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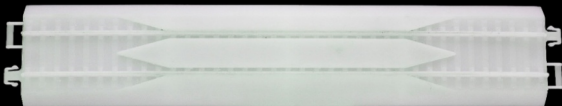
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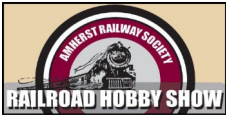
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FREE VIDEOS!

These are just **SOME** of the free videos on TrainMasters TV ...



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Tom Patterson's CW&E



Chris Lyon on painting detail parts



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MRH Website this month: New layout journal, ...
Compiled by JOE FUGATE



Let's talk ops: Start realistic ops the easy way
JOE FUGATE



What's Neat: Car storage, basement upgrade, ...
KEN PATTERSON



Electrical Impulses: Debugging "ghost" shorts, part 3
JOE FUGATE



Allen Pittman's Norfolk Tennessee Southern
the MRH STAFF



Upgrade older cheap model railcars
From the MRH FORUM



Savvy Modeler online: High-end waterfall paint booth
Compiled by the MRH STAFF



June 2026 news and events
RICHARD BALE and JEFF SHULTZ



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PUBLISHER'S MUSINGS



Model Railroad Hobbyist | June 2026

JOE FUGATE ON FINISHING WHAT WE STARTED – AND WHAT'S NEXT ...



EIGHT YEARS AGO, I SET OUT TO WRITE SOMETHING I WISH HAD EXISTED WHEN I GOT INTO THIS HOBBY: A comprehensive guide to making model railroads run flawlessly.

Not just tips scattered across forum posts and magazine articles, but a complete system – decades of best practices in one place.

The vision was a trilogy: *Trackwork*, *Rolling Stock*, and *Locomotives*. Get all three right, and your railroad runs like a dream.

Book one, *Run like a Dream: Trackwork*, came out in 2016. Book two, *Rolling Stock*, followed in 2018. Book three was supposed to arrive in 2020.

Then the world had other plans.

We all remember 2020. For *MRH* Media, it meant navigating an existential challenge: how do we keep this business afloat when everything's uncertain?

We streamlined operations, cut costs, and held on. That survival strategy meant making a major decision in 2022 – relocating from Portland, Oregon to Tulsa, Oklahoma, where the cost of living and business overhead were dramatically lower.

That move saved us, but it also meant upheaval. Settling in took another couple of years.

Finally, in 2024, I restarted work on the *Locomotives* book in earnest.

And I'm thrilled to tell you: the writing is complete.

This summer, the *Run like a Dream: Locomotives* book begins its phased rollout.

- If you ordered the downloadable PDF, you'll be able to download it in just a couple of weeks.
- If you ordered a paperback, expect shipping to start in about four to six weeks – we need a physical proof first to make sure it looks as good as it should.

Completing this trilogy feels like crossing a finish line I've been running toward for nearly a decade.

These three books represent what I would have given my eye-teeth to have when I was starting out. This expert insight shows up here and there in the hobby, but no one's ever pulled together a comprehensive trilogy covering this trifecta: trackwork, rolling stock, and locomotives.

Now there is. And I couldn't be more excited!

Hitting the road: Summer conventions

With the *Locomotives* book finally done, it's time to celebrate – and there's no better way than connecting with fellow modelers in person.

This summer, *MRH* Media is hitting the convention circuit, and I hope to see many of you there.

First stop: The RPM Meet (Railroad Prototype Modelers) in St. Louis/Collinsville, the last weekend of July. If you're a prototype modeler or love diving deep into railroad history and accuracy, this is one of the best gatherings in the hobby.



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PUBLISHER'S MUSINGS | 3

We'll be there, and I'm looking forward to talking shop, meeting readers, and hearing what you're working on.

From there, we head to Chattanooga for the NMRA National Convention. I'm scheduled to give three clinics, including a signature session on *Run like a Dream: Locomotives*. I'll share some of the best insights from the new book – hard-won knowledge that can save you months of frustration and get your locomotives running smoothly right out of the gate.

If you're attending, I hope you'll stop by. Let's talk trains!

Siskiyou Line 2: Practicing what we preach

Here's something I've been looking forward to: this fall, I'm starting construction on Siskiyou Line 2.

Yes, you read that right. I'm finally building a layout again.

I'll be honest – it's been frustrating not having a layout of my own for so long. Life, business, relocations – it all got in the way. But now, with the *Locomotives* book wrapped and our business on solid footing, it's time.

And I'm not just building this for me. Siskiyou Line 2 will be a real-world demonstration of the TOMA methodology we've been promoting at *MRH*. This is us practicing what we preach, showing you exactly how these updated home layout construction principles work in action.

I'll be documenting the entire process through a new TrainMasters TV video series and regular articles in *MRH Running Extra*. If you've ever wanted to follow along as someone builds a TOMA layout from the ground up – making decisions, solving problems, applying best practices in real time – this is your chance.

Subscribe to *Running Extra* to be part of the journey. It's going to be great fun, and I hope it helps you with your own projects.

Let's talk about prices

Now for the part I hate but can't avoid: prices are going up in July.

We haven't raised prices since 2020. We held the line as long as we could, but costs have been climbing steadily.

Hosting costs are up. Shipping costs have risen dramatically – and yes, we offer free shipping, but that means we keep prices reasonable while baking shipping into the total cost. And frankly, it's getting harder to recruit new authors.

We need the resources to bring in the best and the brightest – the people who can deliver the content you deserve.



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So it's time to get real.

Here's what's changing

Starting with *MRH Running Extra*, single issues are going from \$2.99 to \$3.99.

Compare that to paper magazines – \$8 to \$10 for 60 to 80 pages. *Running Extra* delivers 80 to 100 pages of ad-free how-to content, plus we include the ad-supported MRH pages in the back, so one download gets you all the magazine pages we produce in a month. It's still a tremendous value.

But here's the bigger story: annual subscriptions.

When we started our “all back issues included” policy, there were about 40 back issues. Now there are 90. That's more than double.

The current initial subscription is \$29.99 for the next 12 issues plus all back issues. Renewal is \$19.99. Starting in July, the initial subscription goes to \$39.99 per year, and after the first sub, renewal goes to \$29.99 per year.



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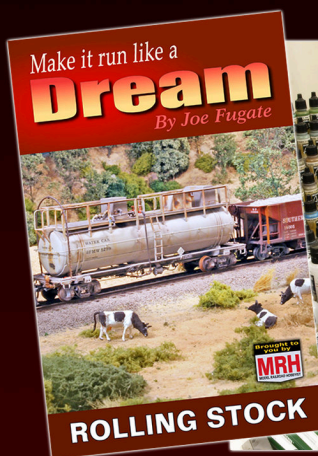
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I think that's fair. And I believe our magazines remain the best deal in the hobby, bar none.

Our mission: Solving problems, embracing innovation

At the end of the day, everything we do at *MRH* Media comes back to one thing: helping our fellow modelers solve problems and get the greatest satisfaction possible from this hobby we love.

That's why we wrote the *Run like a Dream* trilogy. That's why we're building Siskiyou Line 2 and documenting it for you.

That's why we're investing in better authors and better content, even when it means raising prices.

That's why we're committed to pushing the envelope on new hobby technology:

- Battery power
- 3D printing
- LED lighting
- Hobby DIY electronics with Arduinos, etc.
- Using AI to help modelers research better and generate model plans, signs, and photo backdrops

The hobby is evolving, and we want to be at the forefront – helping you navigate these changes and use them to build better, run better, and enjoy the hobby more.

Join us

So here's my ask: be part of what's happening this summer and beyond.





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[Pre-order the *Locomotives* book](#) if you haven't already (prices will be going up July 1). PDF downloads start in a couple weeks; paperbacks ship in four to six weeks.

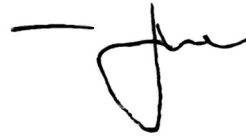
If you're near St. Louis or Chattanooga, come see us at the conventions. Let's talk trains in person.

Subscribe to *MRH Running Extra* and follow along as we build Siskiyou Line 2. Watch the process unfold. Learn alongside us.

And most of all, stay engaged with this community on the *MRH* forum. We're all in this together – pushing the hobby forward, solving problems, sharing what we learn.

It's been a long road to finish the trilogy. But we're here. And the best is yet to come.

Let's keep having fun with trains together!



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LAST ISSUE LIKES

Most liked articles in [May 2026 issue](#) of *MRH* are:

- 1st** Publisher's Musings: Why layout projects sit unfinished
- 2nd** Pelle Søbørg's Daneburg layout update
- 3rd** Electrical Impulses: Debugging problem shorts: 2

Most liked articles in [May 2026 issue](#) of *Running Extra* ...

- 1st** Siskiyou Line 2: The railroad that grows - part 2
- 2nd** Limited Modeler: Building the Ballville power plant
- 3rd** Publisher's Welcome: Updated Rolling Stock book links

If you want more of this type article, then like the article!
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Issue 91: June 2026

MRH RUNNING EXTRA**Publisher's Welcome: The perfect micro drill cross-slide vice**

JOE FUGATE

**Limited Modeler: Ballville power plant operations**

JIM SIX

**Getting Real: 10 lbs of ops in a 5 lb layout, part 6**

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THIS
MONTH

Model Railroad Hobbyist | June 2026

Compiled by **JOE FUGATE**



Nicholas & Ashley Creek Railway 2.0

MRH author **Michael Anteau** has a new blog about the second iteration of his layout. He recently moved so he's starting over on a new layout, and this new blog is documenting the journey.

One of the more impressive recent posts show how he extended an industry parking lot onto a photo backdrop. As you can see by the image above, it's quite effective. The top four cars are on the backdrop!

To see all the the new layout build progress, visit the thread!



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

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



1. MRH forum member **Philipdehne** responded to **Mark Pruitt's** inquiry on the best HO Mikados with this photo of a favorite Trix model.

Best HO Mikados?

MRH forum member **Mark Pruitt** asked the MRH forum members to recommend some good HO Mikado models. Several members chimed in with their recommendations.

One of the more interesting was a post by member **Philipdehne**. Philip says:

“I love Mikados. I have 2 Overland brass CNR mikes, circa 1999 and 2 Trix USRA mikes circa 2006. The picture is of one of the Trix models. They are fabulous models. Diecast bodies, silky smooth mechanism. Great pullers. If you can find used ones, grab them. You won't be sorry.”

Visit the thread for many savvy recommendations on the best running HO Mikado steamers.

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



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2. *MRH* forum member **sauced07** (Shane B.) posted these images of a clever layout entrance he recently visited. Clever indeed!

Interesting layout entrance

MRH forum member **sauced07** (Shane B.) recently posted this very unique layout entrance [2]. He says,

“I received a gracious invitation to view a fabulous N Scale layout. I needed to share this unique entrance to the layout room. The construction was extremely simple, 2x4’s and plywood basically. Care was needed for angles and such but just a slick idea.”

Read the full thread to see the comments and ideas for other ways to create a “very railroad” layout entrance.

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



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Recent photo fun thread

These images posted on recent *MRH* forum Photo Fun threads with succinct captions but the images speak volumes.

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



3. MRH editor emeritus **Charlie Comstock** posted this photo with the caption: “Leaving Junction City eastward.” The SP in Oregon steam era vibe is strong with this one!

4. MRH forum member **SouthlandModeler** (Chris B.) posted this photo among several and simply said, “Fun on the layout.” Yes indeed, that’s some nice eye candy fun for sure. We love the “railroad vibe” of this image.



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Model Railroad Hobbyist | June 2026

Starting realistic ops the easy way ...

YOU'VE READ THE ARTICLES. YOU'VE WATCHED THE VIDEOS. REALISTIC OPERATIONS on your model railroad sounds amazing – running trains like the prototype, with purpose and logic instead of aimlessly circling the layout.

But then you start thinking about everything involved: car routing systems, train building logic, dispatcher protocols, track warrant control or worse, timetable and train order! Four or five massive problems to solve, and suddenly you're paralyzed before you begin.

Here's what I learned building operations on my Siskiyou Line: you don't eat the elephant all at once.

Start simple: Just run trains

For my first operating session, I cheated. I grabbed a prototype reference book, made a list of twelve trains that actually ran on the real Siskiyou Line, and decided we'd run them in sequence. That's it. No car routing. No switching. No formal dispatching. Just trains moving from Point A to Point B without hitting each other.

I had ten operators show up – we ran two-person crews with a conductor and engineer – and I told them we'd spend 3.5 hours getting familiar with the railroad. Train 1 left Eugene staging at 7:15 pm, met Train 2 at Roseburg yard at 7:30, and arrived at Medford staging by 7:40.

When two trains needed to pass, I'd walk over and give casual verbal orders: "Hey Jeff, stop at Rice Hill siding and wait. Hey Terry, there's a train

in the siding – take the main and run through.” Mother-may-I railroading at its finest.

I kept timing notes. That was the goal: learn how long trains actually take to traverse the layout, and get everyone comfortable with the layout’s geography.



1. In the early days of ops we did two-person crews: engineer and conductor, but we kept things really simple.

Add one thing at a time

Session two, I added one thing: the locals would do switching. Super simple – roll a die at each town, swap that many cars from your train for cars sitting in town. If there aren’t enough cars in town, drop off what you’re carrying and pick up what’s available.

That one addition changed everything. Suddenly locals took way longer. Through freights couldn’t just breeze past them anymore. I found myself walking over to local crews saying, “You’d better get in the hole – there’s a through freight coming and you’re the inferior train.”

We were doing realistic operations. It was all pretty basic, but real enough that it felt like railroading.

You don’t need the whole system on day one.

Pick one problem – just one – and solve it. Get comfortable with it. Then add the next piece.

That’s how you take the first bite without choking on the elephant.

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WHAT'S NEAT

column



Model Railroad Hobbyist | June 2026

KEN PATTERSON COVERS THIS MONTH:



- BLI's 2-8-8-0 BULL MOOSE IN HO
- TRANSPORTING AND DISPLAYING YOUR TRAINS: TRAIN BOXES AND CASES
- BACHMANN'S 1976 FREEDOM TRAIN SET
- GETTING THE BASEMENT BACK INTO SHAPE – LAYOUT PREP



WHAT'S NEAT with Ken Patterson
Car storage & basement upgrade

click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

KEN TAKES US ON A TOUR OF THE BASEMENT, which has a section of railroad running again. He shows us the newly released Broadway Limited models of the Union Pacific 2-8-8-0 Bull Moose locomotives, the new Bachmann 1976 Freedom Train set with the Southern Pacific GS-4 #4449, and tours the basement showing off some of the features it had, some it still has, and some it will have.

BLI's 2-8-8-0 Bull Moose



1. Ken's layout is running again as a point-to-point, seen here with this Union Pacific 2-8-8-0 Bull Moose locomotive from Broadway Limited Imports. Ken has two of them to show off. Info: broadway-limited.com



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Transporting and displaying your trains: train boxes and cases



2. Ken has discovered a company in Australia named ModelTrainBox.com that makes train boxes for storing and transporting trains, complete with foam dividers and inserts to hold everything in place. They make boxes and carrying cases in assorted sizes and styles. Info: modeltrainbox.com



3. Ken has several train display cases around his basement, dating back to the early-1970s.



4. This N scale display case is also useful for displaying HO scale vehicles. Ken has purchased his display cases at swap meets over the years, but thinks they wouldn't be difficult to build for someone handy with shop tools.

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5. As Ken started collecting G scale equipment, he built shelves out of 2x12s to hold the locomotives and rolling stock. Later he built smaller shelf inserts with 1x4s for Johnny Lightning and Hot Wheels cars for his son and himself – they work for HO scale equipment as well.

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6. A&B When it comes to storing cars in his layout room, Ken uses architectural drawing drawers, and recommends tool cases with long low drawers, such as the Husky brand from Harbor Freight. Cars can be stored standing or on their sides. Editor's Note: Be careful using foam or plastic as a liner as it can attach itself to the cars over time and damage the paint. Acid free paper can be a useful protective layer.



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Bachmann's HO scale 1976 Freedom Train



7. Bachmann sent Ken the new 1976 American Freedom Train set containing the GS-4 #4449, two display cars, and an observation car all decorated in the red, white, and blue AFT colors. The set is DC-only per Bachmann.

Info: shop.bachmantrains.com

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Getting the basement back in shape – layout prep



8. Ken has been working at cleaning up the basement and the rest of the house since the fire, not only cleaning but sanding the rafters before painting them in a sealing coat of white paint. The rest of the basement he'd treated similarly – but he came down one day and smelled the remains of smoke. He moved one of the large shelving units that form the backdrop of the “What’s Neat this Week” show and discovered the smoke and soot had coated the wall behind them.



9. Ken is going to use this cabinet area as a space for the 3D printer, computer, and electronics for the show. Layout prep includes building work spaces near the layout for support equipment.



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10. One of the plans for the basement is to install valences for the layout on the ceiling, painting the rest of the ceiling black, and the cabinets and shelves white. All the magazine covers that were lining the top of the walls are either down or they'll be coming down. Ken also goes over the need to determine what sort of wall, ceiling, and floor types and he will want installed before starting on the layout.

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11. As a final note, Ken has always liked using concrete patch for making cement roads, and as he has been tearing apart some of the modules, he discovered that a road he made several years ago came out largely intact and is flexible, demonstrating its durability.

To see the complete video of the BLI Bull Mooses, the assortment of methods he uses for transporting and storing trains, the Bachmann 1976 American Freedom Train, and what Ken's plans are for the basement, click on the video link at the beginning of the article.

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Electrical impulses: Debugging problem shorts Part 3



Electrical
Impulses

Model Railroad Hobbyist | June 2026



JOE FUGATE DIVES INTO THIS VERY PRECISE WAY OF
LOCATING SHORTS ...

**THIS SERIES HAS COVERED THREE
COMPLEMENTARY DIAGNOSTIC METHODS**, each
suited to different scenarios:

- In April 2026, we discussed **Method A: Divide-and-Conquer** – Rapid isolation by systematically disconnecting sections
- In May 2026, we introduced **Method B: Clamp Ammeter** – Dynamic testing to catch motion-dependent faults
- This month's topic is **Method C: Constant-Current Voltage Mapping** – Precision voltage mapping to pinpoint elusive shorts

METHOD C: THE CORE CONCEPT

Constant current voltage mapping is elegantly simple: Turn your track into a resistor map.

Force a known, stable current through the rails and measure the voltage drop at regular intervals. You're creating a profile of the track's electrical resistance.

Normal track shows a consistent, predictable pattern. Faults – whether partial shorts, high-resistance connections, or intermittent problems – create unmistakable anomalies in that pattern.

Think of it as taking the electrical “pulse” of your layout, one measurement at a time, until the fault reveals itself.

EQUIPMENT

If you've already worked through Method B (the clamp ammeter approach), you're mostly set for Method C. You already have the automotive 1156 turn signal bulb, power pack, and test leads.

You also already have a meter that reads DC millivolts to 0.1mV – the clamp ammeter from Part 2 includes this capability with plug-in probes. Use that directly for Method C.

If you don't have the clamp ammeter from Part 2, get a digital multimeter with DC millivolt capability (0.1mV resolution). Most modelers already own one, so you likely won't need to buy anything new.

If you're coming to this without the earlier methods, don't worry. I'll walk you through the complete equipment list.

Either way, the payoff is precision: This method can pinpoint a fault to within six inches – even when it's completely invisible.



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WHEN TO USE METHOD C

Use Method C when you've narrowed a fault to a specific section through divide-and-conquer, but the short persists and you can't see the cause.

It's also invaluable for intermittent problems – shorts that come and go, making them hard to catch with simpler methods.

Load-dependent shorts (faults that only appear when rolling stock is on the track) are another perfect application.

And on high-value layouts where you want to avoid destructive troubleshooting – ripping up scenery, removing track – until you're certain of the location, Method C gives you that certainty.

Method C isn't always necessary. For obvious shorts – like a derailed wheel bridging the rails or a loose wire touching both rails – simpler methods work faster.

But when you're hunting a ghost short that won't reveal itself, the constant-current approach turns frustration into systematic discovery.

THE PHYSICS

Before we jump into the procedure, let's talk about why this method works.

Every piece of rail on your layout has electrical resistance. It's small, but it's measurable. When current flows through the rail, that resistance creates a voltage drop according to Ohm's Law:

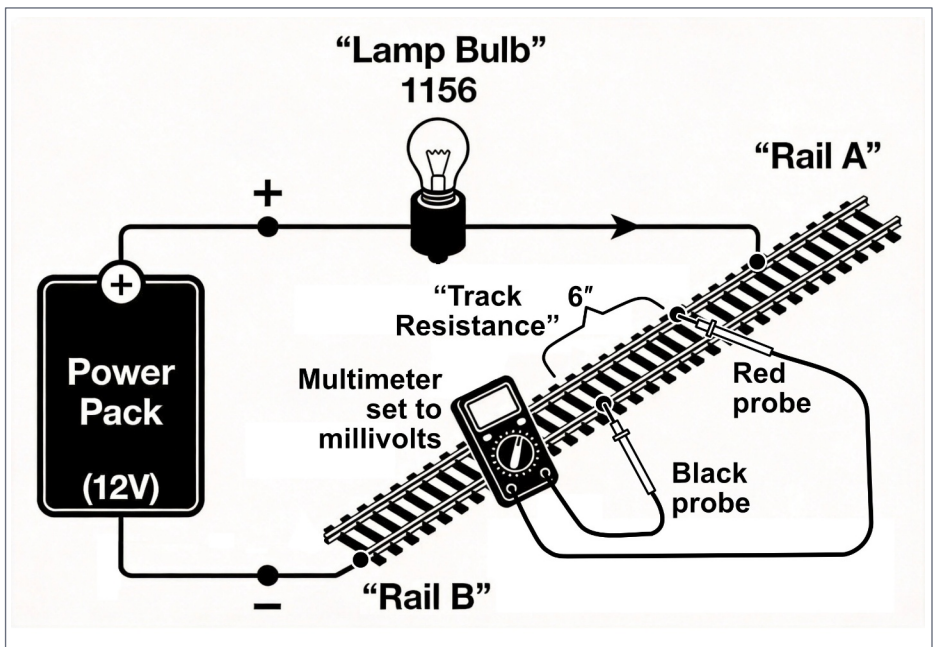
$$V = I \times R$$

Here's the key insight: If we hold the current (I in the formula) constant, the voltage drop becomes directly proportional to the resistance (R in the formula). Any change in resistance – caused by a fault, poor connection, or short circuit – shows up as a change in voltage.

This is exactly what the constant-current method does. By inserting an 1156 automotive bulb in series with the track, we create a current-limiting device that keeps the current stable.

The bulb isn't a perfect constant-current source, but that doesn't matter. We're hunting for anomalies – places where the voltage drop pattern changes by three to five times compared to normal track. Those anomalies are so dramatic that small variations become irrelevant. We're looking for mountains, not molehills.

The beauty of this approach is that it transforms an invisible electrical problem into visible data. You're not guessing where the fault might be. You're watching the numbers tell you exactly where the resistance anomaly exists.



1. This diagram shows the basic setup for Method C, which assumes there's a short circuit between the rails.

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EQUIPMENT SETUP

The constant-current method requires specific equipment, but nothing exotic or expensive. Most of what you need is available at auto parts stores, hardware stores, or online retailers.

The digital multimeter

Let's start with the digital multimeter. You need one that can measure DC millivolts. You'll be measuring voltage drops in the 1-20mV range, so resolution matters.

Look for:

- DC voltage measurement down to 0.1mV resolution
- Test leads in good condition with no frayed wires or corroded probes

For the automotive lamp bulb, your selection depends on your track code.

- For Code 83 or Code 100 track, I use a **#1156 bulb** – 27 watts, 2.1 amperes at 12 volts.
- For Code 55 or Code 40 track, use a **#1141 bulb** – 18 watts, 1.4 amperes at 12 volts.

The smaller bulb delivers proportional current appropriate for delicate components.

Most modern modelers solder feeders directly to rails rather than relying on rail joiners for power delivery, so current capacity isn't typically a concern. However, if you're using rail joiners to carry power, excess current could damage very light track.

These bulbs cost \$2-\$5 each. Buy two – they occasionally burn out.

You'll need a standard automotive bulb socket with wire leads. You can find one at any auto parts store for \$3-\$5.

Your existing model railroad power pack works perfectly for this. You just need 12-14V DC output capability.

Using four alligator clips for your test leads – two for connecting the power circuit to the rails, and two for the multimeter probes – allows solo operation without needing three hands.

Beyond the core equipment, keep a few supporting tools handy: LED flashlight, magnifying visor, dental pick, and masking tape with marker for noting positions.

Before connecting any equipment, prepare the layout section you're testing. Turn off your DCC command station or traditional DC power supply, and disconnect all track power from it. Remove all rolling stock, locomotives, and accessories from the test section.

Confirm that your test section is electrically isolated from the rest of the layout. It should be an electrical island – power enters only through the feeders you've identified.

Clean the rails using mineral spirits (see note, next paragraph) to remove any oxidation or grime. For stubborn buildup, use 600-grit black wet/dry sandpaper.

Note: I've been saying for years that isopropyl alcohol is bad for track cleaning – it's a polar solvent that encourages micro-arcing between the rail head and wheels. Mineral spirits are non-polar and a much better choice.

Now wire the constant-current circuit [1]:

1. Connect the power pack's positive terminal to one wire of the lamp socket.
2. Connect the other wire of the lamp socket to Rail A.
3. Connect the power pack's negative terminal directly to Rail B.

That's it. Current flows from one terminal of the power pack, through the lamp (which limits it to about 2 amperes), through Rail A, through any short between the rails, through rail B, and on to the power pack's other terminal.

The lamp should glow when you turn on the power.

■ A **bright glow** means good current flow.





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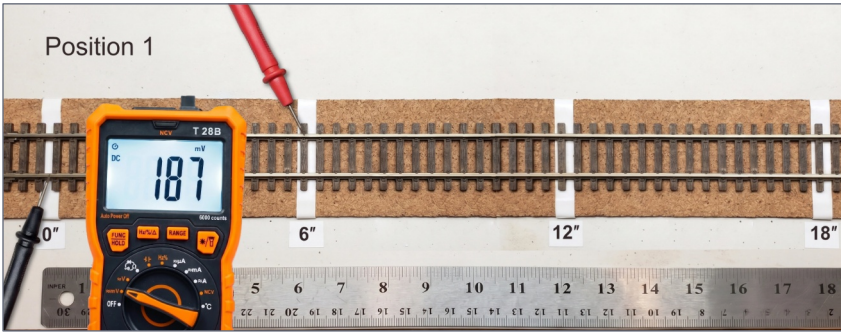
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- A **dim glow** means poor connection – check your alligator clips.
- **No glow** means an open circuit – verify all connections.

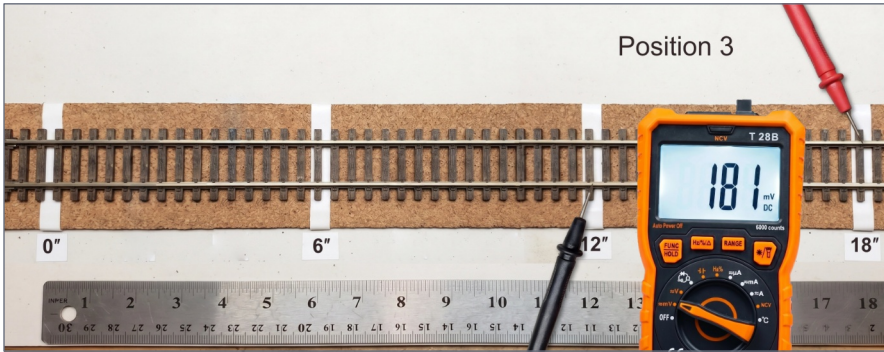
Set your multimeter to DC millivolts mode. This is usually marked as “mV” with a straight line (DC) rather than a wavy line (AC). Insert the black test lead into the COM (common) jack and the red test lead into the VΩmA jack.



2. This shows the basic walking-the-tracks method. Mark the track every six inches with tape, then place the probes as shown six inches apart on different rails and take a reading for position 1.



3. “Walk the probes” down six inches on each rail and take a reading for position two. If the resistance of the rail is normal, then the reading should change by only 3-4mV.



4. Continue walking the probes to the next position, take a reading, and so on.

THE PULSE-TESTING PROTOCOL

The constant-current circuit is safe for brief testing, but continuous operation creates heat. The lamp itself gets hot – that’s normal. But heat also develops at any point of high resistance: Poor rail joiners, weak solder joints, and especially at fault locations. You want to limit that.

The protocol is simple:

1. Turn on the power pack.
2. Wait 5 seconds for the reading to stabilize.
3. Read and record the multimeter reading.
4. Turn off the power pack immediately.
5. Wait 5-10 seconds for any heat to dissipate before the next measurement.
6. Move six inches and repeat.

This 5-seconds-on, 5-seconds-off rhythm becomes natural quickly, and provides accurate data without risking damage.

The lamp brightness gives you visual feedback about circuit health:

- A **bright, steady glow** means normal operation.
- A **very bright glow** means you’re near a short circuit.



- A **dim glow** means poor connection – check clips and rail cleanliness.
- **Flickering** means intermittent connection – wiggle the clips.
- **No glow** means an open circuit – verify all connections.

If the lamp suddenly brightens as you move probes, you're approaching a fault.

If you smell burning plastic, see smoke, or notice extreme lamp brightness, turn off power immediately and investigate.

WALKING THE PROBES

The probe-walking technique is systematic, methodical, and surprisingly easy once you get into the rhythm [2, 3, 4].

You're building a resistance map of your track, one measurement at a time.

Here's how probe positioning works:

Your multimeter has two probes: Black (negative/common) and red (positive). Position them six inches apart on opposite rails – black probe on Rail B (the rail connected to power pack negative), red probe on Rail A (the rail connected through the lamp to power pack positive).

Critical point: Both probes move together as a pair, maintaining that six-inch spacing throughout the entire walk. The black probe is always "behind" (closer to the power source connection point), and the red probe is always "ahead" (farther from the power source).

You're measuring the voltage drop across that specific six-inch section of track between the two probes.

Here's a step-by-step walkthrough:

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- **Position 1:** Black probe at 0" (starting point on Rail B), red probe at 6" (on Rail A). Turn on power, wait 5 seconds, record reading: 187mV. Turn off power.
- **Position 2:** Move both probes forward 6 inches. Black probe now at 6" (on Rail B), red probe at 12" (on Rail A). Turn on power, wait 5 seconds, record reading: 184mV. Turn off power.
- **Position 3:** Move both probes forward another six inches. Black probe now at 12" (on Rail B), red probe at 18" (on Rail A). Turn on power, wait five seconds, record reading: 181mV. Turn off power.
- **Position 4:** Black at 18", red at 24". Reading: 178mV.

And so on, walking the probe pair down the track in six-inch increments.

Why this works: Each measurement gives you a snapshot of the resistance in that specific six-inch segment. As you move away from the power source, you're measuring sections that are progressively farther from the connection point, so the voltage readings naturally decline due to cumulative rail resistance.

Here's what a typical voltage-walk looks like on healthy track:

Position 1: 187mV (black at 0", red at 6")

Position 2: 184mV (black at 6", red at 12") (-3mV)

Position 3: 181mV (black at 12", red at 18") (-3mV)

Position 4: 178mV (black at 18", red at 24") (-3mV)

Position 5: 175mV (black at 24", red at 30") (-3mV)

Position 6: 172mV (black at 30", red at 36") (-3mV)

Position 7: 169mV (black at 36", red at 42") (-3mV)

Position 8: 166mV (black at 42", red at 48") (-3mV)

Notice the pattern: each six-inch step shows a voltage drop of approximately 3mV. This is normal rail resistance at work. The voltage decreases steadily because you're measuring progressively more rail resistance as you move away from the power source.



Why six inches? It's a practical compromise after years of testing. Smaller spacing like three inches gives higher resolution but requires more measurements. Larger spacing like 12 inches is faster but might miss subtle faults. Six inches hits the sweet spot for most applications.

The absolute voltage values don't matter much – what matters is the consistency of the drops. On healthy track, you'll see drops in the 2-4mV range per six-inch section, depending on rail size, condition, and current level.

As you walk the probes, watch for deviations from this pattern.

Faults reveal themselves in two ways:

1. **Sudden rate changes** – the voltage drop suddenly jumps from 3mV to 14mV in a single step, then returns to normal.
2. **Progressive voltage collapse** – the voltage drops steadily toward zero, reaches 0-2mV at a specific location, then increases again on the other side.

I'll explore these fault signatures in detail in the next two sections. For now, focus on establishing the rhythm of probe walking, and recognizing what normal track looks like in your data.

Practical tips:

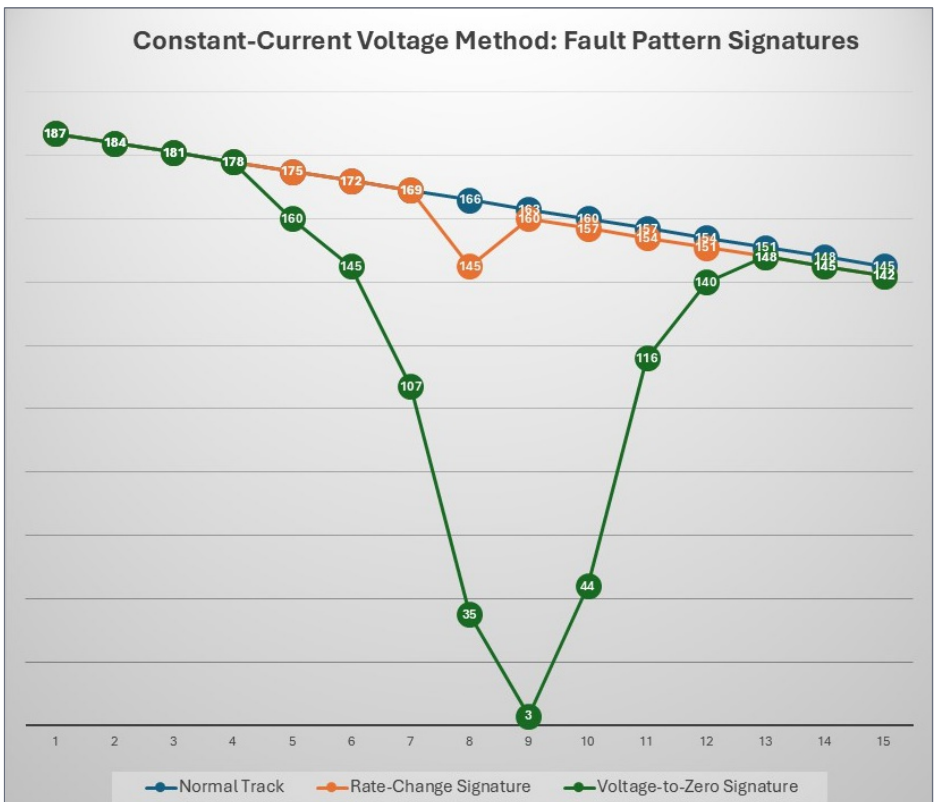
- Use a ruler for consistent probe spacing – inconsistent spacing creates false patterns.



- Mark positions with masking tape every 12 inches along the rail to record where you are, and return to specific locations.
- Always move probes in the same direction: Farther from the power connections. This keeps your data consistent.

Don't skip sections. It's tempting to jump ahead when readings look normal, but faults can appear anywhere. Complete the walk systematically.

Watch the lamp – if it suddenly brightens or dims, note that in your log. These visual cues often correlate with voltage anomalies.



5. This chart shows the two different signatures you may find when walking the probes, as compared to a normal track signature (no faults).

After 20-30 measurements, take a break. Fatigue leads to mistakes like misreading displays, skipping positions, forgetting to power-off.

RECORDING YOUR DATA

You will want to keep records of each test, including its position, voltage, delta (change from previous test), and any other notes you might have (lamp very bright, clip slipped, etc.”). A permanent record that’s easy to review with a delta column that reveals delta patterns instantly is a real advantage. Use whatever method suits you best, but be systematic in capturing every reading so you can find the patterns!

You have three choices for recording data:

Written log: I typically use a written log – classic notebook and pen. I set up columns for Position, Voltage, Delta, and Notes. Position documents my measurement location, Voltage records the millivolt reading, Delta shows the change from the previous reading (making patterns obvious at a glance), and Notes captures observations like “lamp very bright” or “clip slipped.” The advantage? A permanent record that’s easy to review, with the Delta column revealing patterns instantly. The disadvantage: you have to stop to write.

Voice recorder: Some modelers prefer speaking each reading into their phone’s voice recorder. The advantage is hands-free operation and speed. The disadvantage: you’ll need to transcribe later. Most smart phones have a voice-to-text feature that can assist, but these virtual assistants are notorious for their misunderstood words.

Helper: If you have a helper, having them record readings while you operate the probes is fastest and most accurate – but it requires a second person.

Choose whatever works for your situation. The key is capturing every reading so you can find the patterns.

FAULT SIGNATURE EXAMPLE #1: RATE-CHANGE DETECTION

Let's look at an example. You've been walking the probes for several minutes, recording steady 3mV drops at each position. The rhythm is straightforward and dull: position, power, wait, record, off, move.

Suddenly, at Position 12, the reading jumps to 17mV – a 14mV drop instead of the usual 3mV.

Your attention snaps into focus. You've found something.

This is **rate-change detection** – the first of two fault signatures you'll encounter.

Here's what rate-change detection looks like in your data:

Position 9: 187mV (-3mV from Position 8)

Position 10: 184mV (-3mV)

Position 11: 181mV (-3mV)

Position 12: 167mV (-14mV) ← ANOMALY

Position 13: 164mV (-3mV)

Position 14: 161mV (-3mV)

Position 15: 158mV (-3mV)

The pattern is clear: steady drops spike at one position, then return to normal. The voltage drop at Position 12 is nearly 5 times larger than surrounding positions.

This rate-change signature points to a localized resistance anomaly between Position 11 and Position 12 – somewhere in that six-inch section. Something in that zone is adding extra resistance, causing the larger drop in voltage.

Common culprits include:

- **Metal debris** – a wire fragment, metal filing, or dropped screw creating a partial short between the rails
- **Damaged rail joiners** that have been compressed or corroded
- **Cold or cracked solder joints** at a feeder or rail connection



- **Contamination** from conductive scenery material like metallic paint or graphite powder bridging the rails

RATE-CHANGE FAULTS ARE LOCALIZED

The resistance anomaly exists at a specific point, not distributed along the track. Current flows normally before and after the fault, but hits extra resistance at the fault location.

To pinpoint the exact spot:

Mark the section with masking tape at both probe positions to bracket the six-inch fault zone.

Then reduce your step size – move the probes in 2-inch or 3-inch increments within that section and take new readings:

Position 11: 241mV

Position 11+2": 237mV (-4mV)

Position 11+4": 228mV (-9mV) ← Fault is here

Position 11+6": 227mV (-1mV)

You've now narrowed the fault to a two-inch section – precise enough for detailed visual inspection.

Turn off the power pack. Use your LED flashlight and magnifying visor to examine the identified section closely. Look between the rails, under the rail base, and at any nearby components.

At first, nothing is visible.

Then, using a dental pick to probe between the ties, you find a tiny piece of brass wire – maybe 1/8 inch long – bridging an insulated gap at the frog. It's completely hidden by ballast.

In this example, the contact path the wire makes through the ballast glue residue is imperfect and high resistance. This varying resistance shows up as a rate-change signature rather than a voltage-to-zero collapse.

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If you remove the wire, and the fault disappears, then you've found it!

Rate-change detection works because the anomaly is dramatic. A $5\times$ increase in voltage drop isn't subtle – it jumps out of the data. You don't need statistical analysis or curve fitting. You just need to recognize that one number is much larger than its neighbors.

This robustness makes the method forgiving. Even if your probe spacing isn't perfectly consistent, or your power pack voltage drifts slightly, the rate-change signature remains obvious.

Occasionally, you'll see a rate change that doesn't correspond to a visible fault. This happens if:

- The fault is intermittent and not active during inspection
- It's inside a component like a turnout frog or rail joiner
- It's in wiring beneath the layout

In these cases, you may need to:

- Induce the fault if possible
- Disassemble components for internal inspection
- Trace feeder wires and check connections

In most cases, though, rate-change detection leads directly to a visible, fixable fault.

FAULT SIGNATURE EXAMPLE #2: VOLTAGE-TO-ZERO DETECTION

Let's do another example to show how voltage-to-zero detection reveals something more dramatic: a clean, low-resistance short circuit. This signature is equally unmistakable, but the pattern looks completely different.

Here's what voltage-to-zero detection looks like in your data:

Position 1: 187mV

Position 2: 184mV (-3mV)

Position 3: 181mV (-3mV)

Position 4: 178mV (-3mV)



Position 5: 174mV (-4mV)

Position 6: 168mV (-6mV)

Position 7: 159mV (-9mV)

Position 8: 146mV (-13mV)

Position 9: 127mV (-19mV)

Position 10: 99mV (-28mV)

Position 11: 58mV (-41mV)

Position 12: 1mV (-57mV)

Position 13: 1mV (-0mV) ← ZERO POINT

Position 14: 57mV (+56mV)

Position 15: 111mV (+54mV)

Position 16: 160mV (+49mV)

Position 17: 188mV (+28mV)

The pattern is dramatic: voltage drops accelerate as you approach Position 13, reaching nearly zero. Then voltage climbs back up.

The zero-voltage point marks the exact short circuit location.

WHAT THIS MEANS

A voltage-to-zero signature indicates a very low-resistance path between the rails at a specific location. Current is diverted through this short, bypassing the normal track path.

Electrically, the short circuit “pulls” current toward it from both directions. As you walk the probes toward the short, you’re measuring the voltage drop across progressively less rail – current is diverted at the short.

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When you reach the short, there's essentially no voltage difference between the rails because they're electrically connected.

Voltage-to-zero signatures typically indicate a few common culprits:

- **Solder bridges** – excess solder connecting both rails, often at turnout frogs or rail joints
- **Bare wire contact** where a feeder or bus wire touches both rails
- **Metallic debris** like a screw, washer, or wire clipping bridging the rails
- **Damaged insulation** where insulated rail joiners have failed, allowing direct rail-to-rail contact
- **Turnout frog shorts** where frog points touch both rails simultaneously due to misalignment

The key characteristic: these are clean shorts with very low resistance, often less than 0.01 ohms. They're direct electrical connections.

The voltage-to-zero signature gives you exceptional precision. The zero-voltage point (Position 13 in the example above) pinpoints the short circuit location, accurate to within your six-inch probe spacing.

To confirm:

1. Mark the zero point with masking tape at Position 13
2. Verify from both directions – walk the probes from the opposite direction to confirm voltage approaches zero from both sides. This rules out measurement errors
3. Power off and examine the marked location

With voltage-to-zero signatures, the fault is usually visible once you know where to look.

Why voltage-to-zero signatures are unmistakable

Unlike rate-change signatures, which show a 3-5x increase, voltage-to-zero signatures show a complete collapse – from

hundreds of millivolts to nearly zero [5]. This makes them impossible to miss.

The progressive nature of the collapse also confirms you've found something real. You're not looking at a single anomalous reading that could be a measurement error. You're seeing a clear trend over multiple positions, all pointing to the same location.

It's worth understanding when you'll see each signature type.

Rate-change detection indicates partial shorts, high-resistance faults, or localized anomalies. The fault adds resistance but doesn't completely divert current.

Voltage-to-zero detection indicates clean shorts, low-resistance faults, or direct connections. The fault diverts most or all current.

Both signatures are equally valid and useful. They just represent different electrical problems. Your job is to recognize whichever pattern appears in your data and follow it to the fault.

WHEN YOU DON'T FIND A CLEAR SIGNATURE

You've walked the probes systematically across the entire section. The lamp glows. The multimeter reads voltage. But you're not seeing a clear rate-change or voltage-to-zero signature. What now?

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Intermittent faults: Try inducing the problem

Some faults only appear under specific conditions. Try:

- Tapping the track gently with a screwdriver handle to simulate vibration
- Flexing the track slightly by pressing down on it
- Wiggling turnout throw bars and point rails
- Adjusting room temperature if possible – thermal expansion or cracked solder joints may trigger the fault

After each attempt, repeat the voltage walk. If the fault activates, you'll see the signature appear.

Fault outside your test section: Expand the search

The fault may be in an adjacent section, in the bus wiring beneath the layout, or in a turnout you didn't include.

- Extend your voltage walk into sections on either side of your original test area
- Disconnect track feeders and test the bus wires directly – a short where two wires touch will affect all connected sections
- Isolate turnouts and crossings and test each separately. Frog shorts often hide in complex trackwork

Subtle faults: Reduce step size

High-resistance faults like corroded joiners create voltage signatures only 1-2x larger than normal.

Re-walk the section with 3-inch probe spacing instead of six-inch. This doubles your resolution and may reveal subtle signatures that were hidden.

With six-inch spacing, a subtle fault is easy to miss:

Position 1: 187mV

Position 2: 184mV (-3mV)

Position 3: 180mV (-4mV) ← Could be normal variation

Position 4: 177mV (-3mV)



With 3-inch spacing, the same fault becomes obvious:

Position 1: 187mV

Position 1+3": 185mV (-2mV)

Position 2: 184mV (-1mV)

Position 2+3": 182mV (-2mV)

Position 3: 180mV (-2mV)

Position 3+3": 176mV (-4mV) ← Clear anomaly

Position 4: 177mV (+1mV)

WEIGHT-DEPENDENT FAULTS

Some shorts only appear when equipment weight compresses the track. This means rails are making contact under load at frog gaps, reversing section boundaries, or block boundaries where polarity changes.

The most common culprit: uninsulated frog gaps. If you cut the rail and left an air gap instead of filling it with styrene, weight compresses the rails together. Reversing section boundaries and DC block boundaries need physical insulators – not air gaps.

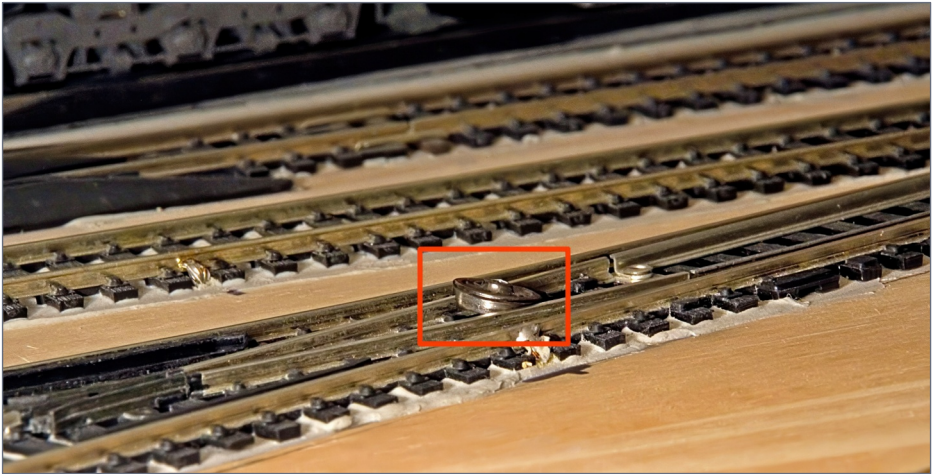
To test: Run a locomotive slowly through the section and mark where the short trips. Place a brick wrapped in a towel or sand-bag (1-3 pounds) on the marked spot. Turn on your DCC system – if the short trips with the weight in place, you've confirmed it's load-dependent. Connect your constant-current circuit and perform a voltage walk with the weight still there. The fault should appear as a voltage-to-zero signature at the gap location.

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To fix: Remove rail joiners at the gap, cut a thin styrene strip (0.010-0.020"), apply CA glue, press it into the gap, let it set up completely (overnight is ideal) and then trim to the rail contour with a fresh sharp hobby knife blade. Test with weight applied – the short should be gone.

MOTION-DEPENDENT FAULTS: SWITCH METHODS

If the fault only appears when rolling stock is moving – from vibration, wheel bounce, or dynamic forces – static testing won't catch it.



6. I had a mystery-short in my Siskiyou Line 1 staging yard. The yard was up high (near eye level), so it was hard to spot track anomalies, and it was also about 6" below some furnace duct work so it was dark and cramped down under there. Walking the track isolated the fault that became clearly visible once I knew where it was, and could get some strong light into the area – a metal wheel wedged between two turnout closure rails. After this, I swore-off metal wheelsets with plastic axles – too easy to break off in a bad derailment.

Switch to Method B (clamp ammeter with a locomotive running) to find faults that only appear in when running trains.

WHEN ALL ELSE FAILS ...

If you've exhausted the troubleshooting approaches and still found nothing, double-check your equipment. A meter's failing battery or weak probe connection can give false readings and mask a real fault. Run these quick checks before giving up on the section:

- Check your multimeter battery.
- Inspect test leads for frayed wires or corroded probes.
- Examine alligator clips for dirty or weak contact.
- Check the lamp bulb – a failing bulb won't provide consistent current.
- Verify your power pack delivers stable voltage.

To test equipment: Connect the multimeter directly across the power pack terminals with no track and no lamp – you should see stable voltage. Add the lamp – the meter should read 12V-14V with the lamp glowing.

If the equipment is okay...

Once you've double-checked your equipment and it's fine, then you're left with one more answer: sometimes the absence of a signature is your answer.

If you've walked the entire section, tried to induce the fault, expanded your search, reduced step size, and verified your equipment – and still found nothing – the fault may not exist in that section. This is valuable information. It tells you to look elsewhere.

Ghost short diagnosis is iterative. You test, learn, adjust, and test again. Don't be discouraged by dead ends – each test narrows the possibilities.

FINAL THOUGHTS

You've traveled from Ohm's Law to the workbench.

Method C is most valuable for ghost shorts that survive simpler diagnostic methods, intermittent faults that appear sporadically, load-dependent shorts triggered by equipment weight, and high-value layouts where precision matters. It is not effective for motion-dependent faults that only appear when trains are running – those require Method B's dynamic testing approach.

When you encounter that stubborn ghost short, you'll be glad you learned this method.

Next month we will wrap up with some general short-prevention tips.

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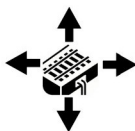
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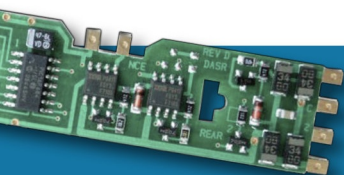
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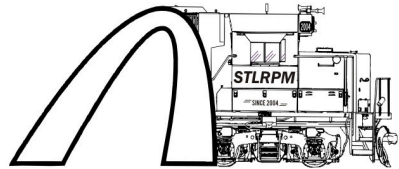
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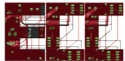
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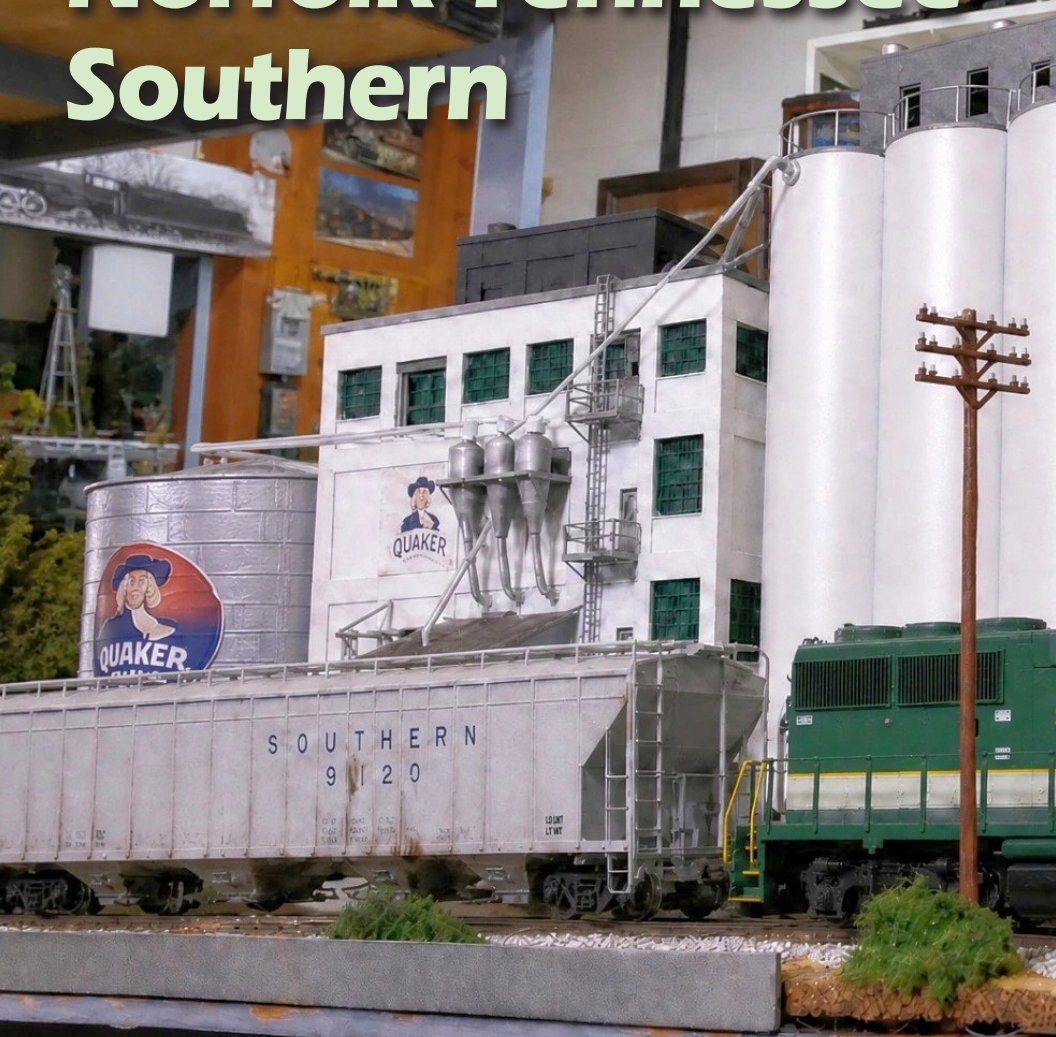
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Allen Pittman's Norfolk Tennessee Southern



THE MRH STAFF COVERED VISITS THIS TWO-
LEVEL LAYOUT WITH A LEGACY BUILT ON
FAMILY, PATIENCE, AND QUAKER OATS ...



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July 27-Aug 2, 2026

1. Allen's signature Quaker Oats factory complex is featured on this month's cover of MRH (inset). Here we see the same scene without the photoshopped sky.

Model Railroad Hobbyist | June 2026



WITH THE NMRA CONVENTION IN CHATTANOOGA JUST WEEKS AWAY,

let's look at another layout on tour: Allen Pittman's Norfolk Tennessee Southern. The layout showcases its owner's passion for trains in a modest space, and tells you immediately whose world you're visiting.

Look at the fascia and you'll see John Wayne Boulevard called out. Study the layout and you'll find more – a theater showing John Wayne films, and a cafe named after the Duke. These personal touches make the layout memorable.

ABOUT THE LAYOUT AND ITS FAMILY LEGACY



Allen Pittman

The Norfolk Tennessee Southern is a two-level HO layout occupying most of a dedicated alcove in Allen's garage. The levels aren't connected by track – they're two separate railroads stacked vertically, with DC power on the bottom and Digitrax DCC on top.

Together they give Allen over 80 feet of main line, 45 turnouts, and the ability to run up to five trains simultaneously (three on the lower level, two on the upper). He's collected more than 300 freight cars over the decades, and the layout features everything from switching operations to rolling terrain and rocky hills.

But here's what makes this layout story worth telling: there's a significant family story behind it – one that Allen will share as we talk about how this layout came to be.



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GETTING STARTED IN THE HOBBY

MRH Staff (Joe Fugate): Allen, how did you first get into model railroading?

Allen: I got a train set for Christmas in 1971. My dad brought home a piece of plywood and said, "Now build a railroad." That's how it started. I was hooked immediately.

MRH: So your father was the catalyst?

Allen: Absolutely. He encouraged me from the beginning. We built layouts together, and he was always supportive. He saw the lower level completed, but unfortunately, he passed away before I built the upper level. My greatest wish is that he could have seen the whole thing finished.

MRH: Tell me about the Quaker Oats plant on your layout.



2. Overview showing the two-level layout structure and modest layout size.

Allen: That's a really important feature for me. My dad worked for Quaker Oats for almost 40 years. That's where he met my mother – they both worked there.

So having that plant on the layout means a lot to me. It's a major industry on the lower level with good switching opportunities, but it's also a personal connection to my family history.

MRH: That's a wonderful tribute. You mentioned to us before the interview you have friends who share that connection.

Allen: Yes, I do. My good friend Chuck Overby – his father also worked for Quaker Oats. Chuck is building a Quaker Oats structure on his own layout right now, and I'm helping him with it.

It's interesting how these family connections carry through into the hobby.



3. Another view of the Quaker Oats plant on the lower level.



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THE LONG JOURNEY TO THE NORFOLK TENNESSEE SOUTHERN

MRH: What happened after that first layout with your father?

Allen: I joined the Chattanooga Area Model Railroad Club and stayed active in the hobby. My dad and I built several layouts together over the years.

Then in the 1980s, I boxed everything up and stored it at my father's house. Life got busy.

I came back to it in 1991 and built another layout. But this current layout – the Norfolk Tennessee Southern – I started the lower level in May of 2003, right after I retired. That's when I finally had the time to do everything I had been wanting to do.

MRH: So retirement gave you the opportunity to really commit to a major project?

Allen: Exactly. I had the time, the space, and the determination to build something substantial. I'd been collecting equipment for decades, and I finally had the chance to put it all together as a nice place to run the trains.

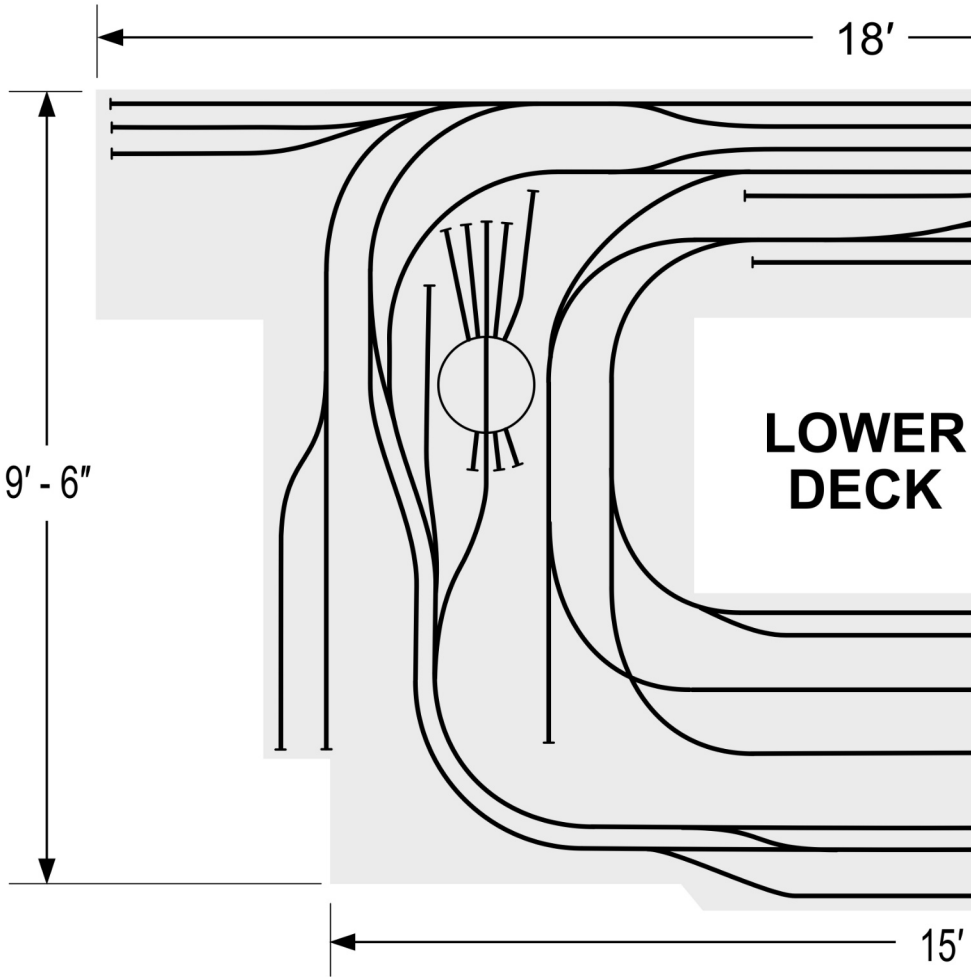
EXPLAINING THE LAYOUT TO NON-MODELERS

MRH: When someone who's not a model railroader asks what you do, how do you explain it?

Allen: I tell them it's a journey. It requires carpentry skills, electrical knowledge, painting, planning – all kinds of different talents. You learn as you go.

It's not something you do in a week or even a month. It's a step-by-step process where you develop skills over time.

Some people focus on one aspect, like scenery or operations, and that's fine. There's room for everyone's interests.



Allen Pittman's Norfolk Tennessee

HO scale - Core deck size

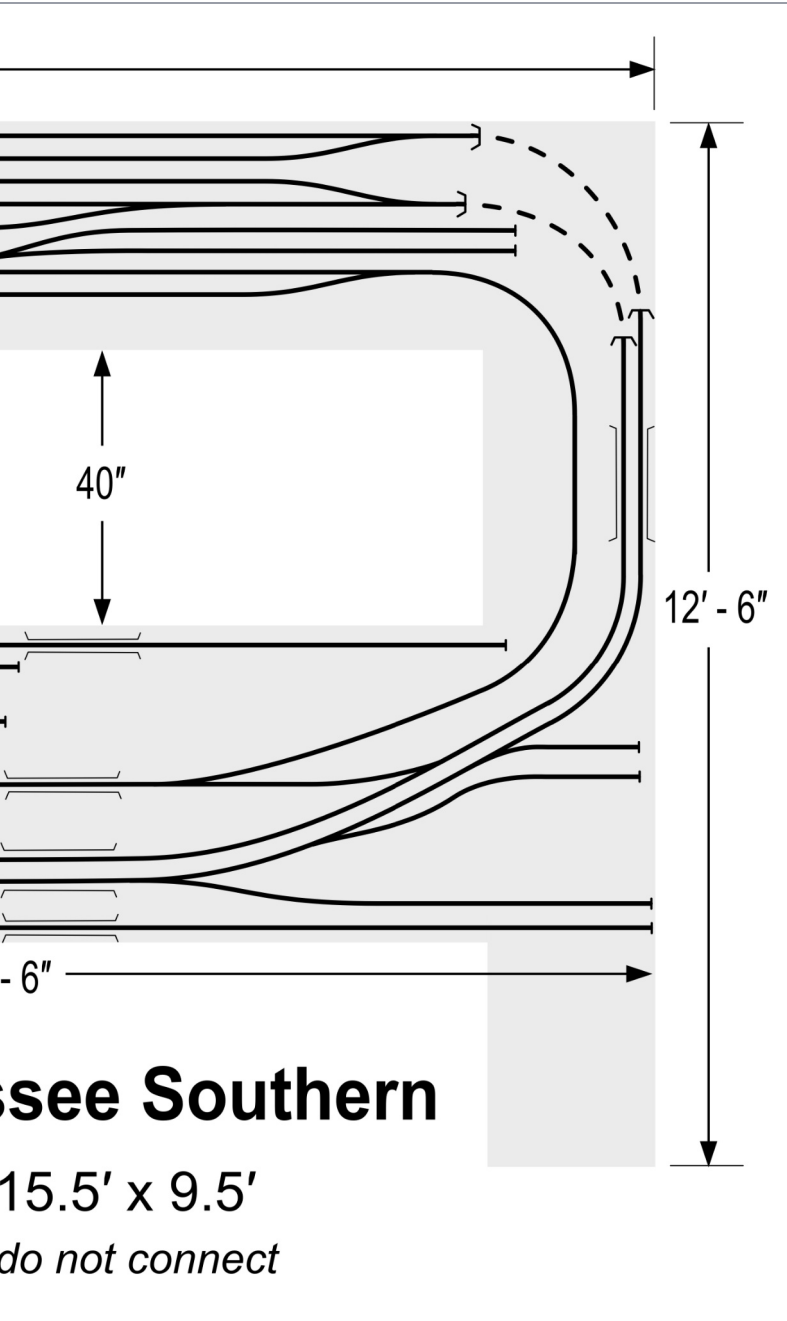
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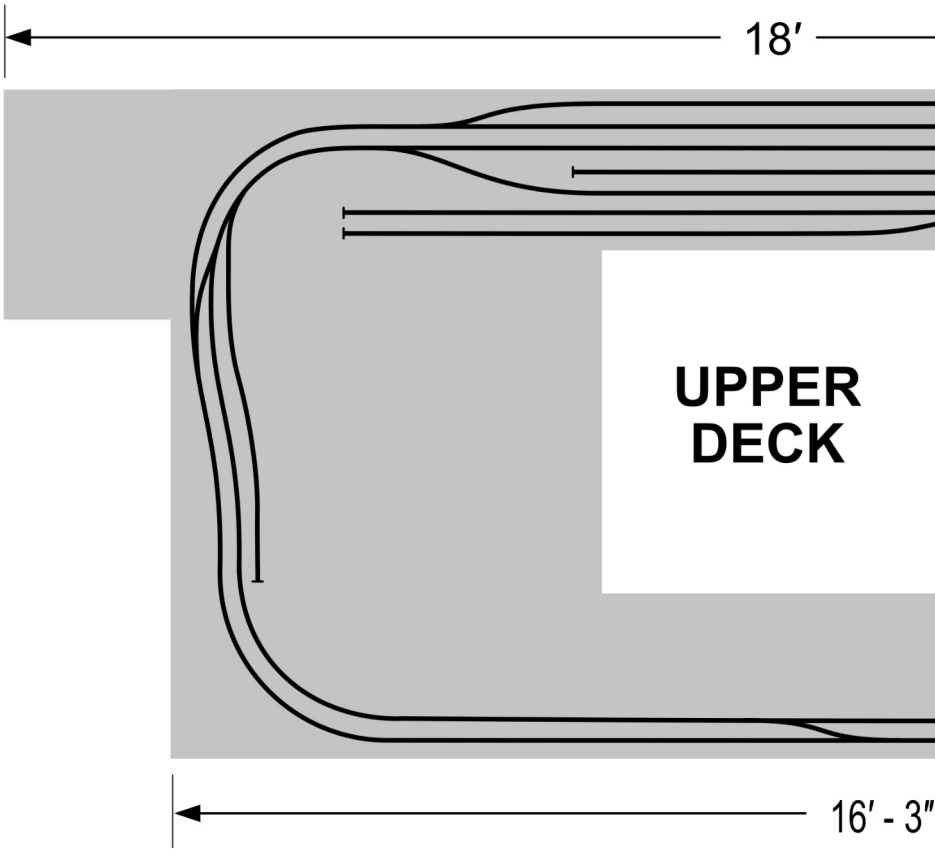


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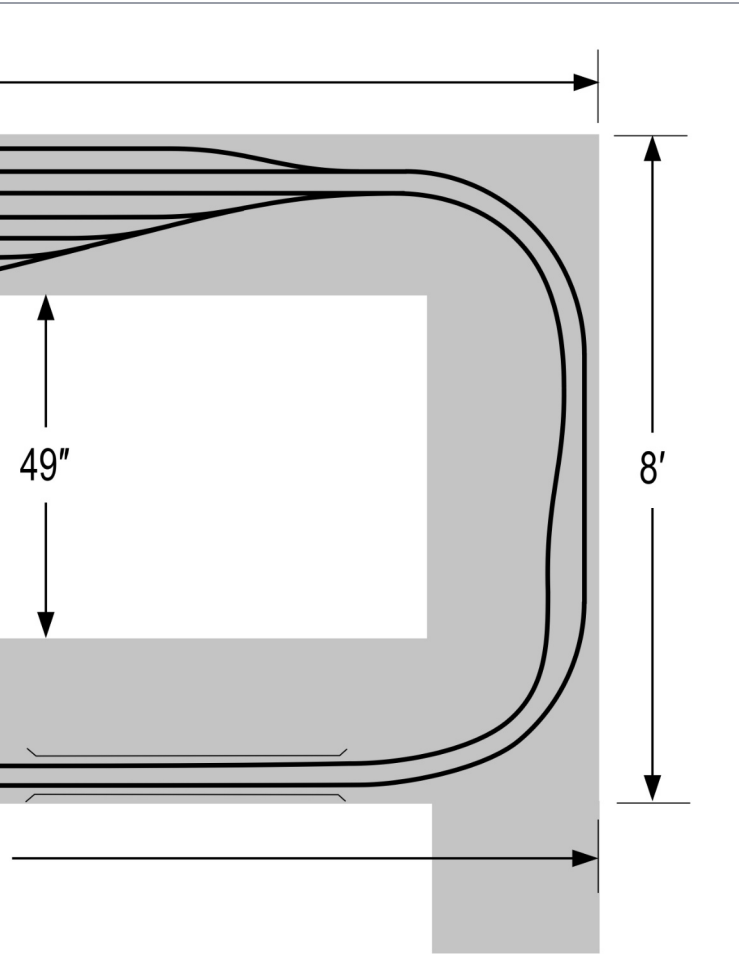




Allen Pittman's Norfolk T

HO scale - Core deck s

Note: Decks are independent,



Tennessee Southern

size 16.25' x 9.5'

they do not connect

5. Track plan for the upper level.

THE NORFOLK TENNESSEE SOUTHERN: AN OVERVIEW

MRH: Give us the big picture. What are we looking at with the Norfolk Tennessee Southern?

Allen: It's a two-level HO layout. The footprint is about 15-and-a-half feet by nine-and-a-half feet.

The two levels are completely separate – no helix connecting them. I can run three trains on the lower level and two on the upper level, so five trains total if I want to.

The lower level has the industrial complexes – Quaker Oats, Roberts Printing, a Jeep manufacturing plant – plus a turntable and roundhouse. The upper level has a larger freight yard and more scenery.

MRH: How much mainline are we talking about?

Allen: Over 80 feet of main line total, with about 45 turnouts. Minimum radius is around 22 inches. I've got over 300 freight cars, so I needed that big yard on the upper level.

MRH: When did you decide to build upward instead of outward?

Allen: That was in 2017. I'd finished the lower level and wanted to expand, but I didn't have room to go outward. So I thought, why not build upward?

It was the perfect solution. I could add more operating capacity and scenery without taking up any additional floor space.

PROTOTYPE AND ERA

MRH: Is this a prototype-based layout or freelanced?

Allen: It's freelanced, but I model Southern, Norfolk Southern, and CSX – the railroads through Chattanooga. The era is mainly 1970s to mid-1980s, though I'll run some modern equipment occasionally just because I like it.



MRH: So you're drawing inspiration from local railroads, but giving yourself creative freedom?

Allen: Exactly. I wanted it to feel like Chattanooga railroading without being locked into strict prototype accuracy. Freelancing gives me the flexibility to model what I enjoy.

PLANNING AND BUILDING THE LOWER LEVEL

MRH: Let's talk about how you planned the lower level. What were your goals?

Allen: I wanted to run two or three trains in opposite directions, with multiple switching opportunities. I knew I wanted those industrial complexes – especially Quaker Oats – and I had a turntable and roundhouse from my earlier collection that I wanted to preserve.



6. This display commemorates Allen's love of the hobby he shared with his late dad and the family ties to Quaker Oats.

So I started sketching ideas on scrap paper, figuring out how to fit everything in: Big loops, bridges, creeks, and all the features I wanted.

MRH: Did you use any track-planning software?

Allen: No, I'm old school. I sketched it out by hand and then just started building. The construction unfolded organically from those core needs.

MRH: When did construction begin?

Allen: May, 2003. I'd already prepped the room – painted the walls and ceiling – and then I started building benchwork. Once the benchwork was up, I laid track and started wiring. It was methodical.



7. One of Allen's other interests is fire engines. Here you see a cutaway of the local firehouse. Also see [9].



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THE UPPER LEVEL: BUILDING UPWARD

MRH: What were your goals for the upper level?

Allen: I wanted to run two trains and have a much larger freight yard to handle all those freight cars I'd collected.

But the big difference was scenery. The upper level has minimal industries – it's really about the landscape. Mountains, rivers, bridges, towns, buildings. I wanted to showcase the detail work I love.

MRH: How challenging was it to build above the existing lower level?

Allen: It was slow and careful. I was working full-time when I started the upper level in 2017, so I didn't have as much time as I'd had for the lower level.

I had to be careful not to damage anything below while building the benchwork above. But it turned out even better than I expected.

CHALLENGES AND OBSTACLES

MRH: What was your greatest challenge building this layout?

Allen: Honestly, my greatest challenge is wishing my father had lived to see it finished. He saw the lower level, and he was so proud of it. But he passed away before I built the upper level.

I think about that a lot. I wish he could see what it became.

MRH: That's would have been great for sure. Were there any construction challenges that stand out?

Allen: The biggest surprise was when Hobby Town here in Chattanooga suddenly closed while I was building the upper level. That was my main source for supplies, and suddenly it was gone.



8. Scenic section on the upper level with river, bridge, and rock cliffs showing off Allen's detail work.



9. Detailed view of the town on the upper level showing the small-scale scene detailing Allen enjoys.

I had to scramble to buy up what inventory they had left and then pivot to ordering everything online, mostly from Walthers. It wasn't a disaster, but it definitely disrupted my workflow.

MRH: But you adapted and kept going?

Allen: You have to. That's part of the hobby – problem-solving. You figure it out and keep moving forward.

WHAT WORKS AND WHAT DOESN'T

MRH: What do you like most about your layout?

Allen: The scenery and the small details. I'm very detail-oriented, and I've put a lot of effort into the scenery details.

Every little building, every tree, every rock formation – that's where my focus has been, and I'm happy with how it came together.

MRH: And what would you change if you could start over?

Allen: Accessibility. I wish I had more walking space around the layout. Right now there are tight spots where you have to duck under to reach the back. If I were building it again, I'd center the layout in the room so I could walk all the way around it. That would make maintenance and scenery work much easier.

SCENERY AND BACKDROPS

Scenery is where Allen's real passion lies.

MRH: Tell me about your scenery techniques.

Allen: I'm old school. I use plaster over newspaper and screen wire for the basic landforms. Then I rely on Woodland Scenics products – ground foam, trees, bushes. The backdrops are from Walthers, mounted on thin fiberboard. I've got rock formations across the entire back wall to create that hilly terrain.

MRH: What season are you modeling?

Allen: Summer. Everything is green and bloomed-out. I like that lush, full look.

MRH: What height did you build the lower level at?

Allen: 42 inches. That's comfortable for working, and gives a good viewing angle. You can see the details without straining. The upper level is 18 inches above that.

MOTIVE POWER

MRH: What kind of locomotive roster do you have?

Allen: It's pretty varied. I've got Scale Trains, Walthers, Athearn, Bachmann – a mix of manufacturers. I love SD40-2s and GP30s. I don't have many steam engines, mostly diesel.

But I do have one special locomotive – a Civil War-era DC engine that my grandmother gave me for Christmas in 1974. It



10. Looks like the local police are out in force today as a Southern train rumbles by.



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still runs, and I operate it occasionally. That one's got a lot of sentimental value.

MRH: So you've got equipment spanning from the 1970s to modern?

Allen: Absolutely. Some of those old Athearn Blue Box locomotives from the early days with my father are still running. And then I've got brand-new stuff too. It's a mix of old-school and new technology, and they all run great.

ROLLING STOCK

MRH: Tell me about your freight car collection.

Allen: I've got over 300 freight cars. A lot are Athearn Blue Box cars from the early 1970s that I bought with my father. I've also got plenty of Walthers Mainline cars, especially refrigerator cars. Lots of hoppers and boxcars. I've got one container train with stacked containers. But mostly it's traditional freight – this is a freight-hauling railroad.



11. Looking down John Wayne Boulevard on the upper level.

MRH: Do you run passenger trains?

Allen: Occasionally, but not often. I've got a few passenger cars, but this layout is really designed for freight operations.

STRUCTURES

MRH: What's your approach to buildings and structures?

Allen: I've got a mix of everything. Kit structures from Walthers and other companies, some scratchbuilt buildings, some kitbashed. I've got a Hillside Lumber Mill from the early 1970s that's still on the layout and still looks great. Every era is represented – old kits, new kits, custom work. Whatever fits the scene and tells the story I want to tell.

CONTROL SYSTEMS: DC AND DCC

MRH: What control system are you using?



12. Movie theater showing John Wayne movies.



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Allen: I'm using both DC and DCC. The lower level runs DC – the original system from when I built it in 2003. The upper level has Digitrax DCC, which I installed about a year ago with help from a friend.

MRH: Why keep both systems?

Allen: Because I have a lot of DC locomotives I wanted to preserve and run. Some are older, some are newer, but they all run extremely well on DC. I didn't want to convert everything or retire perfectly good engines. This way, I can run anything in my collection.

THE TEDIOUS WORK

MRH: What's the least favorite part of layout building for you?

Allen: Signal wiring. It's tedious, time-consuming, and hard to reach. I don't enjoy crawling under the layout to run wires and connect signals. But I love the hobby, and I want things to work properly, so I push through it. You do what needs to be done.



13. Local café named after John Wayne.

DOING A LAYOUT WELL

MRH: What does it take to build a layout really well?

Allen: Planning, skills, and good benchwork. But the most important thing is taking your time with trackwork.

If you rush the trackwork, you'll create headaches down the road. You need a good base, proper trackwork, and patience. Those are the three pillars.

Get those right, and everything else follows.

ADVICE FOR BEGINNERS

MRH: What advice would you give someone just starting out in the hobby?

Allen: Patience, planning, and research. Do it right.

This is not a one-week project. You have to take your time, do your research, and approach it methodically.



14. Bridge scene on the lower level showing Allen's trackwork and ballasting.



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Respect the process, and you'll get better results. Don't rush. Enjoy each step.

THE HOBBY TODAY

MRH: What do you think about the state of the hobby today?

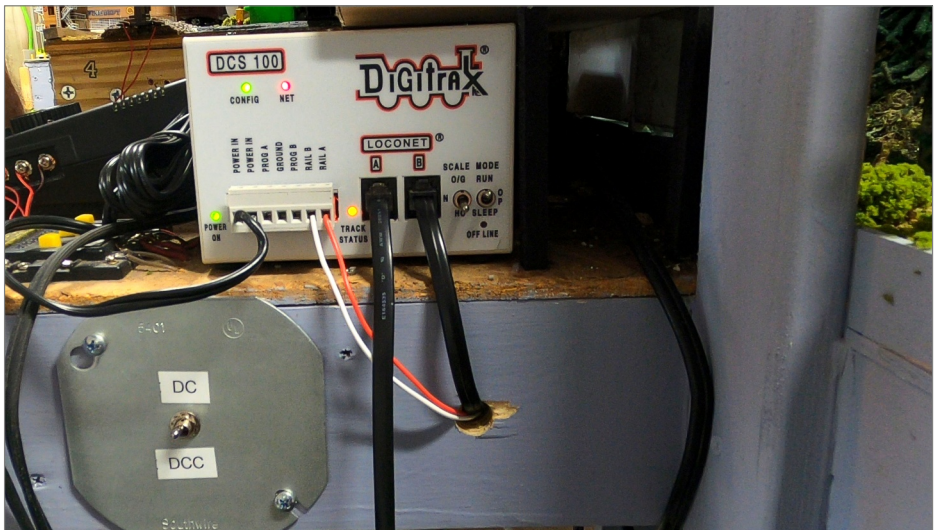
Allen: I'm concerned that young people are missing out. They're so absorbed in phones and social media that they don't discover hobbies like this.

And that's a shame, because model railroading offers so many skills – carpentry, electrical work, planning, design, scenery. There's room for different interests and specialties.

And the community is wonderful. People are eager to help and share knowledge.

MRH: Do you think the hobby can attract younger people?

Allen: I hope so. It has so much to offer. But it requires stepping away from screens and engaging with something physical and creative. That's a tough sell in today's world.



15. On the upper deck, Allen can switch between DC and DCC.

MRH: Have you done any operating sessions on the layout?

Allen: Not yet, but I'm open to it. With the switching opportunities on the lower level, I could easily host a couple of guys for an operating session. It's something I'd like to try.

A WONDERFUL THING

MRH: Looking back over your decades in the hobby, what does model railroading mean to you?

Allen: It's been a wonderful thing. I have so many fond memories – happy hours working on layouts and running trains.

I think about my father and how he encouraged me from the very beginning. That Christmas train set in 1971, him bringing home that plywood and saying, "Now build a railroad." That started a journey that's lasted my whole life.

This layout represents that relationship and all that growth. I just wish he could see it finished.



16. Allen running trains on the upper deck using DCC.



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SEE IT IN PERSON

Want to see Allen's layout in person? Allen is opening the Norfolk Tennessee Southern on Wednesday and Friday during the 2026 NMRA National Convention in Chattanooga, scheduled for late-July and early August.

You'll see 50 years of dedicated collecting and building – the freight cars, the scenery, the switching operations, and all those personal touches that make it uniquely his.

Who knows? It might just inspire you to tackle your own layout project.

For more information about the 2026 NMRA National Convention in Chattanooga, visit the [NMRA 2026 Scenic City Express website](#). ✓

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17. Another overall layout view showing both levels and the scope of Allen's achievement.

WEATHER

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To this ...



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Guide to legacy freight car upgrades



1. Both these cars began as \$12 Athearn Ready to Run cars. Forum user Steve P. ([ezlyamuzd66](#)) upgraded the car at right with Kadee couplers, A-Line stirrup steps, a Kadee brake wheel, painted trucks, and careful weathering. *Photo by Steve P. ([ezlyamuzd66](#))*



Model Railroad Hobbyist | June 2026

JOE FUGATE ON WHEN IT MAKES SENSE TO UPGRADE OLDER CHEAP MODEL RAILCARS ...

TWO HOURS AND 10 DOLLARS SEPARATE THE TWO D&RGW BABY HiCube boxcars in [1].

The question isn't whether legacy freight cars can compete with premium models – it's when they're worth upgrading versus replacing.

Dom Bourgeois nailed it in a recent *MRH* forum thread:

I have a rather sizable freight car roster that I've accumulated over the last 40-something years as a model railroader. I've made an effort to at least weather them to varying extents.

His question: When does upgrading make sense versus buying modern replacements?

Walk any train show and you'll find Blue Box cars, Roundhouse cars, and older Accurail kits for under \$20, sometimes even under \$10. They're also plentiful on eBay.

If you can find a bulk deal, you may even get it down to seven or eight dollars per car. These legacy cars are cheap, plentiful, and often dismissed as "train-set quality" by modelers chasing modern, highly detailed releases for \$50 plus.

Upgraded with Kadee couplers, metal wheelsets, wire grab irons, and weathering, legacy cars can hold their own next to premium models.

An *MRH* forum thread I'm drawing from for this article delivered practical wisdom from modelers who've traveled this road: Scott Chatfield, Kevin Parson, Larry Barnard, and others. They shared a decision framework for choosing which cars deserve attention, then walked through high-impact improvements organized by effort – from simple coupler swaps to advanced kitbashing.

One strategy to build a fleet of cars on a budget is to bulk-up the fleet with legacy cars matching your road and era. Upgrade them with new parts, weathering, and perhaps some new paint and decals. Round out the fleet with premium models, and the entire fleet looks much more detailed.

This article shows how you can put upgraded legacy cars next to those fancy higher-end, and none of your operators will likely realize the difference. Don't believe me? See the sidebar, *The Mark Pruitt test* for a real-life example.

Let's start by figuring out which cars are worth your time.

WHEN TO UPGRADE, WHEN TO WALK AWAY

Before you crack open the box on any bargain bin legacy car, run through this three-step filter:



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J. Fugate

THE MARK PRUITT TEST: WHEN DOES DETAIL REALLY MATTER?

Mark ran an experiment of building two Walthers tank cars side by side to different levels of detail as a direct comparison.

Car number one had a practical upgrade with Kadee couplers, sprung trucks, and basic weathering. The upgrades were all completed in an evening.

Car number two had the full treatment including new stirrups, detailed brake rigging, custom placards, a replacement brake wheel, and any other detail Mark could think of. The process took 15-20 hours.

Then came operating session night.

Mark ran both cars in his consists and got a result that changed everything:

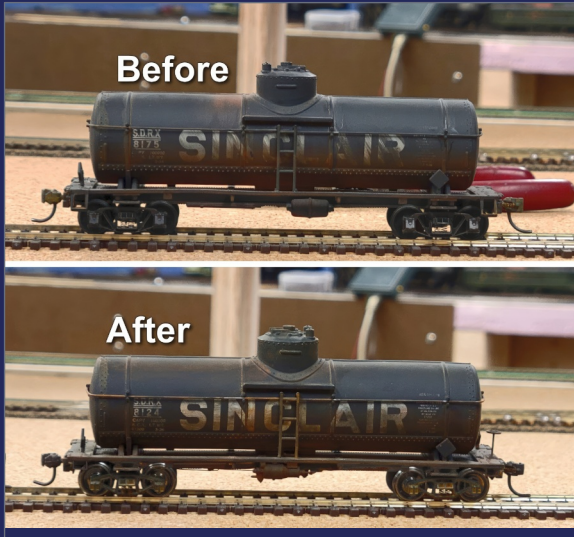
I couldn't tell the difference between them during the session. Nobody else could either. The heavily detailed version didn't stand out. The simpler version didn't look cheap. They both just looked like working freight cars doing their job.

The details that matter during operation are big-picture elements that can be seen from three feet away: **weathering, overall condition, color accuracy, proportions.**

Micro-details – individually applied brake rigging, etched placards, nut-bolt-washer castings – are invisible when that car rolls through your yard buried in a 40-car manifest. It shows a legacy car with simple detail upgrades and consistent weathering will likely not stand out as an oddball in your fleet.

But it's also a cautionary tale: going hog-wild on micro-details won't move the needle for most of your operators. Few will even notice the difference! ■ *Continued on the next page ...*

The Mark Pruitt test: When does detail really matter? *Continued ...*



2. Mark ran two similar cars of different detail level on his layout, and found operators did not see the difference. When both models are nicely weathered, the fine detail variations just are not that noticeable during ops! Weathering suggests high detail.

Step 1: Does the shell have good bones?

Check for warping, cracking, or brittle plastic. If the shell feels fragile or looks damaged, walk away. We're building working freight cars, not restoring museum artifacts.

Step 2: Does it match your era and railroad?

Is it prototypically plausible for your layout? A quick Google search can save hours of wasted effort.

Some cars have fundamental flaws that no amount of upgrading can fix. Dom Bourgeois raised the perfect example: the Athearn chemical tank car modeled at 10,000 gallons when the prototype was 15,000 gallons. That's not a detail problem – the car is simply **wrong**. Walk away from cars with dimensional or capacity errors you can't correct.



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3. MRH forum member *flatpenny* says, “This Athearn CP flat got re-lettered, new stirrups and brake wheel added, white stripes applied on the bulkhead, then faded and lightly weathered. I didn't bother shaving off the grab irons.

Step 3: Is it worth your time?

“I don't spend time upgrading an old model just to make something I can buy a better model of. That's not a good use of my limited modeling time.” – **Scott**

Be honest about your available modeling hours. A coupler swap is realistic. Dreaming of a full repaint but haven't touched the airbrush in six months? Start simpler.

Here's the good news: cost is rarely the barrier. Most comprehensive upgrades total \$15-30 per car. Kadee couplers run \$3-5 per pair, Intermountain wheelsets \$8-10, detail parts are a few dollars each. The real investment is time – that's entirely within your control.

“It's your railroad. Do the cars give you what you model for? Personal satisfaction or pleasure, whatever your personal goal is? Well, there's your answer.” – **Tony**

If a car gives you personal satisfaction when you run it, the upgrade was worth it.

THE THREE-FOOT RULE: YOUR NORTH STAR

If a car looks good from the aisle – roughly three feet away – it’s good enough. Here’s how that translates to real upgrade decisions:

Scenario 1: The car that passes (no upgrade needed)

You’re looking at an Athearn 50-foot gondola. Body proportions are correct, paint scheme is clean, lettering is sharp. The factory grab irons are molded plastic, but they’re properly positioned and not oversize.

From three feet away, this reads as a realistic gondola in a freight consist.

The three-foot test: Hold it at arm’s length. Does anything jump out as obviously wrong or toy-like? No?

The call: Buy it if the price is right, swap the couplers for reliability, and run it. Don’t fix what isn’t broken.



4. Here is a clear example of the three-foot rule. Dom Bourgeois says, “On the left is a brand-new Tangent model, fresh out of the box. On the right is my older pseudo X-58 with a Moloco roof. In this example, I think a decently weathered legacy car looks more realistic in the scene than an un-weathered finely detailed car.”



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5. Here is the Tangent car from [4] now weathered and with a few detail decals added.

Scenario 2: The car that fails (but can be fixed)

You're holding a Blue Box 40-foot boxcar. The body shell is dimensionally sound, and the paint scheme is correct for your era. From three feet away, two things scream "toy" – those thick, shiny plastic grab irons and the pristine factory finish.

The three-foot test: What specifically looks wrong? The grab irons catch light wrong—too thick, too reflective. The paint is too clean. But the car itself – proportions, details, basic accuracy – is fine.

The call: Replace grab irons with wire Detail Associates parts (\$3-5) and add a weathering wash to kill the plastic sheen. Thirty minutes of work, and this car holds its own next to your Tangent models.

Scenario 3: The car that fails (and can't be fixed)

You're looking at that old Athearn chemical tank car. From 3 feet away, something looks *off*. The proportions feel wrong.

You check the specs: the prototype holds 10,000 gallons, but this model's tank diameter and length scale out to maybe 8,000 gallons. The car is fundamentally undersized.

The three-foot test: This fails not because of details, but because of *bones*. The basic structure is wrong. Your eye registers it as “not quite right” even if you can’t articulate why.

The call: Walk away. Don’t buy it. If the foundation is wrong, no amount of upgrading will make it right.

In summary: The three-foot rule keeps you focused on upgrades that actually improve how the car reads in a scene.

Now let’s look at what the forum teaches us about the fastest, highest-impact upgrades.

TIER 1: HIGH IMPACT UPGRADES (5–15 MINUTES)

The foundation: Kadee couplers and better wheels

We start with the non-negotiable upgrade: replacing those factory horn-hook couplers with Kadees. Swapping horn-hook couplers out for Kadees is a must for fleet compatibility and reliability.



Athearn 3-dome tank car



Tangent Scale Models - James Holder photo © 1976 - Monroe LA ICG

TANGENT
SCALE MODELS

gallon three-dome car. Tangent photo courtesy of Tangent Scale Models (see: tangentscalemodels.com/general-american-6000-gal-3-comp-tank-car)

6. Some legacy models aren’t even close, and you should avoid them, such as the Athearn three-dome tank car. It’s essentially a 12,500-gallon single dome tank car with domes plopped either side of the middle dome. Real three-dome tank cars were much smaller, such as the Tangent model of a 6000-



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We'd strongly recommend swapping Kadees in for any plastic knuckle couplers as well for improved reliability and durability.

The swap takes about five minutes per car once you've done it a few times. Pop off the truck, remove the old coupler, snap in the Kadee, and you're done. Cost? About \$3-5 per car for a pair. The operational improvement is immediate.

While you've got the trucks off, consider upgrading to metal wheelsets. Intermountain makes excellent replacements for around \$8-10 per car. The difference is like night-and-day: better tracking, smoother rolling, and more realistic appearance.

Together, couplers and wheelsets run you about \$10-15 and maybe 10 minutes of work. This is the foundation every legacy car needs.

THE VISUAL TRANSFORMATION: SIMPLE WEATHERING

Here's the secret: weathering is the single most powerful detail upgrade you can apply to any model.



7. This legacy car model image posted on the *MRH* forum by member *tp* just has some nice weathering, relettering paint blocks, and a few added decals such as the ACI label and the black/yellow wheel inspection stencil. Of course some Kadee couplers and new metal wheelsets, but that's it. Carefully applied weathering is one of the most dramatic detail upgrades you can apply. Using reference photos will help you get the most realistic result.

Put a shiny, factory-fresh Blue Box car next to a weathered one – even if the weathered car started cheaper – and the weathered one will *always* look more detailed and convincing [1]. That’s how the eye works.

Ed Emery captured this perfectly in the *MRH* forum thread:

It never ceases to amaze me how much weathering can blend freight cars together in a train, whether ancient Roco cars or new ScaleTrains.



J. Regier

GETTING THE WHEELSET RIGHT

There are many options for metal wheelset upgrades out there today. Unfortunately, wheelsets are not quite a one-size-fits-all proposition. Fortunately, there is minimal price variation between the different brands. Getting an upgrade right is important.

First, make sure any replacement wheelsets you consider also have metal axles and journal points. In my experience, the plastic journal points common to many earlier metal wheelsets can wear down over time, affecting the wheels’ performance. If your car has plastic axles and journal points, replacing them will improve endurance and reliability.

Second, Intermountain wheelsets are great for cars from most legacy manufacturers, including Walthers, Accurail, Bowser, and others. However, if you’re upgrading an older Athearn Blue Box, Round House, or Model Diecasting car, the journals are such that the Intermountain wheelsets can be a sloppy fit. Athearn makes metal wheelsets of the right spec for these trucks, and the performance is much better.

A little research before upgrading the wheelsets can prevent many headaches later on. ■



When you weather your entire consist, mixing old and new models, they all look like they belong to the same railroad.

Start simple. You don't need an airbrush or advanced techniques for effective weathering.

Here's what works:

The pin wash

Mix heavily thinned dark brown or black acrylic paint (Vallejo Model Air Black Grey (71.055) or Badger ModelFlex Grimy Black (16-03), thinned 10:1 with a 50-50 mix of water and 70% isopropyl alcohol. Flow this wash into panel lines, around rivets, and along the underframe. Let gravity do the work. This creates instant shadow and depth.

Rust streaks

Use a rust-colored wash (burnt sienna or raw umber) applied vertically from rivets, bolts, and metal fittings. Real rust runs downward. Don't overdo it – a little goes a *long* way.

Dust and grime

Apply weathering powders or chalk (make your own by crushing soft chalk, or use Bragdon, AIM, or Pan Pastels) with a soft brush. Focus on horizontal surfaces: roofs, running boards, trucks. This simulates road dust and accumulated grime.

Seal it

Spray the entire car with Rust-Oleum Universal Dead Flat. This locks everything in place and kills any remaining factory shine.

- **Total time:** 15-20 minutes per car once you've got your rhythm.
- **Total cost:** maybe \$5 in materials that'll weather dozens of cars.

COMMON MISTAKES TO AVOID

Fix operational issues first – couplers and trucks before weathering.

Test your technique on a junk car first; you'll quickly learn what "too much" looks like.

Resist making every car look like it's on its last legs. Most working freight cars are dirty, but not destroyed.

Scott nailed the philosophy:

"The condition of a car matters far more than its pedigree." –
Scott

Make sure the car runs well and looks like a solid but hard-working car. A weathered legacy model (who cares what brand) will fool the eye every time.

THE ROI REALITY CHECK

Let's talk about what you're actually spending – because the math changes everything.

That Blue Box gondola you picked up at a train show for \$12? Add Kadee couplers (\$4), Intermountain metal wheelsets (\$6),



8. Kevin says, "Athearn 50-foot gondola upgraded with grab irons, ladders, sill steps, and a nice load. I have upgraded three cars like this, if I recall correctly."



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Detail Associates wire grab irons (\$5), and weathering materials (maybe \$3 worth of paint and powders you already own).



9. Kevin says, “Here is the Athearn pulpwood car upgraded with grab irons and better sill steps. I did three of these cars.”

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J. Fugate

THE SECRET TO A “DEAD-FLAT” SHOP FINISH

Achieving a professional, non-reflective finish on weathered rolling stock doesn't require expensive hobby-brand clear coats.

You can get excellent results from Rust-Oleum Universal Dead Flat from Lowes or Home Depot. The secret is in the preparation.

Testors Dullcote runs \$11.50 for a 3-oz. can. Rust-Oleum Dead Flat? \$13 for 11oz. You do the math.

Standard hardware-store rattle cans are designed for large surfaces, and often leave a “grainy” or “orange peel” texture on fine HO scale details. To get a smooth matte coat, use this technique:

Heat the can: Place it in a bowl of hot tap water (not boiling) for 15 minutes. This thins the clear coat and increases internal pressure for a finer mist.

Agitate thoroughly: Shake the can for two minutes after the mixing ball starts rattling.

The “close-pass” technique: Unlike standard instructions that suggest 12 inches, hold the nozzle about six inches from the model.

Rapid applications: Start spraying before you reach the model and keep spraying after you've passed it. This prevents splatters at the start and end of each pass. Apply one quick pass, covering the model smoothly. Wait exactly two minutes for the solvents to flash off, then apply a second pass.

This “wet” application method, combined with the heated formula, lets the clear coat level-out across the details before it dries, giving you a smooth, dead-flat finish. ■





10. Kevin upgraded an Athearn auto loader with wire grab irons and A-Line sill steps. He says the Classic Metal Works 1955 Chevy Bel Aire replacements for the nondescript plastic originals were well worth it.

Total investment: **\$30**

Time invested: About 90 minutes once you've dialed in your process.

Set that car on your layout next to a \$50 Tangent gondola. From the aisle, can you tell which is which? The proportions read correctly, the details work, the weathering gives both cars visual weight.

For the cost of one premium Scale Trains boxcar (\$55–70), you can upgrade two legacy cars to Tier 2 standards. That's not compromising – that's smart modeling.

TIER 2: DETAIL REFRESH (30–90 MINUTES)

Most older models fail in specific, highly visible areas: grab irons too thick, stirrups that look cartoonish, door latches that scream toy-like.

These are fixable problems that respond beautifully to targeted replacement parts.

This is the sweet spot between basic coupler swaps and serious kitbashing – surgically correcting the details that matter most to the eye, while keeping costs reasonable at \$5–15 per car.

Ladder rungs and grab irons: This is the highest-impact upgrade you can make.

Thick, chunky molded ladders and oversized grab irons scream “toy” from across the room. Scott took an uncommon but effective method to solving this issue. He demonstrated the technique on an Atlas PS-2/2003 hopper [11]:

I filed-down the back edges of the ladder rungs to soften that plastic appearance. It takes patience – you’re working in tight spaces with narrow vertical braces – but it’s actually easier than drilling holes in those braces, and the visual payoff is enormous.

Replace factory grab irons with wire grabs from A-Line or bend your own from 0.010” brass wire. The difference is immediate and dramatic.

Stirrups and sill steps

A-Line metal stirrup steps are the gold standard here – they look great and are virtually indestructible. Tichy makes durable Delrin plastic alternatives that press-fit or glue into place in minutes.

Running boards and platforms

Chooch and Plano etched-metal running boards work well on cars, replacing thick factory-plastic versions that lack the see-through quality of prototype metal grating. Tichy makes see-through plastic running boards.

Decals

Update lettering and road numbers if the paint scheme is wrong or faded, but prioritize physical details first.

Kevin’s example

Kevin shared a several car upgrades that perfectly illustrate this approach [8, 9, 10].





11. Sometimes an upgrade simply takes some patience. Scott (*blindog10*) upgraded this Atlas PS-2/2003 years ago by filing down the ladder rungs. Scott says, “After doing three of these upgrades, I’ll happily wear my ‘been there, done that’ shirt and fill out the rest of the PS-2/2003 fleet with a few Kadee hoppers.”

In all three cases, he took a basic legacy car and added new grab irons, improved sill steps, and proper end details.

The result looks like it belongs on a modern layout alongside premium models.

Sourcing and installation

Finding parts is easier than you think. Intermountain, Tichy, A-Line, and Chooch cover most needs.

For specialized work, Ulrich castings offer resin detail parts for specific car types.

Installation methods vary: some parts press-fit into drilled holes, others need CA glue. Start with white glue – it’s forgiving and strong enough for most applications.

Measure twice, drill once – mistakes on freshly painted cars are costly.

The decal strategy

Don't overlook decals. Proper reporting marks and road numbers can transform a car's appearance, especially if the factory lettering is faded, incorrect, or ugly.

Microscale and Speedwitch Media offer extensive freight car decal sets. The key is matching your prototype – if you're modeling the Pennsylvania Railroad in 1952, make sure your car's reporting marks and paint scheme are period-appropriate.

Pro tip: Use minimal carrier film, or trim close to the lettering. Apply decal setting solution to snug them down over details.

The payoff

A Blue Box boxcar with new grab irons, proper stirrups, fresh decals, and weathering will hold its own in any consist – an hour of work and \$15–20 in parts for a car you're proud to run.

You've also learned techniques that transfer to every other car you build. Sometimes that's enough. Sometimes it isn't.

TIER 3: THE WORKING REPAINT (2-4 HOURS)

Sometimes the factory finish is just not correct, or you want to model a specific prototype. That's when you repaint.

When repainting makes sense

Repaint when the car's bones are good, but the finish is beyond salvaging, or when you want to model a specific prototype – that

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12. MRH forum member flatpenny says, “This Athearn Soo flat got grab irons, stirrups, new brake wheel, and a heavy dose of weathering.” We think this tier-2 upgrade looks *amazing*.



13. MRH forum member tp posted these before and after images of a simple Blue Box Athearn 50-foot boxcar with minimal changes and an amazing weathering job following a prototype photo. He says, “Only new

details were paint, decals, putty to fill holes in roof from awful roofwalk and 'body-mounting tab slots – bits of styrene glued on roof for the roofwalk support brackets.” We also notice he trimmed the grossly oversized bottom door claws. This is a perfect example of how a lightweight tier-3 decal and weathering job can fool the eye into thinking this is a highly detailed car.

short line scheme, historical paint variation, or weathered work train car scheme that isn't available commercially.

The Larry Barnard example: Pennsylvania & Ohio

Larry shared a perfect case study in the forum discussion. He took a couple of basic Blue Box car bodies and gave them a complete visual reset with custom paint and decals, along with simple detail upgrades [14, 15].

The key is knowing what you want the car to represent. Then work backward from there.

The result? Two cars that fit into his roster without apology.

THE PROCESS: WHAT ACTUALLY WORKS

Disassemble the car completely – trucks, couplers, detail parts. Clean old weathering with 91% isopropyl alcohol and let it dry overnight.

Primer is non-negotiable

Use automotive primer (Duplicolor, Rustoleum) or hobby primer (Vallejo, Badger, or AK Interactive). Gray works for most colors; white for yellows and light shades; black for dark colors.

Apply three light coats from 8-10 inches away, letting each coat set for 5-10 minutes before applying the next. Cure for 24 hours minimum.



14. Larry says, “Repainted Blue Box Athearn. I modified the side sills, added a better door (no claws and age-appropriate), carved off the old grabs and installed wire grabs and stirrup steps. Finished-off with champ decals.”



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15. Similar upgrade to [14], but with a scratchbuilt door.

Paint choice:

Acrylics (Vallejo Model Air, Badger ModelFlex) are forgiving and fast-drying, but fragile until sealed. Lacquers (Scalecoat II) are durable with authentic sheen but need ventilation and longer cure times.

Pick one and commit. Spray light coats 8-10 inches away, 15-20 minutes between coats. Two to three coats usually suffice.

Acrylics need 24 hours to cure; lacquers need 48-72 hours.

Decals go on only after paint fully cures

Use Micro Set to position them, then Micro Sol to snug them down. Work one decal at a time and let each dry completely.

Speedwitch Media and Microscale decals cover most railroads. Custom services (Circus City Decals, Highball Graphics) run \$15-25 per sheet.

Final weathering seals everything

Use the same techniques as Tier 1 – washes, dust, rust streaks – but now over a clean, correct paint scheme.

Seal with Rust-Oleum Universal Dead Flat (11-oz. can, \$13) for a matte finish that kills plastic sheen and locks-in your work.

When to stop

For most modelers, Tier 3 is the destination.

You've transformed a \$5 bargain-bin find into a custom model that reflects your specific railroad, era, and standards. The skills you've learned—surface prep, painting, decaling, finishing—transfer directly to scratchbuilding, kitbashing, and any other modeling project.

But if you're hungry for more challenge—if you want to build cars that don't exist commercially, or correct fundamental design flaws in legacy tooling—then it's time to talk about the advanced tier.

That's where things get *really* interesting, and where Dom Bourgeois's examples in that *MRH* forum thread show what's possible.



16. Dom says, “Here’s an example of an upgraded blue box. In this case, the Athearn Blue Box pseudo X-58 boxcar’s worst shortcoming was the wrap-over roof edge. Similar prototype cars all had overhanging roof edges. I substituted a Moloco Stanray roof, which made a *huge* difference in the car’s appearance. In a train, you can’t tell it’s not a Tangent unless you look very closely at it. Yes, I know the end is wrong, but just I live with it. I did this work to several cars in 2008, *before* the Tangent ones came out. I later bought several Tangents, but I kept my old ones anyway.”



ADVANCED UPGRADES: KITBASHING AND FABRICATION

Kitbashing involves combining parts from multiple kits, aftermarket sources, and scratchbuilt components to create a model no manufacturer offers.

Maybe you're modeling a work train cobbled together in 1947, or a specific prototype variant that never got commercial treatment. You source parts from wherever you can find them – Ulrich castings, resin components, 3D-printed details, sheet styrene, brass stock.

The legacy car provides the foundation (usually the body shell and frame), but everything else is negotiable.

The philosophy shift

Kitbashing requires a different mindset than upgrading. You need prototype research – actual photos, dimensional drawings, rivet patterns, specific hardware configurations. You're not making cars "look better"; you're making them correct for specific prototypes.

Kirk Wakefield captured this perfectly in the *MRH* forum thread:

There is nothing better than finding "junk" for cheap at a train show. Do I save any money over a new model with all of this already in place? The answer varies but is most always, no.

Dom's kitbash involves making a lot of detail changes to get exactly the car he is after.

He thinks like a prototype railroad shop foreman, not someone assembling a kit. The legacy car is just raw material – the modeling equivalent of lumber and steel in a railroad back shop.

Common kitbashing projects

The most frequent kitbashes involve converting between related car types:

- Changing out the roof to get a completely different class of car
- Modifying boxcar ends to create a car that's not commercially available
- Combining parts from multiple car kits to build a specific prototype that falls between two commercial offerings

Fabricating missing components is another common need. End sills, platforms, and draft gear assemblies on older models are often crude or incorrect. Replace them with scratchbuilt parts from styrene strip, brass wire, and resin castings, and you transform the car's appearance.

Ulrich castings are particularly valuable here – they offer highly detailed resin components for specific car types you can't get anywhere else.

3D printing is opening new possibilities. Need a specific brake wheel? A particular style of roof or car end? Custom end ladders for an obscure prototype? If you can find or design the part, you can print it.

“The Moloco roof was a perfect fit once I removed the factory roof. A little styrene work on the seams, some careful sanding, and suddenly I had the exact car I needed for my D&RGW roster.” – Dom Bourgeois

When not to kitbash

If a car looks good after Tier 2 or 3 upgrades, don't kitbash it just to kitbash. It only makes sense when you have a specific prototype goal that can't be achieved any other way.

YOUR LAYOUT, YOUR STANDARDS

Every car on your layout is there because you decided it should be. That matters.

Here's the practical truth: upgrading legacy models lets you build the large, diverse fleet you actually want. Salt it with a few premium modern models for showcase pieces, and you've got quantity, variety, and quality on a realistic budget.

Upgrading teaches you to see details, build with intention, and make choices that transform a dated relic into an indistinguishable member of your freight roster.





J. Fugate

PROTOTYPE REALITY CHECK

How accurate do freight cars need to be?

Accurate enough to look right on your layout – that's it.

The Safety Appliance Act matters

Passed in 1911, this federal law mandated specific safety equipment on all railroad rolling stock: standardized grab irons, sill steps, stirrups, and end platforms.

This is why Kevin's gondola upgrade focused on these details – they're not just cosmetic, they're historically required for post-1911 cars.

If you're modeling 1920s–1950s freight operations, your cars need these features in the correct configurations. Five minutes of research on the Safety Appliance Act can save you from building an anachronistic consist that shouts, "you didn't do your homework."

Research is easier than you think

OPSIG, railroad historical societies, prototype photo books, and modeling forums offer quick answers to most questions.

Spend five minutes confirming a car's era, paint scheme, and detail requirements before starting. That small investment prevents hours of wasted work.

The bottom line:

Legacy cars are still viable. Accuracy comes from your choices and research, not factory tooling.

This is where upgrading becomes creative modeling, not just fixing mistakes. ■

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Model Railroad Hobbyist | June 2026



Deluxe waterfall paint booth

We often feature inexpensive solutions for the budget-minded, but at times getting the best can be worth it, especially when it comes to protecting your lungs and eyes.

Youtuber **Barbatos Rex** discusses a deluxe waterfall airbrush booth selling for \$400-\$500 in this 28 minute video. Paint pros know the physics of flowing water generates a scrubbing action that sucks overspray right up, keeping the space fume free. You can [find shopping list links here](#) for this spray booth if interested.



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JUNE NEWS

column



Model Railroad Hobbyist | June 2026

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



INDUSTRY NEWS

Westerfield Models has announced that it is closing and putting the business up for sale after 14 years. The following statement was posted on the Westerfield Models, LLC Facebook page:

**WESTERFIELD MODELS
BUSINESS FOR SALE**

Hello Steam Era Modelers:

We have enjoyed making Steam Era resin Kits for all of you dedicated Prototype freight car modelers and we greatly appreciate all of the orders that we have received from the Prototype freight car community over the last 14 years. We have always tried to give the best service possible and have enjoyed talking and emailing with many of you over the years.

Due to economic reasons, we have had to cease operations with Westerfield Models and are now listing it for sale. We have a Business Asset Listing PDF available.

We ask that we only receive serious inquiries from interested parties. We will be selling the business complete, partial sales will not be considered.

THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS

Please send inquiries to: westerfieldmodels@gmail.com.

Please be sure to include your email and phone number. We will need an email to send the PDF information files.

Please note that we cannot respond to any inquiries posted on groups.io forums or Facebook.

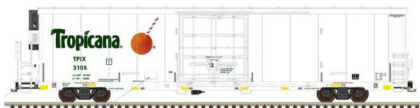
Thank you again!

Andrew Dahm

westerfieldmodels@gmail.com

Info: www.facebook.com/westerfieldmodels

O SCALE PRODUCT NEWS



Atlas has announced a new model, the O scale Master Trinity 64' reefer. Available in both two

and three-rail versions, road names available are BNSF, CIT Group/CEFX, TILX (ex-BNSF), Tropicana/TPIX, and Union Pacific/ARMN. The MSRP for 4-packs of 3-rail models is \$479.80, 4-packs of 2-rail models is \$499.80. Single models MSRP is \$119.95 for 3-rail and \$124.95 for 2-rail.

Info: shop.atlasrr.com



Frenchman River Model Works is previewing a kit designed by Thomas Yorke that builds into an On3/On30 1:48 scale sugar cane car. Used to transport cut canes from the field to processing mills, the cars are

essentially a flatbed with a cage to keep the canes from falling out. Trucks and couplers are not included, Kadee #5 couplers are recommended. Expected to start shipping around June 30, 2026, the retail price for the car is \$59.95 with a preorder price of \$47.95.



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Also in preview on the Frenchman River Model Works website is an On3/On30 1:48 scale pickle car kit. Another Thomas Yorke product, the 18' car goes with the Pickapecka Pickle Company, a structure released by Yorke years ago. The coffin style car sides shield three wooden barrels used to transport raw pickles. Trucks and couplers are not included, Kadee #5 couplers are recommended. Expected to start shipping around June 15, 2026, the retail price for the car is \$64.95 with a preorder price of \$51.95. Info: frenchmanriver.com

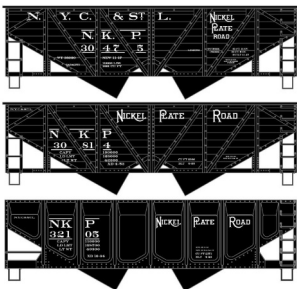
HO SCALE PRODUCT NEWS



Accurail's May 2026 announcements begin with a 3-bay ACF center flow covered hopper decorated for Stauffer Chemicals/STAX. With a NEW/BLT date of 9-67, the covered hopper has markings indicating a capacity of 4650 cu. ft. MSRP for the kit is \$22.98.



Also part of the May lineup is a Chicago & North Western 36' double sheathed wood boxcar with wood ends and a straight underframe. The markings indicate that the boxcar is a furniture and vehicle car with a maximum gross weight of 30 tons. MSRP for the kit is \$21.98.



Accurail's 3-pack announcement this month is a 3-car set of Nickel Plate wood-side and panel-side twin hoppers. The two wood-side hoppers have an as-built 1917 paint scheme (BLT 11-17) and a 1953 paint scheme (BLT 8-23) with the panel-side hopper featuring a 1934 paint scheme (BLT 4-23). MSRP is \$61.98 for the 3-pack kits and \$20.98 for single cars.

All Accurail cars are equipped with Accu-Mate couplers and

appropriate trucks with Delrin wheelsets.

Info: accurailinc.com



Products in the **Athearn** May/June announcement begin with the HO scale Genesis GE AC4400CW

locomotive. The AC traction counterpart to the Dash 9-44CW locomotive, the AC4400CW locomotive was more expensive but capable of higher tractive effort. Road names in this release include CSX (two schemes), Denver & Rio Grande Western, Ferromex, Kansas City Southern, Montana Rail Link, Southern Pacific, Transportación Ferroviaria Mexicana (TFM), and Union Pacific (two schemes). All road names have three numbers available. MSRP is \$269.99 without sound and \$369.99 with SoundTraxx Tsunami2 Sound/DCC.



Another Genesis product is the GATC 2600 cu. ft. Airslide covered hopper. Depending on the road name these cars are appropriate for eras from

1958 through the 1990s and potentially later. Road names in this release are Anheuser-Busch/GACX, Gulf, Mobile & Ohio; Missouri-Kansas-Texas, Missouri Pacific, Multifoods/GACX, Norfolk & Western, Northern Pacific, Southern Pacific, Staley/GACX, and Union Pacific. MSRP is \$54.99, \$59.99 for models in the Primed for Grime line.



The last Genesis model in the May/June announcements is the ICC C-50-5/C-50-9 Bay Window caboose. Originally built in 1974 by the

International Car Company, the C-50-5 caboose was used by both Southern Pacific and Cotton Belt/SSW. The C-50-9 Bay Window caboose was the last series of cabooses built for Southern Pacific, built by PACCAR in 1980 with road numbers SP



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4700-4774. Road names in this release for the C-50-5 are Southern Pacific and Cotton Belt, with two “Legendary Liveries” schemes that were applied to other SP caboose types. The C-50-9 model is available in Union Pacific and two Southern Pacific Railroad Police schemes. MSRP for the cabooses equipped with lights and sound is \$179.99, just with lights \$139.99.



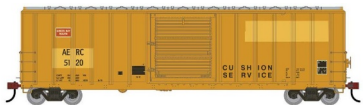
In the Athearn line, the 200-ton crane and 50' gondola set have long been a popular product.

The new run includes models decorated for BNSF/BN, Conrail, CSX, Delaware & Hudson, Lehigh Valley, Norfolk Southern, Penn Central, Santa Fe, Southern Pacific, and Union Pacific. The crane boom rotates, raises, and lowers. MSRP for the set is \$99.99.



Another Athearn line car in the current announcement is a 50' Evans double plug door boxcar. Introduced in the late 1960s, the 70-ton insulated boxcar was built through the 1980s and was popular with the wood products industry. Road names in this release are BC Rail, Burlington

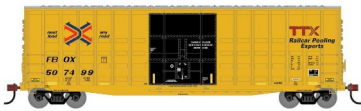
Northern, Canadian Forest Products (two schemes), Chicago & North Western, Evans, Ogden Corporation, Union Pacific, and Wisconsin & Southern (two schemes). The Canadian Forest Products Bicentennial and Wisconsin & Southern flag schemes are available in 3-packs. Retail price is \$39.99 for individual cars or \$109.99 for a 3-pack.



Another 70-ton boxcar announced by Athearn is the 50' FMC 5347 cu. ft. boxcar. The outside post, non-

terminating end boxcar with a large sliding door was popular in per diem service with many shortlines in the late 1970s, with many serving into the 2000s. Several models in this run are part

of the Primed for Grime line, including Albany and Eastern Railroad, Corinth & Counce, Chicago and North Western, and Union Pacific/BKTY. Non-Primed for Grime models are Arkansas-Oklahoma Railroad, Chattahoochee Industrial Railroad, Rock Island, and Texas South-Eastern. MSRP for Prime for Grime models is \$47.99 with standard models priced at \$42.99.



In the Roundhouse line, a run of 50' waffle-side high-cube plug door boxcars has been announced. The cars will come in paint schemes for

Amtrak (Phase III and IV), BNSF Railway, International Bridge and Terminal, Pan Am/MEC, Montana Rail Link, Texas Oklahoma & Eastern, and TTX/FBOX. The Amtrak cars are priced at \$41.99 each with the other road names priced at \$39.99 each.



In celebration of Athearn's 80th anniversary, they are releasing a set of two Roundhouse F7A



locomotives and several streamlined passenger cars in a special anniversary

paint scheme. The passenger cars include a baggage car, a diner, a vista dome, two coaches and an observation car. The coaches and observation car are sold as a 3-pack with an MSRP of \$109.99, the other cars are \$39.99 each. The F7A locomotives, which are equipped with a 21-pin DCC socket, are priced at \$164.99 each.

Most Athearn HO scale rolling stock is available with three road numbers per paint scheme. Preorders are due June 30, 2026, with an expected delivery date of September 2027.

Info: athearn.com

Bachmann has released the HO scale two-axle bobber caboose in two new paint schemes, the Bachmann Christmas railroad North



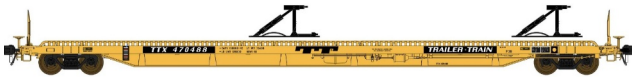
Pole & Southern, and the East Broad Top. Several other paint schemes are also available. MSRP for the Bobber Caboose is \$38.00.



Bachmann also has in-stock HO scale PCC streetcars. The current streetcar model has been improved to sit lower per the prototype, has enhanced truck and wheel details, and includes a 21-pin DCC socket. Paint schemes

available are Green & Cream, Red & Cream, Philadelphia Transportation Company, and the SEPTA Bicentennial scheme. MSRP is \$189.00.

Info: shop.bachmanntrains.com



Preorders for a new HO scale model of the 75'

F39 flatcar have been announced by **ClassOneModelWorks.com** with an expected arrival date of August 2026. The initial run has ten different paint schemes and body styles, with many prototype specific details, including bearing journal types, different bridge plates, and different methods of securing trailers on the flatcar. Kadee-compatible couplers and CNC machined RP-25 contour wheelsets are included. Road names are Erie, Pennsylvania, multiple Trailer Train/TTX, Trailer Train/ATX, Trailer Train/JTTX, and Wabash. Price is \$76.99 per car, marked down from \$84.99.



To accompany the F39 flatcars, ClassOneModelWorks.com is also introducing Fruehauf 31' and 26' trailers in several paint schemes.

The 31' trailer is decorated for Erie, Campbell 66 Express, Lackawanna, McLean Trucking, Chicago

North Western, Northern Pacific, Tamiami Freightways, and Kramer Bros. Freight Lines. The 26' trailers come in Colonial Stores, Byron Transit, MTA Transport, Budget Pack, American Carloading, Bell of Deerfield, Minneapolis & St. Louis Railway, Riss & Company, Great Northern Railway, Commercial Motor Freight, Burlington Route, Missouri Pacific, and Roadway Express. Price for the trailers is \$31.99, marked down from \$34.99.

Info: classonmodelworks.com



A new run of HO scale Pullman Standard 4750 cu. ft. 3-bay covered hoppers from **InterMountain**

Railway Co. has been announced, with paint schemes for Burlington Northern, Chicago & North Western, Delaware & Hudson, Farmers Marketing, Illinois Central Gulf, Norfolk Southern, Santa Fe, Seaboard System, Union Pacific, and unnumbered data only. Six road numbers will be available for each paint scheme. The models are priced at \$49.95 per car. Shipping this month are the Paducah GP10 rebuilt diesels.



J. Shultz

PADUCAH GP10 REBUILD PROGRAM

GP10 is the designation given to GP7, GP9, GP9B, and GP18 locomotives that went through the Illinois Central/Illinois Central Gulf's rebuild program at the Paducah, KY shops between 1967 and 1979. Several

hundred locomotives from various railroads and equipment dealers went through this rebuild process, resulting in a 1750-1850hp locomotive that had 20 or more years of life left after the rebuild. Signature features of a Paducah GP10 are a 4-stack exhaust manifold, a distinctive upside-down U-shaped hump behind the cab for a paper air filter, chopped noses, and no dynamic brakes. However, not all units have all these features. GP9B units going through the program received angled roof cabs. Internal modifications and updates to the electrical gear and 26-L air brakes were not noticeable from the outside.



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Paint schemes available are Arizona & Eastern, Bloomer Line, Central Kansas Railway, GATX Locomotive Group, Gulf

& Mississippi, Illinois Central, Illinois Central (OLS), Louisiana & Delta, Railink, Okanagan Valley Railway, and Winchester & Western. MSRP for the DCC only models is \$229.95 and for the LokSound DCC/Sound models is \$319.95.

Info: www.intermountain-railway.com



Kadee's May release is an HO scale Atlantic Coast Line 50' PS-1 boxcar. With a built date of 10-62, ACL #35144

certainly would have been in service with the Seaboard Coast Line and the Seaboard System. It features 9' Youngstown doors and an H-60 cushioned underframe. MSRP is \$44.99.

Info: www.kadee.com



KV Models has released three 3D-printed resin kits of the Boonton Line passenger cars, a standard coach, standard combine, and combine #425, which was converted from an RPO.

The kits include the frame and body, trucks, air and steam lines, stirrups, marker lights, bullseye light, screws, and two sets of etched parts for the grab irons and window shades. A steel weight is sandwiched between the interior and frame and the kits are designed to accommodate optional lighting. Each kit is priced at \$140.00.

Info: kvmodels.com



Lines West Products has announced the release of a resin kit of the Milwaukee Road/DSDX 40' insulated boxcar in HO scale. Built by Milwaukee Road's Milwaukee shops, 600 cars were built to

transport beer nationwide from the Schlitz brewery in Milwaukee. Equipped with 4' swinging plug doors, small side panels, and multiple rivet rows, they were painted bright orange. The cars were equipped with a welded underframe, welded diagonal panel roof, and extended sills to use as a push point for moving cars with a tractor. During the cars lives 200 cars were rebuilt with 8'-2" Superior plug doors, 200 with 8'-2" Youngstown plug doors, and 200 with 10' plug doors. Serving into the early 1980s they also had their roof walks removed. All three rebuilt door versions are being produced with and without roof walks. The rebuilt versions can be ordered with DSDX, URTX, and MILW decals, the original can be ordered with DSDX decals. The cars are priced at \$49.99 without decals and \$59.99 with decals.

Info: lineswestproducts.com



Rapido Trains has several new announcements, beginning with a new run of GP40 locomotives

in HO scale. Road names in this run are Conrail, CSX (WM Patch), CSX – YN1, Dakota, Minnesota & Eastern; Denver, Rio Grande and Western; Guilford (B&M), Guilford (MEC), Kansas City Southern (GP40-3), Milwaukee Road, Missouri-Kansas-Texas (Conrail patchout), New York Central, Rock Island, Rock Island #4710 wreck rebuild, Soo (ex-MILW Bandit), Wheeling & Lake Erie (ex-DRGW), and Western Maryland. The order deadline for this run is September 15, 2026. MSRP is US\$249.95 for DC/silent and US\$359.95 for ESU LokSound DC/DCC/sound.



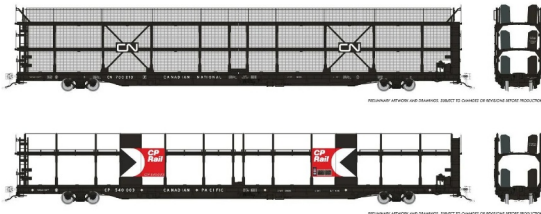
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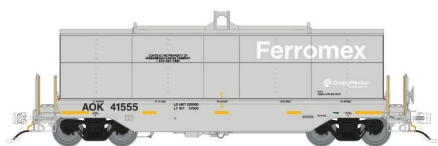
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A new model from Rapido is the HO scale Pacific Great Eastern/BC Rail Squamish caboose. A conditional release, sufficient orders need to be received by September 15, 2026, for development on this product to move forward. The first 15 cabooses were produced by the PGE Squamish shops in 1968 with 10 more produced in 1973 by the railroad now called BC Rail and a final 10 in 1975, with a total of 35 cabooses being produced. If produced, the caboose should be available in a solid green with yellow ends PGE scheme, a two-tone green with yellow platforms PGE and British Columbia Railway scheme with logo variations, three red, white, and blue BC Rail schemes, a yellow CN engineering crew transporter scheme, and undecorated red and undecorated yellow versions. The cabooses are priced at \$US 129.95 on the Rapido website.



Another new model from Rapido is the Whitehead and Kales NSC 89' open autorack in both bi- and tri-levels. Also a conditional release based on orders made by September 15, 2026, this autorack was owned by both Canadian Pacific and Canadian National. Produced between 1962 and 1968, over 700 tri-level autoracks were acquired by CN and CP. The bi-level autorack was produced between 1964 and 1970 with 327 being produced. Both open versions and ones with safety screens were produced and they traveled across North America into the 2000s. For the tri-level autoracks there are five Canadian Pacific schemes and two Canadian National schemes planned, with three Canadian Pacific and two Canadian National schemes for the bi-level autoracks. Undecorated brown and undecorated black versions are planned for both types. Pricing is set at US\$94.95 for a single car and US\$569.70 for a 6-pack.



A new run of HO scale Greenbrier Transverse Coil Cars includes both Rapido prototype and freelance and **HomeShops** freelance paint

schemes. Over 3,000 of these cars are on the rails as of mid-2026 and the design is still in production. Paint schemes in this run from Rapido are CSX, Ferromex (AOK reporting mark), Greenbrier Management Services (AOKX), Norfolk Southern, Union Pacific (CHTT), and ROLX (Railway of Lies patchout on the Ferromex scheme).



HomeShops schemes on the Greenbrier Transverse Coil Cars are Arvada Western Railroad, Cleveland and Lake Erie Railroad, Detroit, Toledo

and Ironton; and Virginian and Ohio Railroad. Orders for both the Rapido and HomeShops cars are due August 17, 2026. The cars are priced at US\$59.95 for single cars and US\$359.70 for 6-packs.



Rapido is taking preorders for a powered End of Train (EOT) device, either separately with one powered and one dummy truck with either 33" or 36" wheels or included on a BC Rail Trenton Works 6637 cu. ft. boxcar. The EOT is available in Silver/Gray, Yellow, Orange, and Red, with each color available pre-installed on the BC Rail boxcars. The price for a single EOT device is US\$24.95 with a

single boxcar with EOT pre-installed is US\$59.95 and a 2-pack is \$109.90. A pre-order end date was not provided.

A last-minute addition to the Rapido P32AC-DM release is a Metro-North locomotive in an America250 scheme. The order deadline for the P32AC-DM models was June 1, 2026, so check with your local retailer or Rapido to see if any are available.



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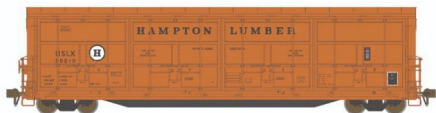


The price is
US\$239.95 for
DC/silent and

US\$359.95 for LokSound DC/DCC/sound.

Info: www.rapidotrains.com

All artwork and graphics are courtesy of Rapido Trains



Roka Prototype Models has opened pre-orders for an HO scale model of the Evans “Side-Slider” all-door boxcar. Intended

for forest products use, the flatcar style access in a boxcar body expanded its use to drywall and other bulky freight. The model will feature blackened metal wheelsets, metal Kadee-compatible couplers, and separately applied detail parts. Paint schemes in the initial release are Amador Central Railroad/AMC, BC Hydro/BCH, Canadian Forest Products/USLX, Delaware Otsego System/FJG, Evans Demo/USLX, Hampton Lumber/USLX, Louisiana Midland/LOAM, Minneapolis Northfield and Southern Railway/MNS, Milwaukee/MILW, and Simpson Timber Company/USLX. Four road numbers will be available for each paint scheme. Only 84 units will be ordered per road number. The cars are priced at \$54.90 for the Milwaukee car and \$54.95 for the others.

Info: rokamodels.com



With the Union Pacific’s 4-8-8-4 Big Boy #4014 steaming across the USA in 2026, **ScaleTrains** is accepting preorders for a new run of the HO scale Union Pacific water tenders, #809 Jim Adams and

#814 Joe Jordan. Each represent the present appearance of the water tenders, with #809 including a separate photo-etched

metal American flag placard. Delivery is expected in August 2026. Scale Trains price is \$174.99 for the set.

Info: scaletrains.com



Tangent Scale Models has released a new HO scale freight car, the North American Car Corporation

(NACC) 1963-design 33,000-gallon dual diameter flammable gas tank car. Built between 1963 and 1965, some of these tank cars survived into the 2000s, hauling liquified petroleum gas (LPG) and anhydrous ammonia. Original versions of the cars available from Tangent are the NATX “White Lease Delivery 1963”, NCTX “Pacific 66 Calgary AB 1964”, and NATX “Murphy SPUR Delivery 1965”. Versions of the car modified with US government mandated head shields, shelf couplers and other safety enhancements after 1977 are the NCTX “Pacific 66 Calgary AB 1979+” and the CITX “White Lease Repaint 1992+”. Also available is a white painted unlettered RTR version of the original 1960s era car. The models are priced at \$69.95 each.

Info: www.tangentscalemodels.com



Walthers May

announcements include a new run of the HO scale WalthersMainline Phase II

GP9 rebuilt with a low short hood. Road names in this release are Burlington Northern, Chessie System (WM), Illinois Central Gulf, Iowa Interstate, Precision National, RJ Corman, and an undecorated version that includes both dynamic brake and non-dynamic brake long hoods. Delivery is expected in Winter 2027 with the price on the website set at \$189.98 for the DC version and \$259.98 for models equipped with ESU sound and DCC.



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Also in the WalthersMainline series is a new run of 36' wood chip hoppers. Converted from older two-bay hoppers with extensions added to the sides, they are appropriate for the 1960s through 1980s. Road names in this run are Baltimore & Ohio, Canadian National, Celotex/NFCX, Northern Pacific, Southern, Western Maryland, Data Only, and undecorated. Two road numbers are available for each road name. The models are expected in Fall 2026 with a price of \$39.98.
Info: www.walthers.com

N SCALE PRODUCT NEWS



A 70-ton N scale boxcar announced by **Athearn** is the 50' FMC 5347 cu. ft. boxcar. The outside post, non-terminating end boxcar with a large sliding door was popular in per diem service with many shortlines in the late 1970s, with many serving into the 2000s. Several models in this run are part of the Primed for Grime line, including Albany and Eastern Railroad, Corinth & Counce, Chicago and North Western, and Union Pacific/BKTY. Non-Primed for Grime models are Arkansas-Oklahoma Railroad, Chattahoochee Industrial Railroad, Rock Island, and Texas South-Eastern. MSRP for Prime for Grime models is \$39.99 with normal models priced at \$34.99. Two road numbers are available for all paint schemes. Preorders are due June 30, 2026, with an expected delivery date of September 2027.
Info: www.athearn.com

Bluford Shops has announced a new run of N scale USRA 30'-6" 2-bay hoppers. The models include operating magnetic knuckle couplers and metal wheels. Road names in this



release are Bessemer & Lake Erie, Baltimore & Ohio, Chicago & Eastern Illinois, Chesapeake & Ohio, Colorado & Southern,

Clinchfield, Big Four/Cleveland Cincinnati Chicago & St. Louis, Delaware Lackawanna & Western, Frisco, Louisville & Nashville, Montour Railroad (four numbers), Northern Pacific, New York Central, Philadelphia & Reading (four numbers), and Pere Marquette (four numbers). All road names will be available with six numbers unless noted otherwise. Preorders are due July 7, 2026, with delivery expected in early 2027. MSRP is \$36.95 per car.

Info: bluford-shops.com/index.html



A new run of Pullman Standard 4750 cu. ft. 3-bay covered hoppers from **InterMountain Railway Co.** has been

announced, with paint schemes for Burlington Northern, Chicago & North Western, Delaware & Hudson, Farmers Marketing, Illinois Central Gulf, Norfolk Southern, Santa Fe, Seaboard System, Union Pacific, and an unnumbered data only car. Six road numbers will be available for each paint scheme. The MSRP is \$44.95.



Also new from InterMountain are N scale EMD SD40-2 locomotives, with a Reading & Northern USA 250th red, white,

and blue paint scheme, a Milwaukee Road Bicentennial paint scheme, and a Burlington Northern Spirit of '76 Bicentennial paint scheme. Preorders for these models are due by July 31, 2026. DCC ready locomotives have an MSRP of \$189.95 and DCC+Sound equipped locomotives have an MSRP of \$299.95.

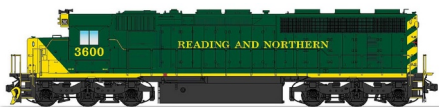
Now arriving from InterMountain is the EMD SD45-2 in N scale. Road names in this release are ATSF, ATSF Kodachrome,



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BNSF patch, BNSF New Image, Clinchfield, Erie Lackawanna, MEC/blue, and Reading Blue Mountain & Northern. MSRP is \$189.95 for DC and \$299.95 for ESU LokSound 5 DCC/Sound equipped units.

Info: www.intermountain-railway.com



Railsmith has announced the launch of *The National Limited*, described as the flagship of the Baltimore & Ohio Railroad.

Traveling from New York

(Jersey City) to St. Louis, the National Limited included a Missouri Pacific sleeper between Washington DC and Fort Worth, TX, and a Katy sleeper between DC and San Antonio.

The B&O Pullman-Standard coach pair Youngstown and Cumberland are available for pre-order. The price for the pair is \$108.00.



Another pair of coaches available for pre-order are the Red

River and Plum Creek cars from the Southern Pacific 4449 Daylight excursion train. The price for the pair of chair cars is \$122.00.

Info: lowellsmith.net



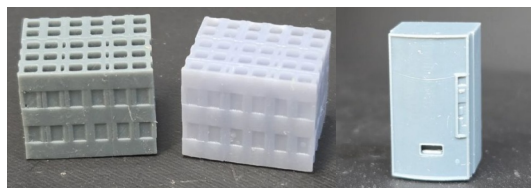
With the Union Pacific's 4-8-8-4 Big Boy #4014 steaming across the USA in 2026, **ScaleTrains** is accepting preorders for a new run of the N scale Union Pacific water tenders, #809 Jim Adams and #814 Joe

Jordan. Each represent the present appearance of the water tenders, with #809 including a separate photo-etched metal American flag placard. Delivery is expected in August 2026.

The set is priced at \$109.99.

Info: scaletrains.com

STRUCTURES & SCENIC SUPPLIES



3G Resin Prints has released two new HO scale detail parts, a 2-pack of skids of cinder blocks and a 3-pack of modern soda machines.

The cinder blocks are priced at \$4.25 and the soda machines at \$6.25.

Info: 3gresinprints.com



AK Interactive has released a new Transparent UV Resin Water product. Available in 30ml bottles, the product remains liquid or gel-like until UV light is applied to cure it. The UV light is not included. MSRP is €6.57.

Info: ak-interactive.com



Aritec has announced several new 1:87 scale vehicle models and

detail parts, starting with a collection of 21st century bicycles. The four bicycle models, three on kickstands and one free-standing resembling a fat-tire sand bike, are made of resin and etched metal and hand painted. MSRP is €20.30.



The HO scale market trader with crates set includes one male figure with an

apron and three separate stacks of crates, with assorted



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produce exposed in the top crates. The set is hand painted resin with an MSRP of €14.50.



An HO scale load described as “Hot steel slabs late” appears that it would be appropriate for a depressed center flatcar. It is lettered for the German company Krupp-Stahl and the size is not provided. Made of hand painted resin, it has an MSRP of €31.20.

Info: www.artitecshop.com/en



Berkshire Valley Models has released the Mine’s Cabins kit. A former American Model Builder’s kit, the three laser-cut kits include a

optional shed addition and mix-and-match walls for different window placements. An interior floor, roofing, window glazing, and a white metal smokejack for each building are included. Finished models measure 2.75” long x 1.5” wide x 1.75” high with the shed addition. The three-kit set is priced at \$39.00.



Another former American Model Builders kit is the Crossroads Church in HO scale. A completely laser-cut kit, the finished structure measures 4” long x 2” wide x 3.5” high. Its price is \$20.00.



Also new from Berkshire Valley is an HO scale lumber load. Sized for two stacks to fill a 53’-6” flatcar, each kit includes enough laser-cut basswood parts to construct

two lumber stacks complete with crossboards and side stakes. The loads are approximately 3-3/8" x 1-3/8" x 1" high. The lumber load is priced at \$17.00.

Info: berkshirevalleymodels.com



Best Trains has introduced new hydrocal castings in the Bricks & Stones line of wall and culvert sections. New pieces include two double culverts, culvert tunnel liners, a low underpass abutment, and several interlocking wet stacked wall sections.

Prices for the new items in the Bricks & Stones line are between \$11.95 and \$27.95 per item.

Info: www.besttrains.com



New from **B.T.S.** is a Two-Stall Engine House in O scale, part of the McCabe Lumber Co. series. A narrow gauge two stall engine house, it is sized to fit two On3 or On30 locomotives up to a scale 64" long. Featuring laser-cut parts with full interior framing, positionable windows, and flooring, the roofs are

removable and the workshop area can be left off or placed on either side of the main structure. The engine house's price is \$379.95.

Also part of the McCabe Lumber Co. series is a 3-pack of On30 lumber carts. Constructed of laser-cut wood with plastic wheelsets, they are designed for the On30 track used on the



sawmill, tramway, drying kiln, and planing shed kits. Each cart is a scale 7' x 6'. The 3-pack kit is priced at \$11.95.

Info: btsrr.com



Characters Count Miniatures has released several new character collections. Railway Express Agency Collection includes seven figures – a depot agent, two lead workers, two men loading, a guard, and a pilot.



Logging Camp Collection #1 consists of a saw filer, a leaning logger, the young loggers, the camp cook and a two-man cross-cut team.



Logging Camp Collection #2 includes Mama the camp cook, a logger leaning on a saw, two loggers in action, and two climbing loggers. Collections are priced by

scale with O scale \$30.00, S and HO scale \$35.00, and 1:24th scale \$110.00.

Info: www.characterscountminiatures.com

Herpa has released several new 1:87 scale vehicles. Cars that might be seen on a North American street include a 1970s era Ford Capri in silver with a vinyl roof for €18.95, a



modern BMW 5 series sedan in imola red for €21.95, and a modern Audi TT Coupé in ibis white for €19.95.



Info: www.herpa.de/en



New from **Hidden River Manufacturing** are two models from La Crosse, Wisconsin in 1926. The Milwaukee Road 1926 Depot, kit HRM-162, is a laser-cut wood kit and has a footprint of 7"

x 14-1/2". The kit price is \$180.



1926 Baggage/Express Building with Pavilion and Covered Platform, kit HRM-163, is a laser-cut wood kit and also has a footprint of 7" x 14-1/2". The kit price is \$100.

Info: hrmlasermodels.com



Jackson Railcar has introduced an N scale Defect Detector kit including a dragging equipment detector, infrared hot box/hot bearing detectors, and equipment shield.

Info: jacksonrail.com

New from **Jason Jensen Trains** in N scale is a 2-pack of Railroad Crossing Shacks. The laser-cut wood kits with



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tarpaper roofing assemble into two crossing shacks measuring approximately 1" x 1.25". The price of the kit is \$31.50.



Also new in N scale is Jensen Trains, a three-story building containing a train store and model railroad club with rooms for rent above it. The unpainted and unassembled kit assembles into a structure with a footprint of 2" x 3". It is priced at \$42.50.

An instruction video for both kits is available at www.youtube.com/watch?v=ES6XLSBZAcM

Info: jasonjensentrains.com



New from **miniprints** is Shooting the Breeze, a miniscene consisting of a pair of older gentlemen, each with a can of their preferred beverage, sitting at a picnic table. All parts are 3D-printed and unpainted. The scene is available in

HO (\$15.00), S (\$17.99), and O (\$29.98) scales. Painting is available for an additional charge.



Another new miniscene from miniprints is Gazebo Proposal. The scene includes an unpainted 3D-printed two part (roof & base) gazebo and two figures, a kneeling man and a surprised fiancé. It is available for HO (\$19.99 (sale)), S (\$29.99), and O (\$39.97) scales. Painting is available for an additional charge.

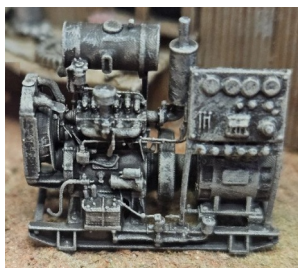
Info: miniprints.com



Monster Modelworks has released Feller's Garage in N scale. Based on a prototype in Castle Shannon, Pennsylvania, the unpainted and unassembled kit includes 3D engraved concrete block, 3D engraved old

brick 1/4" chimney, 3D engraved terra cotta coping, 3D printed details, laser-cut parts, and tar paper roofing with peel & stick backing. The vehicle is not included.

Info: www.larkspurlaserart.com



New from **Rusty Rail** in HO scale is a gas-powered electric generator mounted on a skid. The 3D-pinted model comes unpainted. It is priced at \$5.00.



In O scale is a new electric air compressor. The 3D-printed model comes unpainted. It is priced at \$10.00.

Info: www.rustyrail.com



Scale Sound Systems has released the RAPO-UNI1-RC1, a drop-in replacement speaker for the Rapido SW9. Designed for the models released in 2026 with built-in Mo-Power, the speaker improves the



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sound and has a universal 8Ω impedance.

Info: www.scalesoundsystems.com



New from **Showcase Miniatures** are a set of 1932 “F” Coupe Series Kits in both HO and N scale. Vehicles available are the 1932 “F” 3-window coupe stock, the 5-window coupe stock, the 5-

5-window coupe chopped, the 5-window hot rod closed engine, the 5-window coupe hot rod open engine, and the 5-window coupe hot rod chopped. Each kit includes a detailed resin body and chassis, metal wheels, and window glazing. HO - \$25.00 each, N - \$17.00.

Info: www.showcaseminiatures.net



New from **Silver Spike Designs** is a 4600 Box Cab Ballast Regulator kit. The kit includes the parts to build one ballast regulator. The 3D-printed resin parts include an operator seat, see-thru steps,

separate wheels, and a positionable front blade and rear broom assembly. Price is \$69.00 for HO scale.



Also new from Silver Spike is a 1960s Autojack Tamper, an update of the Electromatic Tamper. The kit includes a single piece frame, roof, and wheels, and three separate alignment buggies. Price is \$59.00

for HO and \$28.00 for N scale.

Finally, Silver Spike is also producing a kit of the 1950s Electromatic Tamper, predecessor to the Autojack Tamper and the first fully automated tamping machine. The kit consists of a single



piece frame with separate roof and wheels. Price is \$44.50 for HO, \$28.00 for N, and \$75.00 for O scale.

Info: silverspikedesigns.com



New from **Tichy Train Group** is brass and black chains in sizes of 40 links per inch, 32 links per inch, and 23 links per inch. Priced at \$5.00, each package contains 18 inches

of chain. A sample pack includes 18-inch lengths of all three sizes for \$12.00.

Info: www.tichytraingroup.com



Announced in the **Walthers Cornerstone** line is a 2-pack of mid-20th century HO scale mobile homes. Modeled in different styles, the pink mobile home measures 6-15/16" x 2-

15/16" x 1-5/8" and the mint-colored mobile home measures 6-1/2" x 1-8/16" x 2-13/16". Both feature a corrugated aluminum siding pattern. Expected in Summer 2026 the kit is priced at \$44.98.



Also from Walthers Cornerstone is an HO scale Self-Storage Facility building. A plastic kit molded in light gray, it features cinderblock pattern end walls with five garage-door style openings on each side. The completed

structure measures 8" x 4-15/16" x 1-7/16". Expected in Summer 2026 the kit is priced at \$49.98.



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Announced in Walthers' SceneMaster line is a set of HO scale satellite dishes, including two C-band dishes that are 8' across and six Ku-band dishes that are 36" wide. When assembled the larger dish is 1-1/8" x 1-3/16" and the smaller dish is 13/32" x 1/2" in size. Expected in Summer 2026 the kit is priced at \$19.98.

Info: www.walthers.com



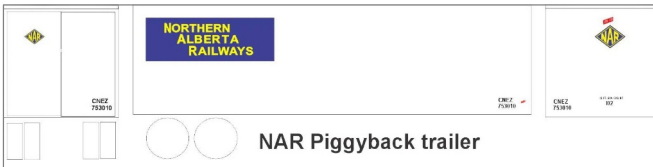
New from **Yelton Models** is an HO scale Railway Communication Tower. Modeled in grey resin, the kit includes a three-sided lattice tower and a communications equipment structure. Price is \$30.00.



Also new is a set of six HO scale ingot molds. Car is not included. Their price is \$10.00.

Info: yeltonmodels.com

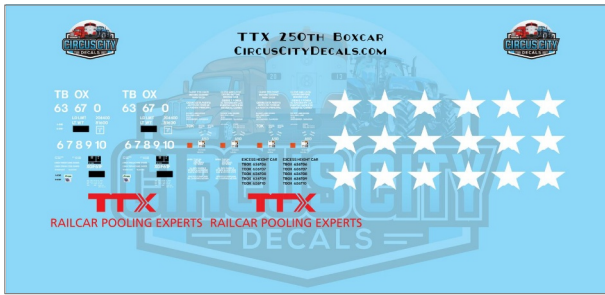
NEW DECALS, SIGNS, AND FINISHING PRODUCTS



Black Cat Decals has released set NAR#70054-N and -H,

Northern Alberta Railways transport trailer dark blue rectangle on silver trailer. -N is N scale and -H is HO scale. Both sets are priced at \$9.00.

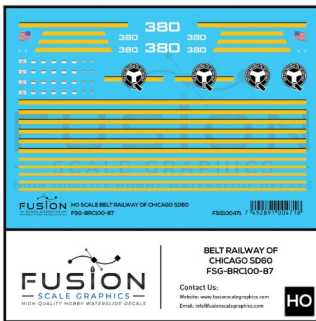
Info: blackcatdecals.com



Circus City Decals has released a set of HO scale decals suitable for decorating TTX boxcars TBOX 636706 through 636710 in the

America250 paint scheme. Each decal sheet will decorate one car. The price on the Circus City website is \$10.99.

Info: circusdecals.ecwid.com



Fusion Scale Graphics has announced the release of decal set FSG-BRC100, Belt Railway of Chicago SD60, in O (\$12), S (\$12), and HO (\$9) scales.

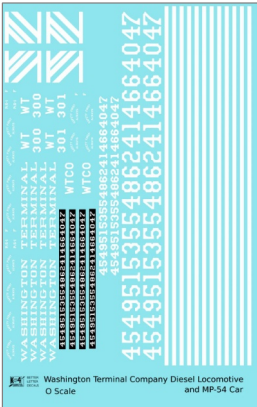
Info: fsdecals.com



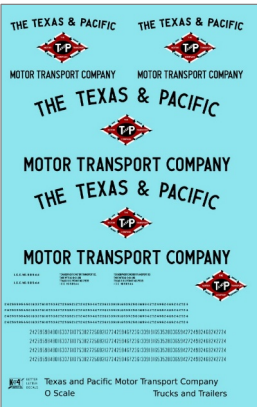
Great Decals has released set #218, S scale decals for the Louisville & Nashville 3-bay 180000-series hopper cars, in white or yellow. Each set letters one car. The price is \$12.00.

Info: www.greatdecals.com





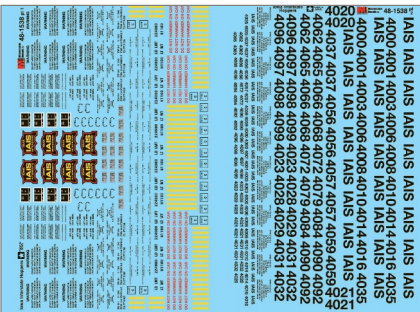
New from **K4 Decals** is the Washington Terminal Co. Diesel Locomotive White Blue Scheme, Steam or Diesel Bronze Gold, and Steam or Diesel Dulux Gold.



Also new is a set of decals for the Texas and Pacific box truck, tractor, and semi-trailer black and red logo and sets for Texas and Pacific Steam locomotives in either Dulux Gold or Bronze Gold.

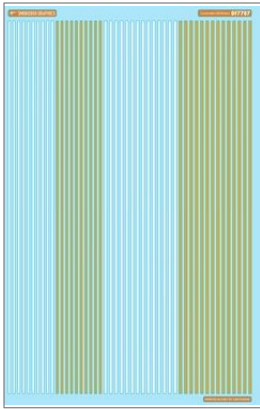
All decals are available in O, S, HO, TT, N, Z, 1:24, 1:29, and 1:32 scales. Prices depend on how many sheets are required for the decals in the chosen scale. A single sheet is \$7.45, two sheets are \$9.95, and 3 sheets are \$12.45.

Info: k4decals.com



Microscale has released set 48-1538, O Scale – Iowa Interstate Hoppers. The MSRP is \$12.95 and it is available for N (60-1538) and HO (87-1538) too.

Info: www.microscale.com



Smokebox Graphics has introduced a set of HO scale Locomotive Sill Stripes waterslide decals in yellow and white. The stripes measure a scale 3" and 4" and the sheet contains enough to stripe at least 8 locomotives, depending on size. Price is \$10.00. www.smokeboxgraphics.com

ELECTRONICS



SoundTraxx has released the new compact CurrentKeeper III. At 10.1 x 6.8 x 4.2mm, it is optimized for smaller locomotives, providing power for a shorter amount of time than the larger CurrentKeeper and CurrentKeeper II products. Info: www.soundtraxx.com

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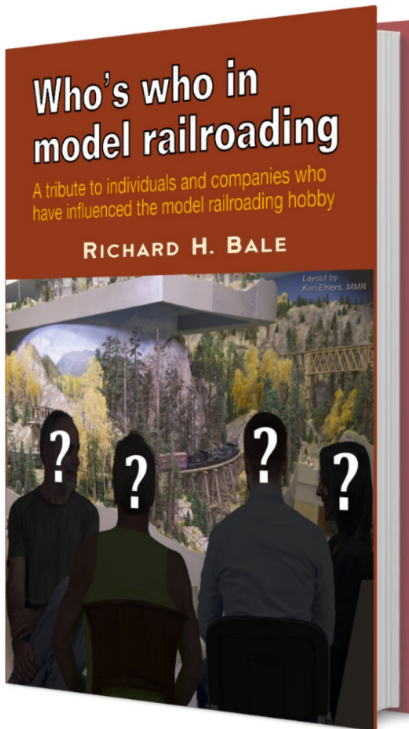
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BRIEFLY NOTED AT PRESS TIME ...

Bachmann Trains has HO scale 85' smooth side dining cars in stock. New cars are New York Central #685 and Norfolk & Western #491. MSRP for the dining cars is \$92.00.

Info: shop.bachmanntrains.com

Digcom Designs has introduced a new digital PDF paper model kit of a 53' dry van trailer decorated for TForce Freight. The PDF includes rear-door markings, wind skirts, and mud flaps. It is available in N and HO scales for \$5.95.

Info: www.digcomdesigns.net

Micro-Trains by **Atlas** has published the first monthly catalog of Micro-Trains by Atlas products, named The Micro-News. Available at the link below, it includes new releases available in late June and pre-orders due by July 15, 2026.

Products include weathered cars in N and HO scales, a single post billboard, and Artemis II and Liberty 250 collectible cars in N and HO scales and Freedom Singles boxcars in N scale. Also included are new N scale CBRW grain train 4-pack and ATSF 2-pack flatcars with helicopter load. A new series of N scale flatcars with billboard loads depicting famous events in American History are available as a subscription.

Info: download.atlasrr.com/MN0626/MSRP-MTA-MNEWS-2606.pdf

Scale Trains has announced several new preorders with a June 29, 2026 due date. The first is the first run of the Fox Valley Models HO scale Thrall 52'-6" 2244 cu. ft. gondola, formerly an ExactRail Evolution model. With an ETA of October 2026 it will be available in six road names and eight paint schemes for \$39.99. With an ETA of November 2026 the second is the second run of Rivet Counter HO scale Trinity 60' 7500 cu. ft. high-cube boxcars in two BNSF, four TTX, one GATX, and one Mississippi Tennessee Railroad/MNTR paint schemes priced at \$54.99, \$49.99 each if six are ordered. the third announcement is a new model, the Rivet Counter HO scale Trinity 60' 12' plug-door high-cube insulated EcoBox boxcar which is used as the modern beer car. With an ETA of December 2026 it will be available in two Trinity Leasing/TILX paint schemes priced at \$54.99, \$49.99 each if six are ordered. With an ETA of January 2026 a new run of HO scale Rivet Counter EMD GP30 locomotives will be available in multiple paint schemes: three Burlington Northern, Chicago & Eastern Illinois, Missouri Pacific, five Family Lines System, Louisville & Nashville, two Norfolk Southern, Southern Pacific, and four Union Pacific. DCC/Sound is priced at \$314.99 and DC/DCC Ready at \$204.99. See the July 2026 *MRH* News for more information on these models.

Info: scaletrains.com. ■



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SELECTED EVENTS



Model Railroad Hobbyist | June 2026

JUNE

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

Ongoing Online and In-Person

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, 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

June - July 2026

CANADA, ONTARIO, FORT ERIE, July 11-12, 2026. Niagara Railway Museum July Open Weekend. 21 Warren Street.

Info: nfrm.ca/events.php

CALIFORNIA, FRESNO, June 26-27, 2026. First Annual Toy Train Show, sponsored by the Fresno Model Railroad Club. Big Fresno Fair Ground's Commerce Building, 1121 S Chance Ave.

Info: fresnomodelrailroadclub.com

CALIFORNIA, KENSINGTON, June 27, 2026. Bay Area Prototype Modelers Meet. Arlington Community Church, 52 Arlington Ave.

Info: www.bayareaprototypemodelers.org

ILLINOIS, COLLINSVILLE, July 23-25, 2026. MCoR 2026 Regional Convention and St. Louis RPM. Gateway Convention Center, 1 Gateway Dr.

Info: www.mcor-nmra.org/Conventions

Info: stlrpm.com

ILLINOIS, DECATUR, June 27-28, 2026. 35th Anniversary Decatur Train Fair. First National Bank of Decatur Arena at the Decatur Civic Center, #1 Gary Anderson Plaza.

Info: www.decaturoviccenter.org/events/573/decaturo-train-fair-2026

LOUISIANA, METAIRIE, June 27, 2026. Crescent City Model Railroad Club Open House. 601 N Lester Ave.

Info: www.ccmrc.com

MASSACHUSETTS, SHIRLEY, June 28, 2026. Nashua Valley Railroad Association Open House. Suite E205 Phoenix Park, 2 Shaker Road.

Info: www.nvrra.com

OREGON, PORTLAND METRO, June 20, 2026. Railroads in the Garden Summer Tour, presented by the Rose City Garden Railway Society. Booklets are available online, at local hobby shops, and some garden centers beginning May 1st, 2026.

Info: rcgrs.com



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PENNSYLVANIA, KUTZTOWN, July 18, September 12, 2026. Flash Train Meets. Renninger's Farmers, Flea, and Antique Market, 740 Noble St.

Info: renningers.net/event-category/kutz-events

TENNESSEE, CHATTANOOGA, July 27-August 2, 2026. 2026 Scenic City Express, NMRA National Convention and National Train Show. Chattanooga Convention Center, 1 Carter St.

Info: www.nmra2026.org

TENNESSEE, JONESBOROUGH, July 24-25, 2026. Watauga Valley Railroad HS&M Train Show. Jonesborough Elementary School, 720 N Cherokee St.

Info: www.wataugavalleynrhs.org

TEXAS, AUSTIN, June 18-21, 2026. 2026 Connections, Lone Star Regional Convention. Wyndham Garden Austin, 3401 South IH-35.

Info: 2026-convention.lsrnmra.org

TEXAS, GRAPEVINE (Dallas), June 22-27, 2026. 72nd Annual Train Collectors Association National Convention. Hyatt Regency DFW Airport. 2334 N. International Parkway.

Info: traincollectorsassociation.regfox.com/72nd-annual-national-convention-grapevine-tx

WISCONSIN, MARINETTE, June 27-28, 2026. Trains, Games & Automobiles, sponsored by the Wisconsin & Michigan Model Railroad Club, Enginehouse Services, and Game Knights Hobby Store. Marinette Community Rec Center, 2501 Pierce Ave.

Info: trainsgamesandautomobileshow.com

Future 2026 by location

CANADA, ALBERTA, CALGARY, September 19-20, 2026. Heritage Park 40th Anniversary Railway Days. 1900 Heritage Dr. S.W.

Info: heritagepark.ca

CANADA, ALBERTA, EDMONTON, October 3-4, 2026. 2026 Greater Edmonton Model Train Show. Edmonton Expo Centre, 7515 - 118 Avenue.

Info: www.mmrf.ab.ca/greater-edmonton-model-train-show

CANADA, ONTARIO, ST CATHARINES, October 25, 2026. Fall Niagara Model Railway Show. Merritton Community Centre, 7 Park Avenue.

Info: nfrm.ca/events.php

CANADA, ONTARIO, WATERLOO, August 29-30, 2026. Waterloo Railway Exposition, Hampton Inn & Suites by Hilton Waterloo St. Jacobs, 55 Benjamin Rd.

Info: waterloorailexpo.ca

CANADA, SASKATCHEWAN, MOOSE JAW, November 7-8, 2026. Moose Jaw Thunder Creek Model Railroad Show. Moose Jaw Convention Center, 250 Thatcher Dr E.

Info: www.facebook.com/groups/562094199802859

CALIFORNIA, SAN DIEGO, September 9-13, 2026. Pacific Southwest Region "All Aboard for 2026" Model Train Convention. Doubletree by Hilton Hotel San Diego-Mission Valley, 7450 Hazard Center Dr.

Info: www.sandiegodivision.org/index.php/convention-2026

CALIFORNIA, VISALIA, October 7-10, 2026. 2026 Southern Pacific Historical and Technical Society Convention. Wynham Visalia, 9000 W Airport Dr.

Info: sphts.org/convention

COLORADO, GREELEY, October 16-18, 2026. Colorado Rail Proto Meet. Island Grove Event Center, 421 N 15th Ave.

Info: corpm.org

FLORIDA, OCALA, October 15-18, 2026. Iron Horse, the 2026 Sunshine Region Convention. Ocala Hilton, 3600 SW 36th Ave.

Info: www.nmrasunshineregion.org

IDAHO, CALDWELL, September 19-20, 2026. Southwest Idaho Train Show, sponsored by the Caldwell Model Railroad Club & Historical Society. O'Connor Field House, 2207 Blaine Street.

Info: sites.google.com/view/caldwell-model-railroad-club/train-show



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MARYLAND, LINTHICUM, October 1-4, 2026. Mid-Atlantic RPM. Doubletree by Hilton at BWI.

Info: www.marpm.org

MARYLAND, TIMONIUM, October 31-November 1, 2026. The Great Scale Model Train Show. Maryland State Fairgrounds, 2200 York Rd.

Info: gsmts.com

MASSACHUSETTS, SOUTHBRIDGE, October 15-18, 2026. Eyes on the NER, Northeastern Regional Convention. Wellsworth Hotel, 14 Mechanic St.

Info: conventions.nernmra.org/home/home-2026

MASSACHUSETTS, TAUNTON, September 20, 2026. 26th Annual Model Train Show, sponsored by the Old Colony Model Railroad Club. Taunton Inn & Conference Center, 700 Myles Standish Blvd, Route 495 Exit 25.

Info: trainshows.net/event/1767/old-colony-railroad-club-annual-model-train-show

MICHIGAN, TAYLOR, October 11, 2026. Taylor Town Train Show and Sale. 22525 Ecorse Rd.

Info: www.facebook.com/james.leland.355111/posts/taylor-town-train-show-and-sale-sunday-february-15th-march-15th-april-12th-octob/841310192235074

MICHIGAN, ZEELAND, October 8-10, 2026. Grand Rails 2026. North Central Regional Convention. Howard Miller Community Center, 14 South Church St.

Info: grandrailsdiv4.com

MISSOURI, INDEPENDENCE, September 17-19, 2026. 2026 Brass Train Show. Missouri Model Railroad Museum, 312 W. Pacific Avenue.

Info: showmerails.org/2026-train-shows/2026-brass-train-show

MISSOURI, SPRINGFIELD, September 11-12, 2026. Ozarks Model Railroad Association Train Show, Ozark Empire Fairgrounds, E-Plex West Hall, 3001 North Grant Ave.

Info: omraspringfield.org/train-show

MISSOURI, ST LOUIS, August 1, 2026. The National Museum of Transportation Model Train & Diecast Tailgate Swap Meet. Parking Lot #2, The National Museum of Transportation, 2933 Barrett Station Rd.

Info: tmmot.org/event/model-train-swap-meet

MISSOURI, ST LOUIS, August 29, 2026. Railroad Swap Meet, sponsored by the Boeing Employees' Railroad Club – St. Louis. Greensfelder Recreation Complex at Queeny Park, 550 Wiedman Rd.

Info: www.berrc-stl.com/V3.0p/index.html

NEW JERSEY, MAGNOLIA, September 26, 2026. Magnolia Train Show. Magnolia Community Center, 425 W. Brooke Ave.

Info: www.facebook.com/StrasburgModelRailroadNJ

OHIO, CAMBRIDGE, October 25, 2026. Eighth Annual NMRA Buckeye Division Train Show. Pritchard Laughlin Center, 7033 Glenn Hwy.

Info: www.nmrabuckeyedivision.org/train-show

OHIO, DAYTON, November 7-8, 2026. 50th Original Dayton Train Show. Montgomery County Fairgrounds and Events Center, 645 Infirmary Road.

Info: www.daytontrainshow.com

OKLAHOMA, OKLAHOMA CITY, November 14-16, 2026. 49th Annual OKC Train Show. Bennett Event Center, Oklahoma State Fairgrounds, 3101 Gordon Cooper Blvd.

Info: okctrainshow.com

PENNSYLVANIA, ALLENWOOD, August 30, 2026. 50th Annual Train Show & Sale, Sponsored by Central PA Chapter, National Railway Historical Society. Warrior Run Fire Department Social Hall, Second St.

Info: www.centralpanrhs.org

PENNSYLVANIA, DUNMORE, October 18, 2026. The Great Northeast Model Train Show. Holiday Inn Scranton East, 200 Tigue St.

Info: bernies-model-railroad-shop.square.site



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PENNSYLVANIA, HAMBURG, September 18-20, 2026. Anthracite Railroad Modelers and Model Railroad Meet XIV. Reading Railroad Heritage Museum, 500 South 3rd St.

Info: www.facebook.com/groups/624611144335704

VIRGINIA, VIRGINIA BEACH, October 15-18, 2026. Tracks to Tidewater, 2026 Mid-Eastern Regional Convention. Holiday Inn, Virginia Beach, 5655 Greenwich Rd.

Info: mer-nmra.com/savethedate/index.html

WASHINGTON, BATTLE GROUND, September 26, 2026. Southwest Washington Model Railroaders Train Club Swap Meet. Battle Ground High School Gymnasium, 250 N Parkway. Exit 11 Battle Ground Highway/SR502 east 8 miles to BGHS – don't let GPS fool you.

Info: www.facebook.com/groups/346730165469/posts/10164546463490470

WISCONSIN, MILWAUKEE, November 7-8, 2026. Milwaukee Trainfest. Baird Center, 400 W Wisconsin Ave.

Info: www.eventcreate.com/e/trainfest-2026-783052 ■

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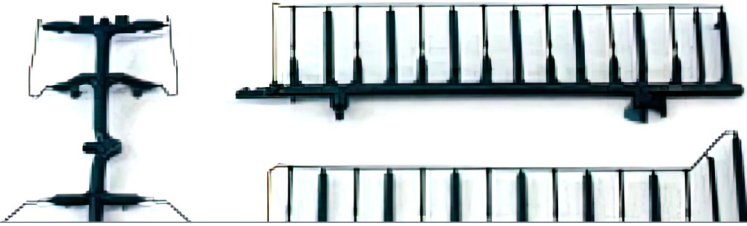
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