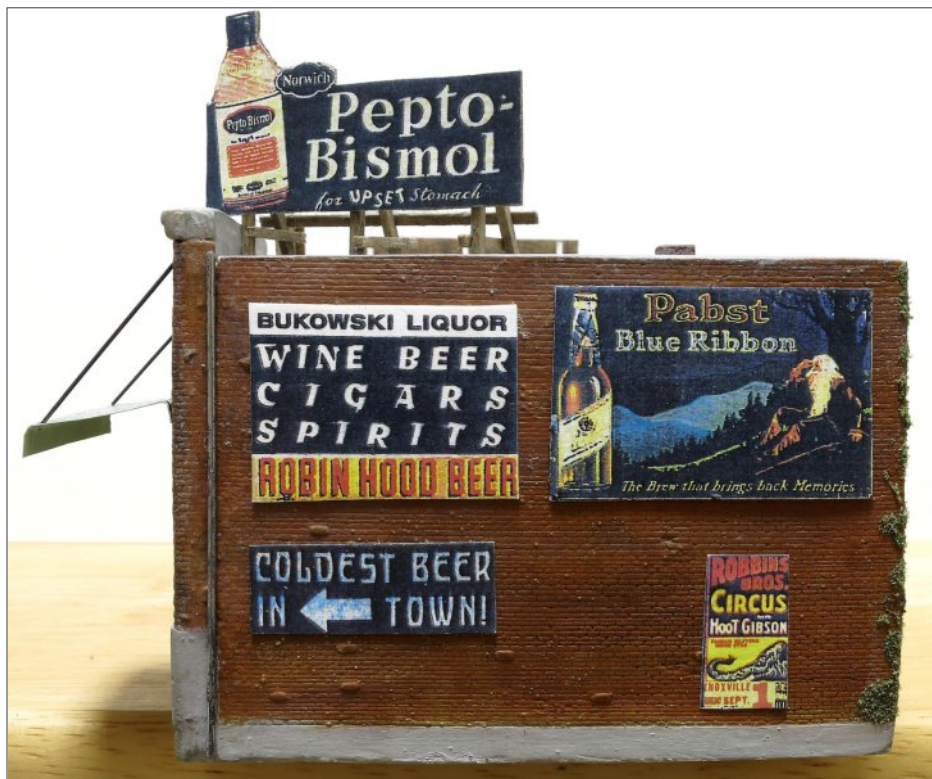
9. Left side wall. I painted the Fast Loans sign using the supplied stencil.



STEP 9: THE REAR OF THE BUILDING

Appropriately, the rear of the building is not as decorated as the front [11]. I dirtied the wall in spots with a black wash and black paint. I applied vines using fine ground foam over lines of white glue to conceal the left wall joint.

I cut and painted a section of sprue material to look like a drainpipe, and placed it over the right-side wall joint. I had a few leftover lights from a previously built Bar Mills kit and installed them over the metal doors. Other details, like barrels, crates, and litter may be added when the structure is placed in an actual scene. ☑



10. Right side wall.



11. Rear wall, with vines, lights, and drainpipe added.

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PETER VASSALLO

Peter lives in Schenectady, NY and works part time as a mechanical engineer.

He became interested in trains as a boy after discovering his father's N scale models in a box in the basement.

He currently models in HO and HO_{n3} scales. His favorite railroads are from the old West, particularly Colorado and California narrow gauge.



To this day, he continues to find inspiration in the works of John Allen, John Olson, Malcolm Furlow, Dave Frary, Bob Hayden and George Sellios, among others. ■



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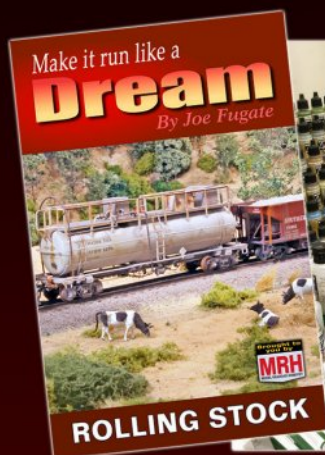
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Floquil / PolyGloss	Color (approx.)	MIR-Acrylic	Winkler-Emulsion	Winkler-Emulsion	Notes
Pineer Gray		MIR 4763	WMA T16109	16-12	
Engine Black		MIR 4888	MR 2008H WMA T16125	16-81	
Storm-Rainy Road		MIR 4765	WMA T16127	16-468	
City Black		MIR 4767	WMA T16127	16-467	
Weathered (Weathered Blue)		MIR 4750	MR 2008H WMA T16164	16-05	
Reef Gray		MIR 4384* MR 4015	WMA T16145	16-04	
Reef White		MIR 4615	MR 2008H WMA T16129	16-02	
Gravel White		MIR 4387	MR 2008H WMA T16155	16-03	
Celadon Red		MIR 4602* MR 4003	MR 2008H WMA T16163	16-08	See also MIR 4602* The yellowish gray the yellowish gray

* Indicates a close but not exact match. All MOOREflex paint is a semigloss finish. Valley Model Air Game Air, Monogram, and Model Master painty flat finish unless marked: † Gloss finish, ‡ Semigloss finish. † Model Master's new Reflex Grays is a shade darker than the old PolyScale Reflex Gray. Color 4301 Dark Steel Gray is a closer match to the old PolyScale color. ‡ Model Master's new Caboose Red is a shade lighter than the old PolyScale Caboose Red. Color 4633 Seafoam Light Blue-Aqua is a closer match to the old PolyScale color. Add 20% flat medium to get semi gloss.

Paint	Color Equivalent	MIR® Brand	Floquil® Brand	MIR®/FLO®	Notes
Taupe		MIR 4001®	FLO 1200	10-15	
Reddish Orange		MIR 4004®	FLO 1003	10-49	
Reddish Yellow		MIR 4020®	FLO 1120	10-10	
Red Brown		MIR 4004	FLO 1000 FLO 1200	10-17b	
Reddish Tan Brown		MIR 4005	MIR 1002 FLO 1000	10-17b Clear coat mix - See Flo 1000 See 10-24	
Red Brown		MIR 4008®	MIR 1000 FLO 1000	10-15	
Red		MIR 4025®	MIR 1005 FLO 1007	10-15	
Cerulean		MIR 4026	MIR 1017 FLO 1007	10-17	
Appl'd Cerulean		MIR 4026	MIR 1007 FLO 1007	10-15 Clear coat mix - See Flo 1000 See 10-24	

* Indicates a close but not exact match. All MOORE games are a semigloss finish.
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NMRA Conformance Warrants: Why they matter



1. The first NMRA convention in
Milwaukee, Labor Day Weekend 1935.

Model Railroad Hobbyist | November 2025



ANDY ZIMMERMAN DISCUSSES THE HISTORY AND
IMPORTANCE OF NMRA CERTIFICATION...

THE EARLY PROBLEM: INTEROPERABILITY

IN THE EARLY 1930s, model railroading was a growing hobby – but frustrating. When clubs from different cities would visit each other's layouts – Columbus, Ohio and Pittsburgh, Pennsylvania, for example – they would frequently discover their rolling stock would not run reliably, if at all, outside their home layouts.

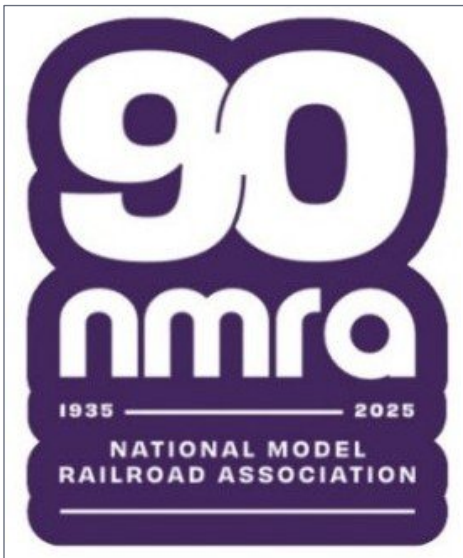
Track systems, couplers, and even power supplies varied wildly. Some ran on 6 volts, others on 115. Some used DC, others AC. Some favored two-rail, others three-rail. Equipment that worked perfectly at one club often failed at another.

Recognizing this challenge, clubs from Columbus, Pittsburgh, New York, Detroit, and Milwaukee gathered in Columbus in 1934 to seek common ground. Their vision was to create a national body to establish uniform standards so modelers could share equipment and enjoy layouts together without barriers.

THE BIRTH OF THE NMRA

That vision became reality a year later. Over Labor Day weekend in 1935, the Model Railroad Club of Milwaukee hosted 71 hobbyists at the first National Convention [1]. They met, debated, and voted to form the National Model Railroad Association (NMRA).

Officers were elected, and their very first priority was clear : set standards for equipment so all modelers could run together.



2. NMRA celebrates its 90th anniversary this year.



This decision, made 90 years ago, fundamentally shaped the future of the hobby. Without standards, model railroading might have remained fragmented and local. With them, it became a shared, national, and eventually international pastime.

ESTABLISHING STANDARDS (1935–1950s)

The newly-formed Standards Committee, led by Harry Bondurant, NMRA Secretary 1935–1936, began its work immediately. At the 1936 convention in Chicago, the first O scale standards were presented, followed by tentative HO standards.

Through the 1940s, the scope widened:

- Wheel profiles and truck bolster heights
- Coupler practices
- Electrical systems (with 12 volts DC eventually recommended for HO, OO, and O scales)

By 1945, the first *Standards Handbook* was published, giving both manufacturers and hobbyists a common reference for reliable, interoperable equipment.

FROM STANDARDS TO CONFORMANCE

Publishing standards wasn't enough. How could a hobbyist know if a manufacturer's product truly met them? The solution came in 1956 at the St. Paul convention, where the NMRA introduced the Conformance Warrant Seal [3].

This allowed manufacturers to voluntarily submit products for testing. Those that passed received the right to display the Seal – a visible guarantee of compatibility and quality. For hobbyists, it meant confidence that products would work on any NMRA-compliant layout. For manufacturers, it meant credibility and a competitive edge.

THE CONFORMANCE WARRANT IN THE MODERN ERA

The purpose of the Seal has remained consistent since the 1950s: balance innovation with interoperability. The NMRA encourages manufacturers to push boundaries, but never at the expense of compatibility.

This principle became especially vital in the 1990s with the advent of **Digital Command Control (DCC)**. The NMRA developed DCC standards (S-9.1, S-9.2, and associated RPs) so decoders, command stations, and throttles from different brands would all work together. Once again, the Conformance Warrant was key – it ensured electronic systems, just like wheels and couplers decades earlier, could integrate seamlessly across layouts.

WHAT IS AN NMRA CONFORMANCE WARRANT?

When a product is submitted for evaluation, the NMRA's **Standards & Conformance Department** inspects and tests it against established NMRA Standards and RPs. If the product meets these requirements, an NMRA Conformance Warrant is issued, indicating it complies with NMRA standards [4].

The official wording of the Conformance Warrant states:



3. The Conformance Warrant Seal.





4. The NMRA conformance warrant approval label.

Dear [Manufacturer],

On behalf of the National Model Railroad Association, I am pleased to inform you that the following products have been inspected and found to be in conformance with the Standards of the National Model Railroad Association:

[Your inspected and tested Product listed here]

By meeting the NMRA's rigorous requirements, Conformance Warrant 2025-0009 has been issued for this product and will be added to the NMRA Conformance Warrant List.

You are hereby granted permission and encouraged to proudly display the NMRA Conformance Seal on your products and advertising. You may use this warrant number and NMRA Warrant Symbol for any other car with the same frame, wheels, and couplers.

We appreciate your support and participation in the NMRA Conformance and Inspection Program. Sincerely [the Standards and Conformance Manager].

For manufacturers, this is a statement of quality. For hobbyists, it's a guarantee that the product will run as expected with the rest of their layout – reducing frustration and increasing enjoyment. Approved products are also showcased in *NMRA Magazine*, offering visibility to over 15,000 members.

WHAT HAPPENS IF A PRODUCT FAILS?

Not every product passes on the first try. When something fails testing, the NMRA provides a full report explaining the issues and how to correct them. Manufacturers are invited to fix and resubmit their products for free re-testing. Many do because the Seal is widely recognized as a mark of trust.

If problems aren't corrected, the product is officially listed as "tested and non-conforming." For transparency, results are published in the NMRA magazine (and perhaps other hobby magazines) so modelers know what didn't meet standards and how they might adjust it themselves in some cases. This ensures hobbyists make informed choices before spending money, and keeps the community's trust intact.

WHY IT MATTERS

The NMRA exists to protect compatibility, not to slow innovation. Standards and Conformance keep our hobby from splintering into isolated pockets of equipment that can't work together. That has been the NMRA's mission for 90 years.

Manufacturers are the drivers of creativity and progress, but the NMRA ensures their innovations remain reliable and interoperable.



5. The NMRA warrant rejection label.



NMRA Conformance Warrants 2025



6. Here are the conforming products tested so far in 2025.

The Conformance Warrant provides a transparent, fair, and cooperative system that benefits everyone:

- Manufacturers gain credibility and market trust.
- Hobbyists gain confidence that their purchases will work.
- The hobby itself gains stability and long-term health.

When you see the NMRA Conformance Warrant Seal, you're not just looking at a logo – you're looking at a promise: peace of mind that your trains will run reliably, alongside others, for years to come.

FINAL THOUGHTS

Today, the NMRA continues to test and issue Conformance Warrants – more than 42 already this year alone. Each represents a product that strengthens the foundation of our shared hobby. As we approach the NMRA's centennial, the Conformance Warrant continues to stand for reliability, cooperation, and the shared joy that unites model railroaders everywhere.

To check whether a product has a current Conformance Warrant, visit www.nmra.org/nmra-conformance-warrants. To learn more about submitting products, visit **NMRA.org** or contact the Standards & Conformance Department Manager at Tech-Chair@NMRA.org.

The Seal has been a symbol of trust since 1956 – and it remains just as important today. When money well spent is an issue, a product with a Conformance Warrant brings you peace of mind. ☑

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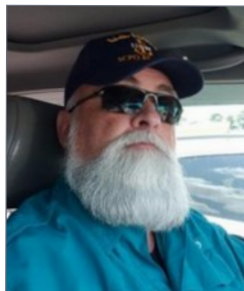


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ANDY ZIMMERMAN



Andy is a retired U.S. Navy Senior Chief with 23 years of service and currently serves as an Associate Director of Information Technology at Florida State University. Within the National Model Railroad Association (NMRA), he is the Manager of the Standards and Conformance Department, ensuring the

continued quality and interoperability of model railroading products. Andy also serves as President of N-Rail, the national organization supporting N-Scale model railroading.

With a strong background in advanced electronics and computer systems, Andy brings both technical expertise and passion to his roles. A lifelong model railroader since age nine, his journey began – like many others – with Lionel trains. Frequent moves and limited space led him to adopt N-Scale and T-Trak, which remain his primary modeling focus today.

He is the President of the Big Bend Model Railroad Association (bbmra.club) in Tallahassee, Florida; an active member of the North Raleigh Model Railroad Club (trainweb.org/nrmrc); and the President of the NMRA Sunshine Region (SSR) (nmrasunshineregion.org), where he promotes Fellowship, community, mentorship, and modular modeling through N-TRAK and T-TRAK initiatives.

Feel free to reach out with questions or comments at Tech-Chair@NMRA.org.

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SAVVY MODELER *Online*



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Model Railroad Hobbyist | November 2025



Apply texture to backdrop & add depth to shallow scene

YouTuber **Burrawon Branch model railway** demonstrates a clever technique for adding depth to a shallow scene by putting texture on the backdrop itself.

He steps through the process, including showing some things *not* to do. We always appreciate the honest videos that don't hide the boo-boos so we can know in advance how to not make the same mistake. That said, these techniques are rarely shown on YouTube. Just look at the thumbnail, this technique totally rocks! ☑

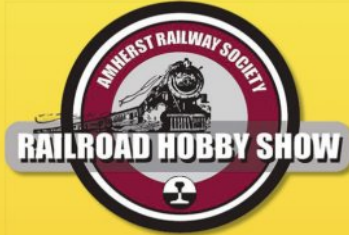


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NOVEMBER NEWS

column

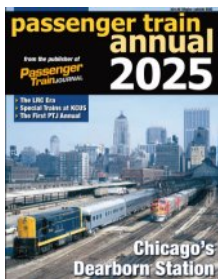


Model Railroad Hobbyist | November 2025

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



NEW PRODUCTS FOR ALL SCALES



White River Productions has released its *HOOn3 Annual for 2025*. Edited by Chris Lane, the 116-page, softbound book is dedicated to HO scale narrow gauge model railroading including layout tours, construction and kitbashing

articles, as well as articles on prototype narrow gauge.

White River's 2025 *Passenger Train Annual* features passenger train history and contemporary coverage from the United States and Canada has also just been released. Edited by Kevin J. Holland, the 116-page perfect-bound softcover publication is produced by the publisher of *Passenger Train Journal*.

Info: shop.whiteriverproductions.com/products

THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS

O SCALE PRODUCT NEWS



Atlas has announced a new Gunderson 60' Plate F Hy-Cube boxcar featuring an ABS body, etched metal safety platforms, die-cast metal ladders and stirrups, and a die-cast underframe. Minimum radius for this model is O-54 (3-rail) and 36" (2-rail). The model is equipped with 100-ton trucks with rotating bearing caps,



limited edition collectors series car will be available decorated for Wheeling & Lake Erie.

Road names in the first release are BNSF, Canadian Pacific, CSX, NOKL, TTX, TTX (On Track for a Cure), and Union Pacific. A

Atlas's new Atlas O Premier Catalog, Fall 2025 edition featuring O scale Master, Premier and Trainman locomotives and rolling stock can be downloaded from download.atlasrr.com/1025MCPDF/Fall2025OMSRPOnly1.pdf

Info: shop.atlasrr.com

S SCALE PRODUCT NEWS



ScaleTrains S-Helper Service has announced an S scale GSC 53'-6" TOFC flatcar with a 35' trailer. The car will feature a detailed plastic deck, tire rub rails, moveable bridge plates, TOFC hitch, and metal handrails and grab irons.



Road names and trailer schemes for the first run of the flat cars are Santa Fe, Baltimore & Ohio/RISS, Canadian Pacific, Great

Northern/Associated Transport, Milwaukee Road, Trailer Train/Preston 151.



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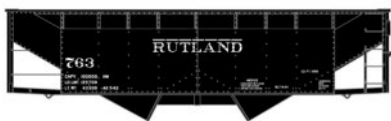


The 35' dry van trailers sold with the GSC TOFC flatcar are also available separately, with different road numbers from the trailers

sold with the flatcars. Road names available are Santa Fe, RISS, Canadian Pacific, Associated Transport, Milwaukee Road, and Preston 151. Pre-orders for both products are due Monday, November 24, 2025 with delivery expected next summer.

Info: scaletrains.com

HO SCALE PRODUCT NEWS



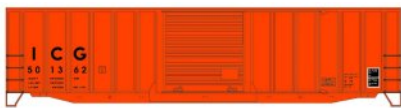
HO scale freight car kits coming soon from **Accurail** include this 50-ton twin bay coal car decorated for Rutland Railway. The model is

based on a prototype built with offset sides in 1934.



New kits from Accurail include three versions of a 50' welded steel boxcar with exterior posts decorated for

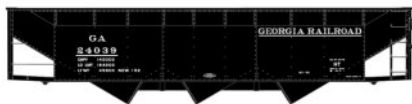
Rock Island, Illinois Gulf, and Chicago & North Western.



The trio of fifty-footers listed here are available individually and in a special three pack.



Accurail has also released affordable kits for a 55-ton USRA twin bay coal hopper decorated for the Georgia, Florida & Alabama Railway.



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

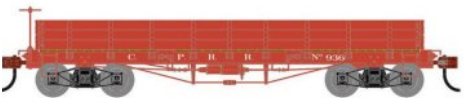
Info: accurailinc.com



1920s era. The models feature metal 33" wheels with face and backside detailing, simulate wood grain textures, metal grab irons and truss rods, K-style air brakes and piping, coupler cut levers, 40-ton Andrews trucks, and McHenry scale knuckle couplers.



Chicago Milwaukee St. Paul Railway (MILW), Rio Grande, and Union Pacific.



Additionally in the 1870-1920 era, Athearn is taking pre-orders for 36' low-side drop bottom gondolas. In addition to the same features as the above flat cars, these models will feature a low-sided gondola extension, floor with molded gate detail, and a ratcheting gate closure detail. Road names for this model are the same as for the 36' flat cars.

Pre-orders for these Athearn products are due on November 28, 2025.

Info: athearn.com



Bollinger Edgerly Scale Trains has announced the availability of a limited-edition kit for a Boston & Maine 36' wood reefer car. The HO scale model is based on cars built by the

Laconia Car Shops in 1907. The kits were produced for BEST by Funaro and Camerlengo. The kits consist of a single piece cast body, frame and brake components, Tichy Train Group



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pre-formed grab irons, silk-screened decals, and Fox truck frames. The modeler needs to supply wheels and couplers.

Info: besttrains.com/car_kits.html



R. Bale

ALCO C424 AND C425 DIESEL ELECTRIC LOCOMOTIVES

The American Locomotive Works introduced the 2,400hp C424 road switcher as part of its Century series of locomotives in 1963. It was marketed as a fresh replacement for Alco's earlier RS-27. A year later Alco added the 2,500hp C425 while continuing to catalogue the C424 as a lower priced alternative. The significant difference between the two diesel electric locomotives was the horsepower rating and a slight modification in the configuration of the cab windows of the C425. Both Alco and the Montreal Locomotive Works built C424 and C425 units. Production of both versions ended in the mid-1960s.



Bowser is booking reservations for Alco C424 and C425 locomotives with delivery planned for January 2027. The HO scale locomotives will include lighting features and some

road-specific details. Analog-DC versions will have a 21-pin plug for upgrading with a DCC decoder. Models with factory installed sound will have a LokSound V5 decoder.

C424 road names will include CP Rail (Multimark, with rebuilt wire intake), CN (Sergeant stripes, with rebuilt wire intake), Delaware & Hudson, Green Bay & Western (Late red scheme), Reading, and Toledo, Peoria & Western (1980s scheme).



Road names available for C425 models include Delaware Lackawanna (EL heritage scheme with ditch lights), Burlington Northern, and Chicago & North Western.



A Norfolk & Western C425 with a high front hood will also be available in this production run. All reservations are due December 1, 2025.

Info: bowser-trains.com



2026, BLI is producing six different versions of the AT&SF/BNSF "William Barstow Strong" theater car.

Broadway Limited has announced a new business car in HO scale. With an order deadline of March 5, 2026 and an estimated delivery of Fall



Featuring road and era specific details, the theater car models will include changes in signage, antennas, paint, underbody details, and even

the size of the container for the retractable theater window cover. The versions available in the first product run are 1975-1982 (Santa Fe), 1982-1990, 1990-1995, 1995-2008 (BNSF), 2008-2013, 2013-2018, and 2018-current. An unlettered version will also be available for modelers wishing to add this to their own railroad.



The models will feature era specific interior details, prototypically accurate trucks for both ATSF and BNSF versions, individually



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controlled lighting functions – interior, track inspection, red/green markers, and details such as protective panel door covers, window arrangements, and roof antennas and GPS domes. The minimum operating radius is 18”.

Info: broadway-limited.com

English's Model Railroad, division of Bowser Mfg., has HO scale versions of coal loads consisting of a 3D-printed base covered with real Pennsylvania ground anthracite coal. Loads sized to fit specific HO scale models are available now for all Bowser coal cars, InterMountain 13-panel Coal Porter, Aluminator, Aero-Flow, Aero-Flow II, Bathtub gondolas, and Walthers Mainline 40' 70-ton hopper cars.

Info: www.bowser-trains.com



Mary's, Golden Triangle, Wisconsin Central, Chicago & North Western, St. Lawrence Railroad, CP Rail, and two Railbox schemes.



Camas Prairie Railroad, Colorado Midland, New York Ontario & Western, and Tonopah & Tidewater.



Intermountain Railway is booking advance reservations for an HO scale 5277 cu. ft. steel boxcar. The model will be available decorated for St.

The 5277 will also be available as part of InterMountain's Famous Image series. Historical road names in this release will be

InterMountain is also booking reservations for HO scale Maxi IV well cars with container bundles decorated for different owners. This release will offer Trailer Train well cars with EMP containers, BNSF well cars with

HUB containers, and Trailer Train well cars (*On Track For a Cure*) with JB Hunt containers. Reservations are also being booked for the EMP, HUB and JB Hunt containers as separate purchase without the well cars.

Info: www.intermountain-railway.com



Kadee's Christmas car for 2025 is a 50' PS-1 boxcar decorated for Winnie-the-Pooh and Friends. The ready-to-run HO

scale model comes with Kadee couplers and Kadee trucks with metal wheels.

Info: www.kadee.com



Rapido Trains is preparing a series of MOW flat cars based on the

Pennsylvania Railroad's class F30A prototype. In its later years, the sturdy one-piece cast frame of the F30A made it a natural for extended service as a maintenance of way car.



In the 1980s some railroads developed camp cars for track workers by mounting pre-fabricated sleepers, diners, kitchens and office vans on MOW flatcars. Road names will be Conrail, Norfolk Southern, Canadian National, and CP Rail.



Specialized flatcars are used to transport wheelsets from one

maintenance shop to another. Road names will be Santa Fe, Canadian National, CP Rail, Conrail, CSX, Penn Central, Southern Pacific, and Union Pacific.



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The use of continuous welded rail required multiple flatcars with special deck-mounted

fixtures to transport and lay down lengthy sections of rail. Road names on this release will include Santa Fe, BNSF, Conrail, CSX, Norfolk Southern, Norfolk & Western, Penn Central, Southern Pacific, and Union Pacific.



Several ex-TTX F30 flat cars were purchased by BN and converted to carry concrete ties.

Rapido's HO scale model is based on BN/BNSF conversions and features a correct deck, tie rack and decorated concrete crosstie load. Additional road names include FTSX and Union Pacific. Each combination of F30 flatcar and MOW load will be available unlettered.



Rapido has also announced that they will be producing the

HO scale Budd Coach in both Canadian and US versions and paint schemes. The models will feature a stainless steel finish with US schemes being equipped with a steam heat underbody and Canadian HEP2 cars featuring a new underbody and three different side window arrangements. Canadian HEP1 cars will include new end tooling with HEP receptacles and cables.



HEP1 and HEP2 cars will feature working marker lights and all

cars will have revised track-powered interior lighting compatible with both DC and DCC. Rapido's usual Jason-Level obsessive underbody detail will include separate air, steam, and electrical lines, D22 or Knorr 26-C brake equipment and piping, and 41-NDO-11 trucks with end frames. The interiors

will include multiple colors including painted glass partitions, antimacassars, and floor to simulate carpet.



11 US schemes including Amtrak, Conrail, New York

Central, Long Island RR, Metro-North, Norfolk Southern, Pennsylvania, Rock Island, Santa Fe, Southern, and Seaboard Coast Line will be available.



For Canada the standard Budd Coach will be

available in Canadian Pacific, CP Rail, and VIA Rail (Early), with HEP1 coaches available in two VIA Rail schemes and HEP2 VIA cars available in coach, club, business, and economy versions with multiple paint schemes through the years. A painted but unlettered version of the steam Budd Coach, HEP1, and HEP 2 and ex-SP HEP2 coach will also be available. A minimum radius of 22" is suggested. Preorders are due February 16th, 2026.



Rapido has also added two new road names to their upcoming helium

car release – US Navy (USNX) and NASA (NLAX). See the February 2025 MRH News for more information on this car. Preorders are due on December 15, 2025.



A new run of Rapido's model of the VIA Canada rebuilt F40PH-2D will be coming soon with three road numbers in the Renaissance Scheme and three in the "love the way" wrap. All

road numbers will be available with a DCC/sound decoder and in a DC/silent version. As with the Budd coaches, pre-orders are due February 16, 2026.



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The HO scale Southern Pacific $\frac{3}{4}$ dome lounge car is

already scheduled for a second run, with more paint schemes added. The model will be available in two fully-detailed interior configurations and underbody arrangements, with flicker free track powered interior lighting – including the dome roof. Free rolling trucks and metal magnetic knuckle couplers are standard and the suggested minimum radius is 22".



Paint schemes in the second run include Southern Pacific –

Daylight, Southern Pacific – Overland, Southern Pacific – General Service, Southern Pacific – SP Leased, Canadian Pacific – Selkirk, two Amtrak schemes, and Panama Canal Railway – Rio Chagres. The deadline on pre-orders for the $\frac{3}{4}$ dome cars is December 15, 2025.

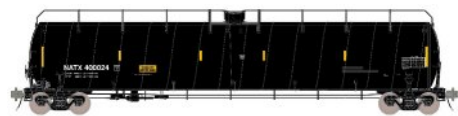


A new run of Hawker Siddeley Cabooses/Vans is coming with new road numbers and paint

schemes. Last seen in the April 2024 MRH News, as well as new road numbers for the CN scheme this release adds two new painted and unlettered versions in Red and Yellow, one ex-DEVCO road number each for Canadian National and Ottawa Central, and special faded Canadian National scheme using an ultraviolet printer. Order deadline in the email and video is December 15th 2025.

Info: www.rapidotrains.com

All artwork and graphics are courtesy of Rapido Trains

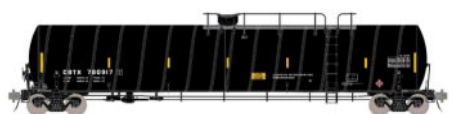


Scale Trains has announced that they will be making a new Rivet Counter model, the HO scale American Railcar

Industries (ARI) 33K gallon Spiral Jacketed Tank Car. A very modern pressurized tank car, they commonly carry Liquified Petroleum Gas (LPG) such as propane and butane. They have been noted carrying anhydrous ammonia. The earliest prototypes these models replicate were first manufactured in 2002 and are designated DOT112J340W.



The cars are notable for their outer jacket consisting mostly of a single piece of steel that is curved into a spiral shape and welded to form a tube. The models feature Apex or slotted style walkways, die-cast metal short center sill bolsters, road number specific details such as brake system locations, factory applied ladders, metal grab irons, hazmat placards, coupler cut levers, and trainline hoses.



Models will be available decorated for American Railcar Leasing – SHPX, SHQX, CIT Group – CBTX, General

American Transportation – GATX, GE Rail Services – NATX, and Transportation Equipment Inc. – TEIX. The cars are equipped with ASF 100-ton trucks with raised foundry data, rotating Timken bearing caps, separate brake beams, and 36" machined metal .110" wheels. Die-cast body mounted metal semi-scale double-shelf Type E couplers with semi-scale coupler boxes are included. Pre-orders for these models have closed, but ScaleTrains says they always order some extras.



Following the release of GE AC44C6M models earlier this year, ScaleTrains is announcing the Rivet Counter Wabtec AC44C6M locomotives – rebuilds performed by Wabtec instead of GE. The Wabtec AC44C6M models have road number specific details such as a new GE safety cab with four side windows, nose door with window and padlock hasp, high mounted headlight, PTC antenna farm with Sinclair antennas, Nathan AirChime K5LAR24 or P3 horn with



or without shower caps, electronic handbrake variations, brakewheel variations, and air dryer variations.



The model will be available in four Norfolk Southern paint schemes – Horsehead, Horsehead/Sinewave, Thank You To Our Railroaders/NS #4822, and the Tennessee Alabama & Georgia Heritage unit/NS #4851. LED lighting features include ground lights on both sides of the locomotive, front, rear, and side walkway lights, front and rear alternating ditch lights, separately lit cab number boards, and directional headlights.



Newly announced is the Rivet Counter HO scale BNSF GE AC44C4M, a rebuilt DASH 9 locomotive that was converted from six DC motor C-C traction to four AC motor A1A trucks. Additionally, updated dynamic brakes, inverters, and inertial cabinets were installed. 20 locomotives were rebuilt from Santa Fe C44-9W locomotives equipped with gullwing cabs, with 19 of the locomotives still operating across the BNSF. The models will have road number specific details such as brake wheel variations, horn type and placement, plow shape variations, and PTC antenna equipment and location differences. Six road numbers will be available with DCC/Sound and a DC/DCC ready versions.



Also just announced is the Rivet Counter Gunderson 3250 covered hopper in HO scale. These modern two-bay covered hoppers were built in Mexico for hauling frac sand, cement, roofing granules, fly ash, and clay. The models will include railroad, road number, and era specific features like 3 or 4 30" roof hatches with three different hatch variations, four outlet gate types from ATP and Miner, 10 or 9 post running boards, Barber or and ASF 110-ton trucks.



Road names in this first run are CEMEX (three schemes), CSX, Dowell Schlumberger Industrial, Greenbrier

Leasing, Greenbrier Management Services, Halliburton, Keg River Chemical, and Union Pacific. Preorders for the Wabtec AC44C6M, the GE AC44C4M, and the Gunderson 3250 covered hopper are due by Monday, November 24th, 2025.

Info: www.scaletrains.com



State Tool & Die has released two styles of DODX specialized cabooses, aka Rail Escort Vehicles (REV). These armored railcars are used by the U.S. Navy and the

Department of Energy to protect shipments of sensitive nuclear materials, including spent nuclear fuel. The REV is designed to provide enhanced security, communication, and surveillance capabilities during transport. The cars are built to stringent specifications, including heavy armor, advanced surveillance equipment, and accommodations for armed security personnel.



The HO scale 3D-printed kits include appropriate trucks with metal wheels, Kadee couplers, and decals.

Info: statetoolanddie.com/dodx

Tangent Scale Models hTangent Scale Models announcement for November 2025 includes 14 new Pullman-Standard PS-2CD 4750 covered hoppers, including three previously not offered undecorated RTR options.



The first is the ATSF "GA-180 Delivery," a 1000-car order in 1973 that featured a distinctive body style of combination

closed-hole/open-hole side posts. Gypsum walkways, Universal



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power brake equipment, and Keystone Portloc 2 outlet gates are featured on this model.



UP "Delivery Gray CH-100-28" is another 1000-car order, this time from 1974. It features the same combination closed-hole/

open-hole side posts, UP specific corner steps, Landreth style roof hatches, and body mounted brake hardware.



UP "Delivery CH-100-28" With Conspicuity 2005+ includes conspicuity striping, smooth replacement roof hatches,

different AEI tag parts, and modern bolt-on outlet gates.



PTLX "Roland and Nevada 1974" is part of a 25 car order that features a body with open-hole posts, center-tube train

airline, and truck mounted brake hardware.



SOO "ex-Roland and Nevada IA" 1985+ same as above, with early-style Miner outlet gates.



MWCX "Ex-Roland and Nevada IA" – a different leasing company but still based on the R&N car.



PTLX "Kellogg Grain 1974" Like the R&N cars, the Pullman body has open hole posts, center-tube

train airline, and truck mounted brake hardware.



they also acquired this former Kellogg Grain car. The original paint is weathered to different colors, and SOO has patched their information over the original.

SOO “ex-Kellogg Grain”
1989+ SOO Line
expanded their grain fleet
in the 1980s, and like the
ex-R&N car previously,



one. It features replacement hatch covers.

INTX “ex-Kellogg Grain”
2015+ A couple of
decades after SOO Line
acquired the previous car,
INTX owns this similar



PTLX “The Andersons
1974” Similar to the
Kellogg Grain based cars,
this leaser is equipped
with Morton walkway
and crossover platforms.



PTLX “The Andersons”
1999+ is a later version of
the above car, with
replacement roof hatches
and the logo plates missing.
AEI tags have been added.



Undecorated RTR versions of
the ATSF GA-180, UP CH-
100-28 Early Version, and
PTLX 1974, are also
available.

Info: www.tangentscalemodels.com

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R. Bale

EMD SD50 DIESEL ELECTRIC LOCOMOTIVE

EMD launched the six-axle SD50 in late 1979 in response to increasingly tough competition from GE, whose Dash 7 series locomotives were proving to be quite successful. EMD used its V16 645 prime mover uprated to 3,500hp at 950rpm and uprated it again in 1984 to 3,600hp. This proved to be a step too far, resulting in a locomotive plagued with engine and electrical system problems which harmed EMD's sales and reputation. Compared with their predecessors, the SD50 had a longer frame and a substantially longer hood. In addition, the resistors for the dynamic brake grid were moved to a cooler location in front of the engine compartment air intakes.



Different Roadnumber Shown

An upgraded HO scale EMD SD50 locomotive is coming from **Walthers** in the fall of 2026. The

Mainline series model will have the same drive system as Walthers Proto series models including a five-pole skew-wound motor, dual-machined brass flywheels, a 14:1 gear ratio, and all-wheel drive and electrical pickup.



Different Roadnumber Shown

The general assembly will be a heavy die-cast metal chassis with a plastic Phase II body shell

with molded drill starter points for grab irons. Walthers offers appropriate grab irons and other details in its EMD SD50-60 Diesel Detail Kit (#910-256) which is available as a separate purchase. The trucks will have detailed HT-C side frames.



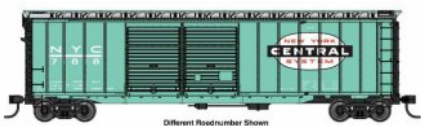
Additional features will include constant and directional LED headlights, factory-

installed ESU Sound and DCC decoder with a 28mm round speaker. Road names available on this release will be Conrail, Seaboard System, CSX, Reading & Northern, Lake States Railway, Utah Railway, and Missouri Pacific.



Walthers has set a spring 2026 release date for 50' Improved boxcars with a pair of 8' Youngstown doors on each side.

The cars earned the improved nickname for several upgrades the prototype cars received including Improved Dreadnaught 4-3-1 ends, AAR tab side sills, and Apex metal running boards. The HO scale models will come with AAR Bettendorf -type plain -bearing trucks with 33" metal wheels, and Walthers Proto MAX metal knuckle couplers.



Road names will include Denver & Rio Grande Western, New York Central, Great Northern, Pennsylvania Railroad,

Louisville & Nashville, and Union Pacific. An undecorated model will also be available.

Info: www.walthers.com

N SCALE PRODUCT NEWS



Bluford Shops is booking reservations for another production run of its popular pre-dented mill gondolas. Delivery of the N scale model is expected in early autumn, 2026.



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Each road name will be available lightly dented, medium dented and heavily dented. The concave dent on the inside faces of the 52'-6" mill gondola matches the convex outside faces.



Road names will be Ann Arbor, AOK-Arkansas-Oklahoma, Bessemer &

Lake Erie, Buffalo & Pittsburgh, Birmingham Southern, Chesapeake & Ohio, Chicago & Eastern Illinois, Conrail, Elgin, Joliet & Eastern, Penn Central, Pittsburgh & Lake Erie, and Pittsburgh & West Virginia. The models come appropriate trucks with metal wheels and magnetically operating knuckle couplers.

Info: bluford-shops.com/index.html



Broadway Limited has scheduled a rerun of its popular N scale EMD SD70A diesel electric locomotive. Road names will be CN (Blue and white), EMD Demo (Yellow, Progress

Rail). Florida East Coast, (Red, white, and blue), Norfolk Southern (D&H heritage), and New York, Susquehanna & Western.



Detail variations based on prototype road name practice will include low and high headlight locations, isolated and non-isolated cab, long and short sunshades, two brake

wheel variations, three cab roof variations, and two blower vent layouts.



Models in this rerun will be available with Paragon4 Sound DC/DCC or with Stealth DCC-Ready setup. The deadline for preorders in January 22, 2026 with availability expected in the fall of 2026.

Info: www.broadway-limited.com

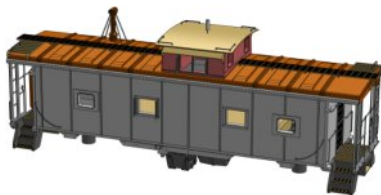


Coming from **Eastern Seaboard Models** this month is an N scale kit for a class G32c steel gondola with corrugated sides.



In addition to a one-piece injection molded plastic body, the kit will include numerous etched metal details parts, Atlas ASF A-3 trucks with metal wheelsets, and Micro-Trains #1015 couplers. Decals with multiple car numbers and schemes will be available for

Pennsylvania Railroad, Penn Central, and Conrail.



ESM is targeting an early January release date for an N scale kit for an Atlantic Coast Line class M5 caboose. The all-new model will be based on the riveted version of the steel prototype, with the

original sealed-window cupola and the subsequent sliding-window cupola. Atlas ASF trucks with metal wheels and M-T #2001 couplers will be included.

Info: www.esmc.com



InterMountain Railway is booking advance reservations for an N scale 5277 cu. ft. steel boxcar. The model will be

available decorated for St. Mary's, Golden Triangle, Wisconsin Central, Chicago & North Western, St. Lawrence Railroad, CP Rail, and two Railbox schemes.

The 5217 will also be available as part of InterMountain's Famous Image series. Historical road names in this release will



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be Camas Prairie Railroad, Colorado Midland, New York Ontario & Western, and Tonopah & Tidewater.

Info: www.intermountain-railway.com



R. Bale

EMD SD60M AND SD70M DIESEL LOCOMOTIVES

In 1984 EMD introduced the 3,800hp turbocharged SD60 road switcher. It became a winning design for EMD with 537 being sold. EMD began offering the SD60 with a wide-nose North American safety cab with a three-piece high-visibility windshield in 1989. Units with the safety cab and “Tri-Clops” windshield were identified as SD60M. Continuing on the successful SD60-series, EMD launched the next step in locomotive evolution with the 4,000hp SD70-series high-horsepower road switcher in 1992. While the shape and location of a few appurtenances such as traction motor blower housings, radiator intake grilles and walkways were juggled around, the general appearance of the SD60 and SD70 were similar. The major difference between the two locomotives was internal, with the SD70 getting a new 4,000hp prime mover, a new alternator, and new traction motors – all controlled by microprocessors. Another significant change was upgrading the standard HT-C high-traction trucks to the revolutionary HTC-R high-traction self-steering radial truck.



New N scale models coming from **Kato** next spring include an SD70M in a choice of five

paint schemes. Available operating options on this release will be DC analog, Digital DCC, and DCC with sound.

Decorating schemes will be Union Pacific (We Are One), UP (Abraham Lincoln), UP (Excursion scheme), Norfolk Southern,



and CSX. The model will have directional headlight, illuminated preprinted number boards, all-wheel electrical pick-up, five-pole motor with dual brass flywheels, magnetic knuckle couplers, and HTCR Phase II self-steering trucks with blackened metal wheels.

Info: www.katousa.com



Micro-Trains Line has started taking pre-orders for a three-pack of N scale 56' BNSF general service

tank cars. The DOT111 tank cars were originally built for ATSF for fuel transport. The model is expected to be released in April 2026.



Also announced for pre-orders is a CSX 31' bay window caboose. Built by Fruit Growers Express as B&O Class C-27 for Chessie System, it is

painted in the CSX YN3 blue and gold scheme. The model is expected to be released in November 2025.



A new body style is this 52'-6" Railgon gondola. Constructed to Trailer Train's

specifications, the 2,494 cu. ft. capacity car was designed to carry steel ingots, scrap steel, and coiled steel. Almost 4,000 cars were built by Greenville, Thrall, Pullman-Standard, and other manufacturers.

Info: Check with a dealer

Railsmith is taking deposits for an upcoming run of Great Northern F3A #366A and F3B #366B locomotives in Big Sky



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Blue. Produced by Broadway Limited exclusively for Lowell Smith/Railsmith, the locomotives will be

available both with Paragon4 DCC and sound and in the DCC ready Stealth series.

Info: lowellsmith.net

Rapido is producing a new run of the N scale Comet Cars, which continue in commuter service across northeast United States and southeast Canada. First known as Dieseliners, the original cars were built for Erie-Lackawanna/Conrail/New Jersey Transit in the early 1970s by Pullman-Standard. Starting in 1982 the Comet design was licensed to Bombardier, which built them as the slightly modified Comet II. Since then Comet IIB, Comet III, and Comet IV cars have built, with the Comet V version arriving in 2002 for NJ Transit. Earlier versions of the cars have gone through rebuilds to bring them up to newer feature levels.



Paint schemes in this run of Comet cars are AMT

(Montreal), CDOT (Connecticut), CTrail (Connecticut), MARC (Maryland), MBTA (Boston), MBTA – Massachusetts 250 wrap, two Metro-North (NYC) schemes, and NJ Transit. The lighting is fully controllable and with MoPower capacitor stay alive and all-wheel pickup. A minimum radius of 14" is suggested.

Info: www.rapidotrains.com

All artwork and graphics are courtesy of Rapido Trains



A new run of Rivet Count N scale GE Dash 9s is coming from **ScaleTrains**. New for this run is CN

Dash-9CWL locomotives with 4-window cabs and the North

America Map paint scheme. Also new for this run are Genesee & Wyoming units.



Roadnames in this release include Southern Pacific, KCS (ex-BNSF), Norfolk Southern (Operation

Lifesaver & Thoroughbred), CN, and BNSF (Heritage II & III). HypoTypical units, due to minor differences between the prototype and the model, include Genesee & Wyoming and three different Alabama & Gulf Coast paint schemes, including the Honoring Veterans one.



These N scale units are available factory equipped with ESU LokSound 5 Nano DCC and a cube-type

speaker as well as DC/DCC ready with an E24 connector. Pre-orders are closed, but ScaleTrains says they always order a few extra.



ScaleTrains has also announced they are taking pre-orders for the latest run of the Rivet

Counter N scale GE ET44 locomotives. The CPKC paint scheme will be offered for the first time on this model.



Standard road names and paint schemes for the ET44 are BNSF/Heritage III, CPKC/ex-Baffinland,

CSX/YN3 boxcar logo, Kansas City Southern/Belle, Norfolk Southern, and Union Pacific.



HypoTypical road names and paint schemes are Burlington Northern/



white face, Chessie System/C&O, Chicago & NorthWestern/Operation Lifesaver, Conrail/Quality, Rio Grande/Billboard, and Santa Fe/warbonnet.



A new model from ScaleTrains in N scale is the Rivet Counter BSC

F68CH and F68DH flatcars. Built for Trailer Train by Bethlehem Steel Co., the F68 100-ton flatcars were introduced in 1969 and include factory options such as bulkheads, finger racks, and wood or steel decks.



The reporting mark for the F68CH is TTMX

and the F68DH is TTJX. The F68CH includes a factory-applied laser-cut wood deck, metal grab irons, a complete underbody brake system with over 12 separate parts, body-mounted Micro-Trains compatible semi-scale Type E knuckle couplers, ASF Ride Control Trucks and 36" machined metal wheels that will operate on Code 55, 70, and 80 rail. The F68DH includes the same features plus a heavy duty deck with two tie down channels running lengthwise in the center of the deck and flush mounted tie down channels mounted to the outer sills.



Also just announced is the Rivet Counter Gunderson 3250 covered hopper in N scale. These modern two-bay covered hoppers were built in Mexico for hauling frac sand, cement,

roofing granules, fly ash, and clay. The models will include three roof hatches, two outlet gate types from ATP and Miner, 10 or 9 post running boards, and detail changes seen through the production years.



Road names in this first run are CEMEX (two schemes), CSX, Dowell Schlumberger Industrial, Greenbrier Management Services, Halliburton, Keg River Chemical, and Union Pacific.

Pre-orders for the GE ET44, F68 flatcar, and Gunderson 3250 covered hopper in N scale are due by Monday, November 24th, 2025 with delivery expected next summer.

Info: www.scaletrains.com

STRUCTURES & SCENIC SUPPLIES



New from **Berkshire Valley Models** are milk wagon kits in O and HO scales. Including both laser-cut parts and white metal details, the kit has two different signs and decals. Assembly

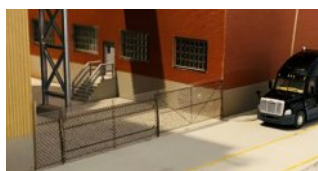
and painting is required.

Info: berkshirevalleymodels.com



DigComDesigns has economy priced HO and N scale kits for an automotive paint shop. The kits consist of basic styrene walls that are then wrapped with detail printed sheets. Vehicles are not included.

Assembly is required.



Also available from DigComDesigns is a detailed chain-link fence printed on clear acetate. Both N and HO scale versions of the kit are available.

Info: www.digcomdesigns.net



Frenchman River Model Works has released a new HO scale craftsman kit for Olde Reliable Moving and Storage Warehouse. This two-story brick structure features a concrete foundation and large windows with center pains that can be posed open or closed. In addition to the three truck bays shown above, there is a rail loading dock on the opposite side. The modular



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design of the structure would make adding a third story feasible. Signage and assembly are included. The structure is 5.75" tall and has a footprint of 3.75' wide by 5.5" long.

Info: www.frenchmanriver.com



Inter-Action Hobbies has released two new HO scale kits, The Bank and Bank Interior Details. The Bank kit is suitable for the 1930s to current day, including such details as 3D-printed security cameras and an air conditioner. Consisting of laser-cut

and engraved brick basswood and resin impregnated boards, 3D-printed details include front and rear stairs, chimney, roof access hatch, vent, lights, vault alarm, and fire spigot. The kit includes clear window glazing. The completed kit measures 4.25" x 6" (including stairs) by 2.9" high.



The Bank Interior Detail kit includes laser-cut teller cage with access door, pony wall, two desks and chairs, two benches, a convenience counter, vault door and frame, and interior walls with two doors. 3d-printed door knobs are included for the interior doors.

Info: www.interactionhobbies.com



Mine Mount Models has released Just Dirt in 60z packages. Sifted and heat sterilized, Just Dirt is a real dirt product available in two colors, Road Dirt and Orange Clay, and four grades: Fine, Medium, Coarse, and Rubble. Due to the possible presence of fine magnetic particles, it is not recommended for use as ballast.

Also new from Mine Mount Model is a selection of six different sheds in HO, S, and O scales. With different footprints and



styles, they are appropriate for everywhere from the backyard, trackside, as a garage, or as storage for a business. In HO scale the footprints of the buildings vary from 1.25" x 1.25" to 2.6" x 1.5".

Info: minemountmodels.com



Monster Modelworks has released an N scale kit for a four-story brick industrial building. Details of an HO scale version of the craftsman-style kit, which continues to be available, were reported in the September edition of MRH. With creative signage, this highly detailed structure can serve as a variety of industrial factories. The footprint of the flat-style N scale model has a depth of just .65" x 6.5" long. Assembly and

painting are required.



Monster Modelworks has released a reversed footprint version (above) of its original four bay brick industrial building (below).



The walls of both kits are made of laser-engraved basswood using photographs of real brick. The dimensions are the same for both versions: 6.875" deep x 12.25"

long and a height of 4.5". Assembly and painting are required.

Info: www.larkspurlaserart.com/structure-kits



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Silver Spike Designs has announced a 3D-printed model of an undecorated Buda 619 motor car, available in O, HO, and N scales. The kit consists of

a one-piece body, one piece chassis, wheels, and lights.

Developed around 1929 by the Buda Engine Company, the 619 motor car was designed for rail use at up to 50 MPH and included seating for up to 11 people. Railroads known to have used them included ATSF, C&S, CB&Q, and Union Pacific. The UP had around 30 Buda's and used them as inspection vehicles well into the 1950s.

Info: silverspikedesigns.com



New from **Summit USA** is a modern liquor store building in HO scale. Laser-cut in white and clear acrylic and self-adhesive

micro-plywood, the kit also includes molded styrene parts. All building parts and signs are included. The structure is also available as a backdrop model with just the storefront. The full-size building measures 11-3/4" x 10" x 3" with the backdrop building measuring 11-3/4" x 3-3/8" x 3".



Also available is a backdrop building for Spec's liquor store, an extension kit for the Summit USA strip mall series. It replaces Pier One Imports, which went out of business in 2020. The kit is assembled from white

styrene plastic, laser-cut white acrylic, clear window glazing, and self-adhesive micro-plywood. The finished kit measures 7" x 3-3/4" x 3-1/2".

Info: www.summit-customcuts.com



Walthers has announced a spring 2026 release date for a modern three bay Diesel Shop. The HO scale

kit features roll-up service bays, rooftop HVAC units, and roof vents. The interior features access pits, elevated work platforms, and decals with floor warning stripes and safety markings. The structure has a footprint of 10.5" x 15.5". Assembly and painting are required.

Info: www.walthers.com

NEW ELECTRONICS



Train Control Systems has begun shipping its TCSWow Box, a standalone sound product that incorporates TCS's full library of sounds, including 66 bells, 55 horns, 75 whistles, 13 steam chuff sets, and 33 diesel prime movers. To

play the chuff and prime mover sounds, connect your layout power to the TCS Wow Box, and calibrate it for the correct chuff rate or sound. The TCSWow Box works with DC, AC, or Lionel powered track and will support external amplified speakers with a standard 3.5mm headphone jack. The TCSWow Box does not work with DCC, and the TCSWow Box requires its own power input even when connected to the tracks. Configurations can be stored for up to 3 separate locomotives.

Info: www.tcsdcc.com



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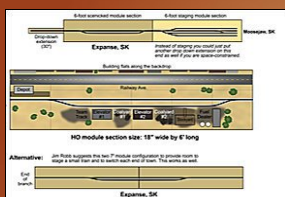
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! BRIEFLY NOTED AT PRESS TIME ...

ClassOneModelWorks.com is taking pre-orders for a Thrall 20-2 autorack in HO scale. This release will feature 4 body types, 17 paint schemes, and 54 unique road numbers. *MRH* will have full details on this model next month ... ■

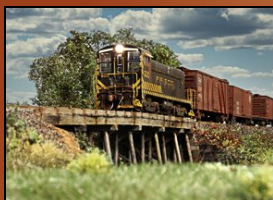
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SELECTED EVENTS



Model Railroad Hobbyist | November 2025

NOVEMBER

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

Ongoing 2025

ONLINE, Zoom & YouTube, Wednesdays at 7pm Eastern. New Tracks Modeling Live Weekly

Info: newtracksmodeling.com

YouTube: [www.youtube.com/channel/UCMA](https://www.youtube.com/channel/UCMAVhPb5pjdkAYTdXLceJA)

[VhPb5pjdkAYTdXLceJA](https://www.youtube.com/channel/UCMAVhPb5pjdkAYTdXLceJA)

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

Info: www.facebook.com/groups/nmragroup

ONLINE, Zoom, Second Tuesdays, 8pm Eastern. “Off the Beaten Track” featuring Narrow Gauge layouts, clinics, and manufacturers.

Info: groups.io/g/NNG

ILLINOIS, CALEDONIA, Monthly Meetings of the Rock River Valley Division, Midwest Region. Paulson’s Agriculture Museum of Argyle, 6950 Belvidere Rd. See Events page on website for dates.

Info: rrvd-nmra.com

November – December 2025

NEW ZEALAND, LOWER HUTT, November 15-16, 2025. RaileX Model Train Show, sponsored by the Marklin Model Railway Club (Upper Hutt) and the Wellington British Railway Modellers from Lower Hutt. Walter Nash Centre (WNC) between Taine & Tocker Streets, Taita.
Info: railex.org.nz

ARIZONA, TUCSON/PHOENIX/PRESCOTT/FLAGSTAFF, November 15-16, 2025. 2nd Annual Cactus Crawl Layout Tour, hosted by the Arizona Division, PSR, NMRA.
Info: www.azdiv-nmra.org

CALIFORNIA, WALNUT CREEK, November 21-23, 28-30, 2025. Walnut Creek Model Railroad Society Holiday Show. 2751 Buena Vista Ave in Larkey Park.
Info: www.wcmrs.org/sites/default/files/schedule/2025DVL.pdf

COLORADO, LONGMONT, December 12-14, 2025. 48th Annual Boulder Model Railroad Club Train EXPO. Boulder County Fairgrounds Exposition Hall, 9595 Nelson Road.
Info: www.bmrconline.org

COLORADO, LOVELAND, November 29-30, 2025. Rocky Mountain Train Show – Holiday 2025. The Ranch Events Complex, 5280 Arena Circle.
Info: rockymountaintrainshow.com/Default.aspx

CONNECTICUT, PRESTON, November 23, 2025. Mohegan-Pequot Model Railroad Club Open House. Mohegan-Pequot Clubhouse - 73 Route 2.
Info: www.mprr.org

INDIANA, DANVILLE, November 22, 2025. CID-NMRA Danville Train Show. Hendricks County Fairgrounds, 1900 E. Main St.
Info: www.cidnmra.org

KENTUCKY, LOUISVILLE, November 15, 2025. 35th Year - Division 8 Train Show & Sale. Holy Family Parish Saffin Center, 3938 Poplar Level Rd.
Info: div8-mcr-nmra.org/site/index.htm



MAINE, BREWER, November 22, 2025. Eastern Main Model Railroad Club Annual Show. Jeff's Catering & Event Center, East/West Industrial Park, 15 Eventcenter Way.

Info: trainshow.net/event/1361/eastern-maine-model-railroad-club-annual-show

MASSACHUSETTS/NEW HAMPSHIRE, VARIOUS, November 28-30, 2025. Tour De Chooch, a free, self-guided model railroad Open House. Featuring over 20 layouts.

Info: www.tourdechooch.org/wp

MICHIGAN, BELLEVILLE, November 23, 2025. Southeast Michigan Model Railroad Show and Sale, sponsored by Rails on Wheels and Division 6, NCR, NMRA. Wayne County Community College's Ted Scott Campus, 9555 Haggerty Rd. ½ mile north of I-94, exit 192.

Info: www.railsonwheels.com

MICHIGAN, SHELBY TWP, November 29, 2025. Model Train Show at the Packard Proving Grounds. Packard Proving Grounds, 49965 Van Dyke Ave.

Info: packardprovinggrounds.org/event/model-train-show

MINNESOTA, BURNSVILLE, November 15, 2025. Progress Valley RPM (fmly North Star RPM). Wyndham Hotel, 14201 Nicollet Ave.

Info: designbuildop.hansmanns.org/wp-content/uploads/2025/08/2025-Progress-Valley-RPM-flyer.jpg

NEW JERSEY, CINNAMINSON, November 29-30, December 6-7, 27-28, 2025, January 10-11, 17-18, February 14-15, 21-22, 2026. Burlington County Model Railroad Club 2025-2026 Winter Open House. 808 Pomona Road, basement of the Footlighters Theatre.

Info: bcmrc.org

NEW JERSEY, NORTH HALEDON, November 28-30, December 6-7, 13-14, 2025. Garden State Model Railroad Club Annual Fall Show. 575 High Mountain Rd.

Info: gardenstatetrainclub.org/modelrailroadshow

NEW YORK, ST. JAMES, November 21-23, 2025. St. James Model Railroad Club Open House, Mill Pond House, 176 Mills Pond Road.
Info: sjtrains.wixsite.com/my-site/news

NORTH CAROLINA, SUMMERVILLE, November 21-22, 2025. Summerville, SC Model Train Show and Sale. Hilton Garden Inn, 406 Sigma Drive.
Info: www.carolinatrainshow.com

OKLAHOMA, OKLAHOMA CITY, November 15-16, 2025. OKC Train Show. Bennett Event Center, Oklahoma State Fairgrounds, 2101 Gordon Cooper Blvd.
Info: www.okctrainshow.com

OREGON, PORTLAND, November 15-16, 22-23, 29-30, and December 6-7, 2025. Columbia Gorge Model Railroad Club Holiday Open House. 2505 North Vancouver Ave.
Info: www.cgmrc.com/events/2023-open-house-c5wxl

SOUTH CAROLINA, SUMMERVILLE, November 21-22, 2025. Carolina Train Shows – Summerville Model Train Show and Sale, Hilton Garden Inn, 406 Sigma Drive.
Info: www.carolinatrainshow.com

TEXAS, PEARLAND (Houston), November 15-16, 2025. 2025 Houston Area Model Train Show. Knights of Columbus Hall, 2320 Hatfield Rd.
Info: houstontrak.org

WASHINGTON, LONGVIEW, November 22, 2025, Longview Kelso & Rainier Model Railroad Club Holiday Model Train & Toy Swap Meet. Cowlitz County Event Center, 1900 7th Ave.
Info: lkrtrains.yolasite.com/events---past-and-future.php

Future 2025-26 by location

ALABAMA, MOBILE, March 7, 2026. SWARM Model Train Show. Mobile Via Health, Fitness, & Enrichment Center, Arlene F. Mitchell Campus, 1717 Dauphin Street.
Info: www.facebook.com/profile.php?id=100070094629309



CALIFORNIA, SANTA CLARA, January 30 – February 1, 2026. PCR Bay Area Layout Design & Operations Weekend. South Bay Historical Railroad Society, Santa Clara Caltrain Depot. Online via Zoom.

Info: bayldops.com/2026/index.html

COLORADO, DENVER, April 11-12, 2026. Rocky Mountain Train Show. National Western Complex, 4655 Humboldt St.

Info: rockymountaintrainshow.com/Default.aspx

FLORIDA, COCOA BEACH, January 8-10, 2026. Prototype Rails RPM Meet. Cocoa Beach Hilton Oceanfront, 1550 N Atlantic Ave (Hwy A1A).

Info: www.prototype Rails.com

KANSAS, WICHITA, February 7-8, 2026. The Wichita Train Show and Swap Meet sponsored by Chisholm Trail Division, NMRA. Cessna Activity Center, 2744 George Washington Blvd.

Info: www.nmrachisholmtraildivision.org/best-train-show.html

KENTUCKY, LOUISVILLE, March 21, 2026. 36th Year - Division 8 Train Show & Sale. Holy Family Parish Saffin Center, 3938 Poplar Level Rd.

Info: div8-mcr-nmra.org/site/index.htm

MASSACHUSETTS, WEST SPRINGFIELD, January 24-25, 2026. Amherst Railway Society Railroad Hobby Show. Better Living Center, Young, Stroh, and Mallary Buildings at The Eastern States Exposition Fairgrounds – Home of the Big E. 1305 Memorial Ave.

Info: www.railroadhobbyshow.com/index.php

MICHIGAN, GRANDVILLE, January 3, 2026. Grand Rapids Model Railroad Historical Society Train Sale. American Legion Post 179, 2327 Wilson Ave SW.

Info: www.grmrhs.org/home/train-sale

NEW JERSEY, CINNAMINSON, November 29-30, December 6-7, 27-28, 2025, January 10-11, 17-18, February 14-15, 21-22, 2026. Burlington County Model Railroad Club 2025-2026 Winter Open House. 808 Pomona Road, basement of the Footlighters Theatre.

Info: bcmrc.org

NEW YORK, ROCHESTER, February 21-22, 2026, RocRPM – Rochester Railroad Prototype Modelers Meet. Edgerton Community Center, 41 Backus St.

Info: www.facebook.com/RocRPM

NORTH CAROLINA, NEW BERN, February 21-22, 2026. 30th Annual Train Show, presented by Carolina Coastal Railroaders. New Bern Riverfront Convention Center, 203 S. Front St.

Info: www.carolinacoastalrailroaders.org/trainshow

OKLAHOMA, TULSA, March 13-15th, 2026. 2026 Layout Design and Operations Weekend, presented by the Indian Nations Division of the NMRA. Locations: Various around Tulsa

Info: ldopsigmeet.tulsanmra.org

OREGON, ALBANY, March 28, 2026. Winterail – 48th Anniversary Railroad Photography Exposition & Collectibles Sale. Russell Tripp Performance Center, Linn Benton Community College (LBCC), 6500 Pacific Blvd, SW.

Info: www.winterail.com

OREGON, EUGENE, February 15-16, 2025. 36th Annual Swap Meet and Train Show, hosted by the Willamette Cascade Model Railroad Club. Lane County Events Center, 796 West 13th Avenue.

Info: www.wcmrrc.com

PENNSYLVANIA, MALVERN, March 19-22, 2026. RPM Valley Forge, The Desmond Malvern, a Doubletree by Hilton, One Liberty Blvd.

Info: www.rpmvalleyforge.com

TEXAS, PASADENA (Houston), February 21, 2026. Greater Houston Train Show, sponsored by the San Jacinto Model Railroad Club. Pasadena Convention Center, 902 Fairmount Parkway.

Info: sanjacmodeltrains.org ■

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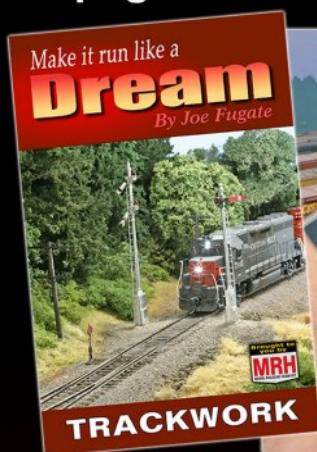
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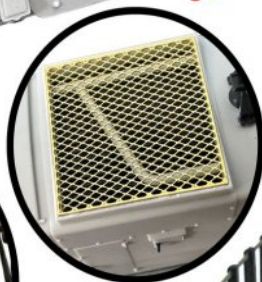


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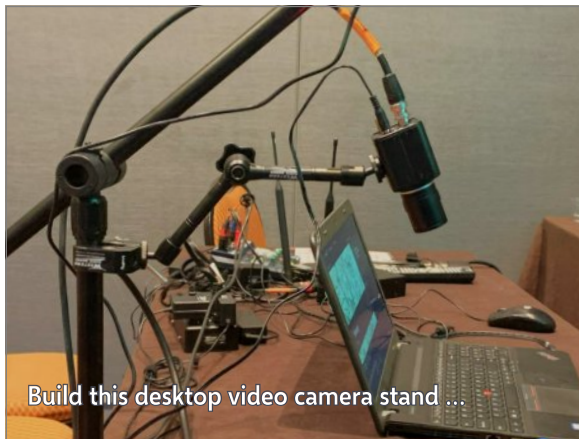
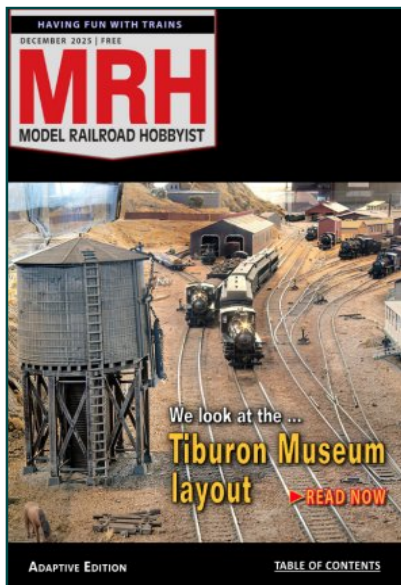
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