HAVING FUN WITH TRAINS

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MRH

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MRH
MODEL RAILROAD HOBBYIST

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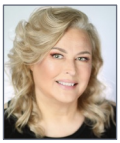
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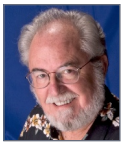
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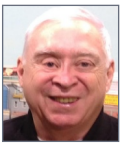
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PUBLISHER'S MUSINGS

Model Railroad Hobbyist | February 2026

JOE FUGATE GOES OVER ALL YOUR OPTIONS FOR POWERING YOUR FROGS ...

VIEW READER COMMENTS

LAST MONTH, I SHARED THE SOBERING STORY OF KEN PATTERSON'S BASEMENT LAYOUT FIRE. Ken, our roving reporter and staff writer, had stepped upstairs for coffee when a locomotive approached a turnout from the frog end – with the points thrown against it.

The result? An immediate short circuit with 8 amps flowing through the frog, which acted like a toaster element. By the time Ken returned, that section of his layout was in flames.

Ken's layout uses contact-controlled frog polarity wiring, a common approach many of us have employed. It seems like a good solution – power the frogs, eliminate dead spots, and use mechanical contacts to switch polarity when you throw the points. What could go wrong?

As it turns out, quite a bit.

This month, I want to walk you through the technical realities of powering your frogs and help you make an informed decision about what's right for your layout. While you should

always avoid leaving your layout running unattended, frog juicers can help avert shorts, headaches, and even disaster.

Understanding the frog problem

The frog is where two opposite rails cross each other in a turnout. In our miniature world with powered rails, every frog is a potential short circuit waiting to happen. Every turnout on your layout contains this inherent risk, and how you manage it has significant implications for performance, reliability, cost – and as Ken discovered, safety.

Three approaches to frog power

Dead frogs

The simplest approach is leaving frogs unpowered. This eliminates the short circuit risk entirely.

The downside? Dead frogs create dead spots. Locomotives may hesitate or stall, especially smaller ones with fewer pickup points. Sound decoders may cut out entirely when crossing a dead frog. For many modelers, this performance hit can be unacceptable.

Contact-controlled polarity

Ken was using contact-controlled polarity. You power the frog but control its polarity using mechanical contacts that switch when you throw the points.

When aligned for the diverging route, the contacts ensure the frog has correct polarity. Throw it to the through route, and the contacts flip the polarity to match.

In theory, it's elegant. In practice, it's a short waiting to happen.

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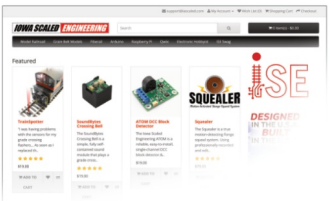

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Here's why: operators make mistakes. They forget to throw turnouts. When you approach a turnout from the frog end with points thrown against you, you get an immediate short. On a DCC layout, this may stop multiple trains across an entire power district, disrupting an operating session.

And as Ken learned, if you're not there to immediately address the short, full booster current can start a fire. Even if your DCC short protection kicks in, you've created a frustrating situation. These shorts can happen several times per operating session on layouts wired this way.

Frog juicers

A frog juicer is an automatic polarity-matcher. When a locomotive reaches a frog with a polarity mismatch, the frog

juicer flips the polarity in milliseconds – so fast you won't see the locomotive hesitate. The short never fully develops.

With frog juicers, you eliminate both dead spots and short circuit risk. Frogs are powered, locomotives glide through smoothly, and sound decoders stay active. There's no risk of a short at the frog, regardless of operator error.

One caveat: if you approach a turnout from the frog end with points thrown against you, you might derail at the points. Heavy locomotives often push the points over and continue through, but cars behind may derail.

If you're using DCC-friendly turnout wiring – where points and closure rails are powered with the same polarity as the nearest stock rail – you'll greatly reduce the chance of a short even if things derail.

You'll just have cars on the ground needing rerailing, and you'll need to correct the turnout position.

The stay-alive factor

Stay-alive capacitors store enough charge to carry a locomotive over brief dead spots. They're typically a separate module although some motherboards include them.

Off-the-shelf stay-alive modules run $25-35 per locomotive. If you're handy with electronics, you can build your own for a few dollars each, though they likely won't be as compact.

Stay-alives do more than solve the frog problem. They make locomotives run more reliably even when track or wheels are slightly dirty. Your locos run almost like they're on battery power, gliding smoothly without frustrating stalls unless track and wheels are really dirty.

This creates an interesting option: use dead frogs and install stay-alives in all your locomotives. Your fleet will run beautifully, but what happens when a friend brings over a locomotive without a stay-alive? It's likely to run less reliably, creating a poor experience for guest operators.

Also, stay-alive capacitors are designed as a limited insurance against dirty track and areas of poor contact.

They aren't a substitute for regularly cleaning your tracks or for maintaining the best quality electrical pickup in your equipment.

Put another way, the less you rely on your stay-alive capacitors, the more dependable they are.

Running the numbers

Let me use my former Siskiyou Line layout as an example. I had 65 locomotives and 120 turnouts.

Here's the math:

- Frog juicers only: 120 turnouts × $12 = $$1,440
- Stay-alives only (off-the-shelf): 65 locos × $25-35 = $$1,625-$2,275
- Both approaches: approximately $3,065-$3,715

With frog juicers alone, you get the most flexible solution. Guest locos work fine, and everyone gets consistent performance as long as rails are reasonably clean. Total cost will likely be less than equipping your entire fleet with stay-alives, and you'll have no dead spots.

With stay-alives alone (and dead frogs), your locomotives run superbly with better overall reliability, even on slightly dirty track. But you'll need to stipulate that guest locomotives must have stay-alives, or visitors will likely have a poor running experience with their foreign equipment.

The "belt-and-suspenders" approach – both frog juicers and stay-alives – gives virtually stall-proof operation for anything you run. It's the most expensive option, but if you can afford it (perhaps on a smaller layout), it guarantees excellent performance.

My recommendation

What should you do? It depends on your locomotive fleet size and number of turnouts. Do the math for your specific situation and then decide.

If you want the most guest-friendly layout with consistent performance for everyone, frog juicers are your best bet. Track wiring is more complex than dead frogs, but you eliminate shorts and dead spots for everyone.

If you want maximum reliability for your own fleet and don't mind requiring guest locos to have stay-alives, the dead frog

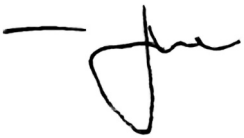
plus stay-alive approach works well. Track wiring is simpler, and your locos will run beautifully even on somewhat-dirty track.

If budget allows, combining both approaches gives you the ultimate in reliability and flexibility.

But here's the take away from Ken's experience: **contact-controlled frog power is less safe because it only takes one operator error to create a full-fledged short.** Even if your DCC short protection catches it, you may have affected multiple trains and created a frustrating session. And in the worst case, as Ken discovered, you could start a fire.

Whatever approach you choose, make an informed decision based on your layout's size, your operating style, and your budget. You may need to rethink contact-controlled frog polarity if you want the smoothest operating sessions.

Ken's fire is a powerful reminder that contact-controlled frogs may not be the best approach when it comes to electrical safety. ☑



Last issue likes

Most liked articles in January 2026 issue of *MRH* are:

1st Publisher's Musings: 2026 survey & Ken Patterson's fire
2nd MRH track plan database
3rd Electrical Impulses: DCC and fancy lighting for a diesel

Most liked articles in January 2026 issue of *Running Extra* ...

1st Limited Modeler: A power plant dedicated layout
2nd Modeling a Rock Island GP35
3rd Publisher's Welcome: Sanding sticks galore

If you want more of this type article, then like the article! Click the *Give us a like* or *comments* button on each article and press the like button on the article's forum page if you want to see more articles like these. ■

Best of the MRH FORUM THIS MONTH

Model Railroad Hobbyist | February 2026

Compiled by JOE FUGATE

What is this gondola load?

VIEW READER COMMENTS

MRH forum member **SeeYou190** (Kevin P.) asked the forum members what they thought this gondola load might be?

Several ideas were offered, with the most plausible responses being red rock rip-rap from the west, or desert landscaping rock destined for some high end building project in the east. One person even suggested river rock from New Mexico or Arizona.

To see what Kevin finally settles on, visit the thread!

View the full thread on the MRH website

▶ *MRH'S* MONTHLY GREAT MODELER POSTS

1. *MRH* forum member **Pruitt** (Mark P.) expressed some dismay that a steam loco and tender he bought had the wheels completely painted over.

Removing cured paint from wheels

MRH forum member **Pruit** (Mark P.) expressed some frustration with his recent loco purchase to the forum members:

"I recently bought am Oriental Limited brass Mikado that had been painted by a custom model painter. It was part of a sale by his estate. Both the loco drivers and the tender wheels are completely covered with paint."

Mark goes on to describe how he immersed the wheels in 99% isopropyl alcohol for days and was able to get the top coat to come off with effort, but the primer underneath refuses to budge. **CandOfan** noted how he had a similar problem and was able to solve it by using an air eraser (sand blaster airbrush).

See the forum for how this story continues to unfold.

View the full thread on the MRH website

2. *MRH* forum member **Denny99** posted this photo of his weathering efforts using oil and enamel paint techniques, linking to step-by-step photos of how he did it.

Weathering with enamels and oils

MRH forum member **Deemiorgos** (Robert D.) kicked off a thread asking how forum members do weathering:

"Has anyone here weathered your rolling stock with oils or enamels or both? I am thinking of giving it a try for the first time. Any pointers or images of your work would be appreciated."

One particularly interesting example was posted by Denny99, complete with links to step-by-step photos and videos [2].

See the full thread for many more great weathering examples.

View the full thread on the *MRH* website

Recent photo fun thread

These images posted on a recent *MRH* forum Photo Fun thread focuses on some interesting train shots.

View list of recent Photo Fun threads

3. **CP Rail Vermont** (MRH author Neil Schofield) took this attractive photo on his CP Rail Newport and Lyndonville Subdivision layout set in Vermont. Of this photo, Neil says, "CV SW1200 #1511 works the CP Rail interchange at Richford, VT on a warm summer afternoon in 1980."

4. **Mark Mathu** says, "The Northern Pacific boxcar behind the locomotives was a Christmas gift from my children and is making its first trip after weathering. Nothing better than rolling stock that not only fits my late-1960s era, but also carries a little extra meaning every time it rolls across the layout." ☑

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Track Warrants forum discussion recap

MY PART 3 ON TRACK WARRANTS LAST MONTH generated some passionate debate in the article's comment thread.

Last time I focused on "proceed from point A to point B" warrants – which allow one direction of movement, unlike "work between point A and B" which allows moving both directions. Track warrants (TW) apply to trains, men, or equipment like MOW cranes or signal maintenance trucks.

I suggested a shorthand: as long as the "caboose" didn't move backwards, a "proceed from" warrant would allow the front end some back and forth movement – like dropping or picking up cars at an industry.

The terminology problem

MRH forum members **Craig Townsend** and **pschmidt700** countered that using "caboose" as shorthand for the rear marker was too simplistic and misleading. The proper term is "rear marker," which in modern railroading could be a freight car with an End-of-Train (EOT) device, a flag, or a red flashing light also qualify as end of train markers.

Imprecise terminology could cause confusion about what the operating rules actually allow. Forum member **Sauced07** put it well: "Nine times out of ten the 'caboose can't go backwards' is an easy shorthand, but there are many exceptions where that's not actually the rear of the train."

The deeper discussion

This opened a larger debate: Does a directional "proceed from" warrant allow ANY reverse movement by the front end? The concern is safety: the dispatcher could issue opposing authority to another train behind you, creating dangerous ambiguity.

The real challenge: Fun vs. accuracy

Thunderhawk suggested that "perhaps the editor should have a few railroaders go over articles discussing prototype operating rules before publishing." Ouch. But fair.

Model Railroad Hobbyist serves everyone from newcomers to serious operators replicating prototype practices – including readers who work for railroads. On real railroads, being simplistic with operating rules can get you injured or killed. But on a model railroad, fun is the most important goal.

Using "caboose" as shorthand seemed like harmless compression, but this discussion made me realize I might inadvertently teach incorrect concepts if I oversimplify. For those pursuing prototype accuracy, *MRH* has a responsibility to get it right. I'll be more thoughtful about presenting terminology and acknowledge when we're simplifying for practical purposes.

I'll continue making operations accessible to newcomers in this column while our forums support detailed technical discussions. The depth of knowledge in our forum community – from rulebook citations to real-world experience – is impressive.

If you're a working railroader or have deep knowledge of prototype practices, please speak up when something doesn't sound quite right. **Thunderhawk's** challenge was uncomfortable but a good reminder of my duty as *MRH* Publisher.

Both casual operators wanting prototype flavor and serious operators replicating practices down to the finest detail are valid approaches. Understanding the difference is what matters most. ☑

WHAT'S NEAT column

Model Railroad Hobbyist | February 2026

KEN PATTERSON COVERS THIS MONTH:

VIEW READER COMMENTS

- BLI DRGW F3 A-B SET AND F3A
- COLORADO RAILCAR ULTRA DOME CARS FROM BACHMANN
- LAYOUT CONSTRUCTION: REBUILDING THE LAYOUT PART 3

click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

Ken continues his layout reconstruction series by sculpting the new section for roads and setting the tracks at different heights. Broadway Limited's Rio Grande F3 A-B set and a separate F3A arrive for photography, and Bachmann has new Colorado Railcar Ultra Dome cars.

BLI DRGW F3 A-B set and F3A

1. BLI is releasing a new run of HO scale EMD F3 locomotives, and they sent an F3 A & B set and a single F3A, all decorated in the Rio Grande "Prospector" scheme to Ken for photography. Fortunately, they arrived after the fire.

View Reader Comments

2. The F3B in the A-B set is an unpowered dummy, but powered B-units are available separately. Other paint schemes available are Atlantic Coast Line, Boston & Maine, Chesapeake & Ohio, Delaware Lackawanna & Western, Pennsylvania RR, and Santa Express.
Info: broadway-limited.com

Colorado Railcar Ultra Dome cars from Bachmann

3. Bachmann has released several HO scale Colorado Railcar Ultra Dome cars that are used by cruise lines on the Alaska Railroad to transport passengers to Denali/Mt. McKinley. These provide additional cars for the McKinley Explorer and Denali Express train sets.

4. The cars have been used by Princess Tours, Holland America Lines, Alaska Railroad, Rocky Mountaineer in Canada, and Royal Celebrity, a joint venture between Celebrity and Royal Caribbean cruise lines.

Info: shop.bachmanntrains.com

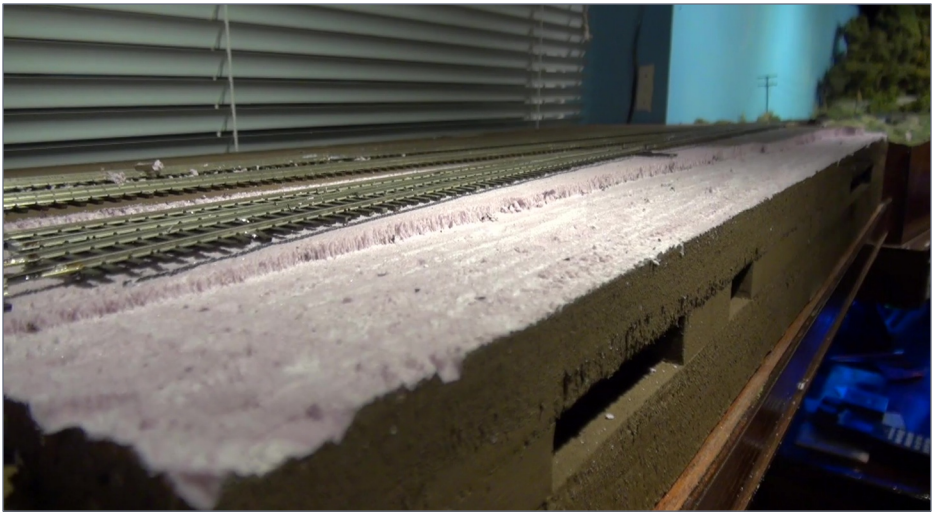
Layout (re)construction part 3

5. Ken has decided that the new section will have the sidings at a lower level than the main tracks, and the road next to them at an even lower level, which is a common prototype practice to encourage drainage. Here he illustrates this difference in height on another section of the layout.

6. To cut the drop in the foam, Ken begins by using a router with the bit set to about 1.5 HO scale feet in depth. He has a vacuum attached to the router to help keep everything clean.

7. Ken uses a curved rasp to create slopes in the foam to simulate roadbed.

8. Ken also uses a 17-inch auto-body hand sander from Harbor Freight. With coarse-grit sandpaper on it, a few strokes are all it takes to make the desired slope for the tracks.



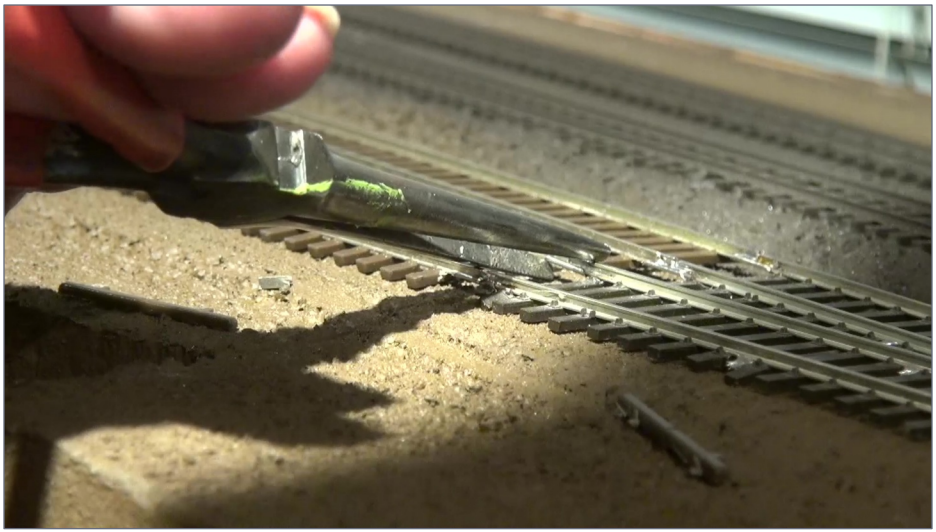
9. The track descends the slope smoothly alongside the main tracks, with the turnout lying flat and not twisted.

10. A battery-powered chainsaw makes an appearance as Ken cuts the foam down in front to create the slope for the road that will go from Kimswick across the new section to the section with the bridge on it. If there were any wood blocks in the way, the saw took care of them.

11. On the other end of the new section, Ken ripped-up the fake fur ground cover and carved out a slope for the access road to go down to the highway under the bridge. He intends to include a small bridge to cross the ditch.

12. A coat of brown paint will seal in the foam and provide a feeling of ground to the module.

13. After getting the track aligned the way he wanted it, Ken uses his portable soldering iron to solder track segments together.



14. Ken also demonstrates how he connects Code 83 and 70 rails together to ensure a smooth joint and rail surface.

15. Using carpenter's glue and ties, Ken builds a road crossing across the tracks. He also shows how he makes sure the flangeways have enough room and sands the ties down so they will be level and won't interfere with the rolling stock.

16. Ken intends to put a building at the end of the two lower tracks, so he carved out a section of foam and glued a piece of plywood in to form a flat and level base for it.

17. To finish off this segment, Ken paints where the road will be with concrete-colored paint.

Click on the video link at the beginning of the article to see the full video, including how Ken carves out the foam and lays the Micro Engineering track. There are also more views of the BLI F3 A&B locomotives and the Bachmann Ultra Dome cars. ☑

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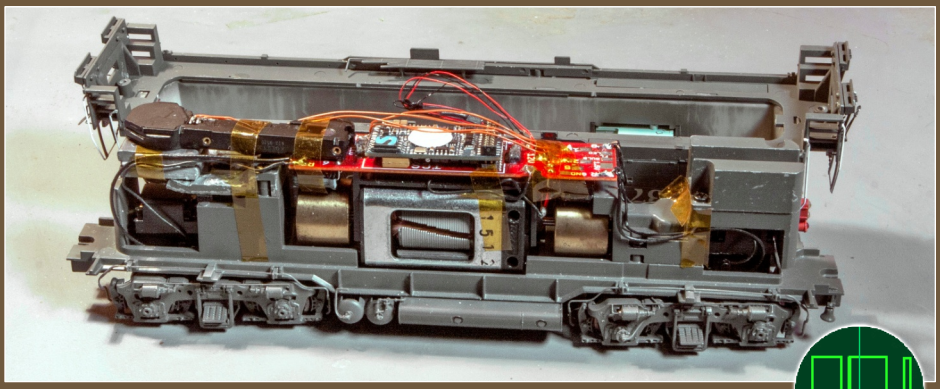
DCC decoder installation best practices



Electrical Impulses

Model Railroad Hobbyist | February 2026

VIEW READER COMMENTS

JOE FUGATE GIVES A COMPLETE RUNDOWN ON DECODER INSTALLATION TIPS AND TRICKS ...

INSTALLING A DCC DECODER PROPERLY ISN'T JUST ABOUT MAKING ELECTRICAL connections – it's about creating a reliable, maintainable installation that will provide years of trouble-free operation. Whether you're new to decoder installations or have several under your belt, following these best practices will save you time, money, and frustration.

ESSENTIAL TOOLS AND MATERIALS

Before you begin any decoder installation, assembling the right tools makes a big difference. Here's what you'll need:

Soldering iron: For decoder work, modern cordless soldering irons with fine-point C245 or C210 tips offer excellent control for working on tiny decoder pads, and maintain a much better tip temperature – *see the Modern fine-tipped soldering* irons sidebar for more.

Cordless models provide rapid heat-up times and freedom to maneuver. If using a traditional corded iron, choose a low-wattage, temperature-controlled model. Avoid high-wattage soldering guns – they generate too much heat and can damage sensitive electronics.

Wire strippers: Precision wire strippers designed for 28-32 AWG wire are essential. Look for adjustable jaws that remove only insulation without damaging wire strands.

Quality solder: Choose from these three excellent options:

■ **SAC305 lead-free solder** (96.5% tin, 3% silver, 0.5% copper) – quickly becoming the safest industry standard solder

■ **63/37 tin/lead solder** – preferred by many experienced modelers for ease of use and beautiful flow

■ **TIX solder** – low melting point solder ideal for cases where keeping the temperature low matters

For general decoder work, use 0.020″-diameter solder; for larger connections like track feeders, 0.031″ works better. Use rosin-core or solid-core with flux. If you use flux, make sure it is flux for electronics.

Setting your soldering iron temperature: Set your iron to approximately 270°F (150°C) above the solder's melting point for efficient heat transfer:

- **SAC305** (melting point 220°C): use approximately 370°C (700°F)
- **63/37 tin/lead** (melting point 183°C): use around 330°C (630°F)
- **TIX** (melting point 135°C): approximately 285°C (550°F)

If solder isn't flowing smoothly, increase temperature +25 degrees at a time until it flows well.

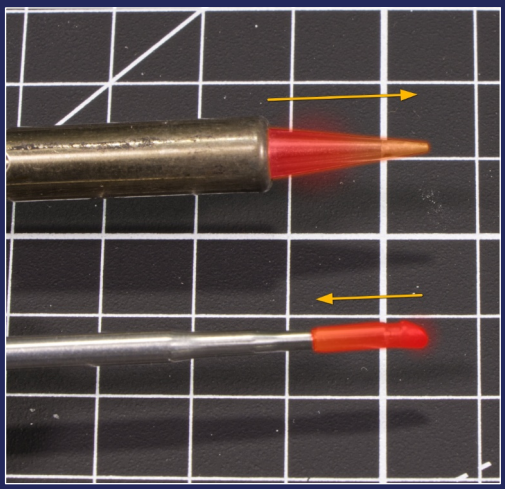
J. Fugate

Modern fine-tipped soldering irons

With old-style soldering pencils, heat travels through an imperfect thermal connection to reach the tip, resulting in lower working temperatures at the tip and less than ideal heat retention when soldering.

The C245/C210 design (first marketed five years ago) makes the tip itself the heater, eliminating thermal resistance. The result is a smaller, lower-wattage iron that outperforms old-style irons by delivering heat exactly where needed, instantly.

These new C245/C210 soldering irons are available as both cordless and corded. Cordless irons remain off until used, and then the tip comes to temperature in as little as two seconds when powered on! After use, the iron goes back to sleep automatically, and the tip cools to a safe temperature within a few minutes.



2. Traditional soldering irons (top) heat outwardly from the barrel to the tip, which means the very tip is the coolest part of the iron. Modern fine-tipped soldering irons (bottom) heat inwardly from the tip toward the barrel, putting the most heat right where you need it.

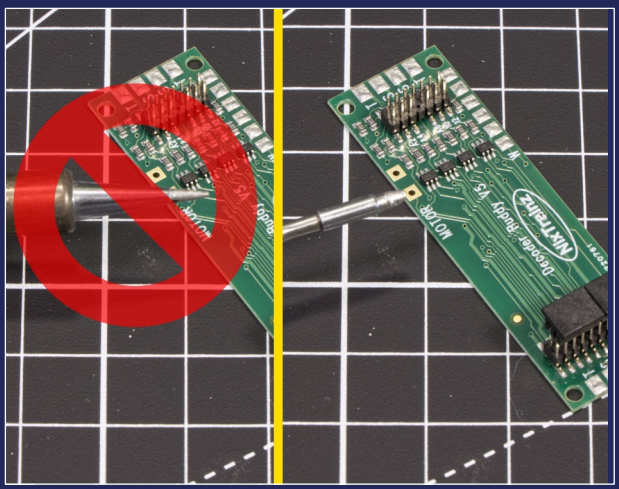
Practical difference

Old-style soldering pencil: Requires higher temperatures to compensate for heat loss. Tip temperature drops rapidly on contact, with slow heat recovery. The broad and sharp pointed tip can be awkward to use, making it easy to miss decoder soldering pads.

C245/C210: Can solder at lower temperatures due to instant heat delivery. Detects thermal load immediately and pumps more power directly into the tip. A small "horse hoof" beveled tip allows for more-precise soldering on decoder pads.

Recommendation: Unless your budget is under $20, the C245/C210 system is vastly superior for modern fine electronics work. Old-style pencil soldering irons are essentially obsolete for this detailed work, but they persist mainly due to low cost and wide clone availability.

Another huge benefit for the battery versions of the C245/210 solder irons over conventional solder stations is flexibility of workspace. The entire solder station folds quickly and neatly away into its included case. This reduces the required setup time, and greatly reduces the required amount of allocated space. ■



3. Unlike the somewhat-awkward traditional broad soldering pencil tip (left), a narrow C210 "horse hoof" bevel tip (right) fits perfectly on decoder soldering pads.

Wire and insulation supplies

Heat-shrink tubing: Stock an assortment of diameters (3/64″ to 1/4″). Heat-shrink protects solder joints, prevents short-circuits, and adds a professional finish.

Double-sided foam tape: Perfect for securing decoders, speakers, and stay-alive capacitors. The foam conforms to irregular surfaces, and provides vibration dampening.

Kapton tape: This thin, heat-resistant tape provides excellent electrical insulation without adding bulk. Unlike regular electrical tape, Kapton won't degrade or become gummy over time.

Silicone conformal coating: You can paint this onto SMD LED and resistor leads, or onto solder splices too small to support shrink tubing for insulation. This is especially useful if you use pewter or brass ditch light housings, or otherwise attempting to install LEDs in places where they might come into contact with conductive materials.

Testing and holding tools

Third-hand tool: Adjustable holders with alligator clips or cross-locking tweezers are invaluable for holding wires steady while soldering.

Digital multimeter: Essential for checking motor isolation, verifying connections, and troubleshooting. A basic meter that reads DC voltage, resistance, and continuity handles 99% of decoder installation tasks.

DOCUMENT YOUR INSTALLATION

Why documentation matters: Good documentation turns your installation into a valuable reference resource. Your future self will thank you when troubleshooting or upgrading.

What to document:

- Photograph key stages– before disassembly, during installation showing wire routing, and after completion
- Record the decoder model and installation date
- Note CV values, the locomotive's assigned DCC number, and any chassis modifications
- Store in a simple notebook, spreadsheet, or organized photo folder on your computer.

PRE-INSTALLATION PREP

Using a decoder tester: A dedicated decoder tester (like the ESU Decoder Tester) allows you to verify decoder operation, program addresses, and configure CVs before installation. This tool prevents wasted installation time on problematic decoders.

Motor isolation testing: Set your multimeter to measure resistance. With motor wires disconnected, place one probe on a motor brush and the other on the chassis. You should see infinite resistance (no connection). Any reading indicates an unwanted path that must be eliminated before decoder installation.

Removing suppression components: Many European- and UK-market locomotives include capacitors and inductors for

When talking to hobby vendors, please remember to mention MRH.

radio-interference suppression. These components interfere with DCC decoder function and should be removed. Look for small disc capacitors and coil-shaped inductors. Carefully clip or unsolder these components, and insulate any bare wire ends with liquid electrical tape.

Workspace preparation: Work on a clean, well-lit surface and, if possible, use a heat-resistant soldering mat. Organize tools within easy reach and ensure adequate ventilation for soldering fumes.

Anti-static protection: Electrostatic discharge can damage decoder components. Use a wrist strap connected to ground when handling bare decoders, or at minimum, touch a grounded metal object like a water faucet or ESD (electro-static discharge) mat before handling electronics.

Ventilation: Solder fumes contain potentially harmful substances. Work in a well-ventilated area or use a small fan to direct fumes away from your breathing zone. For the deluxe option, buy a solder fume filter fan.

Eye protection: Wear safety glasses when soldering. Molten solder can splatter, and protecting your eyes is always the smart way to go.

SOLDERING BEST PRACTICES

A well-done installation uses quality soldering methods:

- Keep your soldering iron tip clean and shiny – wipe it frequently on a damp sponge or brass "scouring pad" tip cleaner. Keeping the solder tip clean will also help prolong its life
- Heat the work, not the solder – place the iron tip against both items being joined, then apply solder
- Work quickly to minimize heat exposure and prevent melting plastic parts
- Ensure good mechanical contact before soldering – crimp or twist wires together, or use a helping hand stand to press the wire down onto the solder pad first
- Don't move the joint until the solder has completely cooled and appears shiny
- A dull, grainy appearance indicates a cold solder joint – reheat and try again

Using flux: For clean, easy solder joints, electronics flux is invaluable. Flux makes the solder flow beautifully and reduces heat application time. A solid-core solder with additional flux is ideal, although you can also use rosin-core solder.

Heat-shrink application: Slide heat-shrink tubing onto one wire before soldering. After the joint cools, slide the tubing over the connection and apply heat with the side of your soldering iron tip. The tubing will shrink snugly around the joint, providing insulation and strain relief.

Planning the Installation

Develop an installation strategy before you cut or solder the first wire.

DCC-ready vs. non-DCC-ready:

- **DCC-ready locomotives** have a socket (typically 8-pin or 21-pin) that accepts a plug-in decoder – installation takes minutes
- **Non-DCC-ready locomotives** require hard-wiring, which takes more time, but often results in a neater installation

Avoiding short-circuits: Red and black track feed wires must never contact orange and gray motor wires – this will instantly destroy your decoder. Use heat-shrink on every solder joint and any bare wire end. Route wires so they can't be pinched when the body shell is installed. Test-fit the shell several times during installation.

Decoder placement: Secure decoders with double-sided foam tape or tape them down with Kapton tape, rather than letting them float loose. Ensure the decoder won't touch metal chassis parts. In steam locomotives, the tender often provides more installation space. Use a multi-pin connector between locomotive and tender for easy separation during maintenance.

Test fitting with modeling clay: You can use lumps of modeling clay to match the size and shape of your decoder, speaker, stay-alive and other components. Stick the clay pieces onto the frame in potential locations – clay naturally adheres temporarily without damage. Test fit the shell to verify everything will clear and fit properly, then adjust positions as needed.

This simple technique prevents costly mistakes and saves time by letting you experiment with placement before soldering anything in place.

NMRA standard wire colors: The National Model Railroad Association has established standard DCC wire colors, see [4].

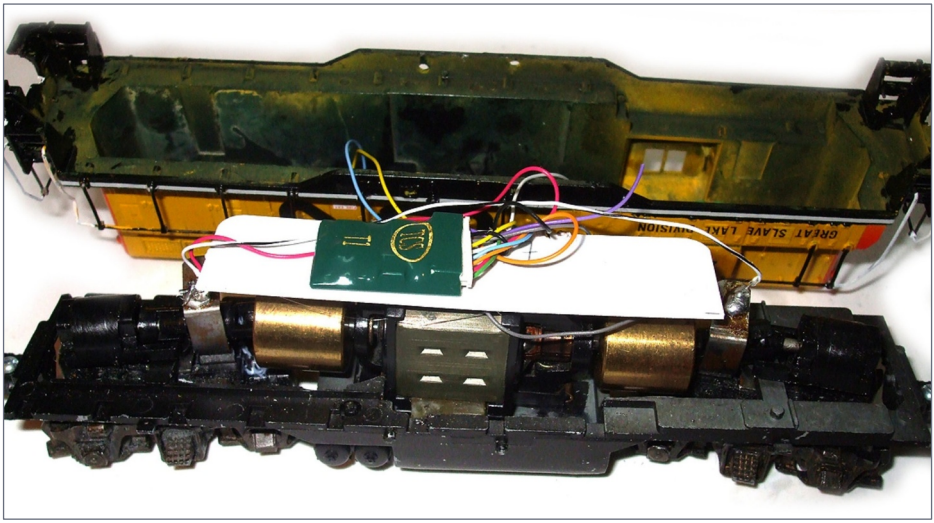
- **Red**: Right rail pickup
- **Black**: Left rail pickup
- **Orange**: Motor positive
- **Gray**: Motor negative
- **Blue**: Common positive for all functions
- **White**: Front light (F0 forward)
- **Yellow**: Rear light (F0 reverse)
- **Green**: Function 1
- **Brown**: Function 2
- **Purple**: Speaker (x2)

4. The NMRA has established these standard wire colors for decoders.

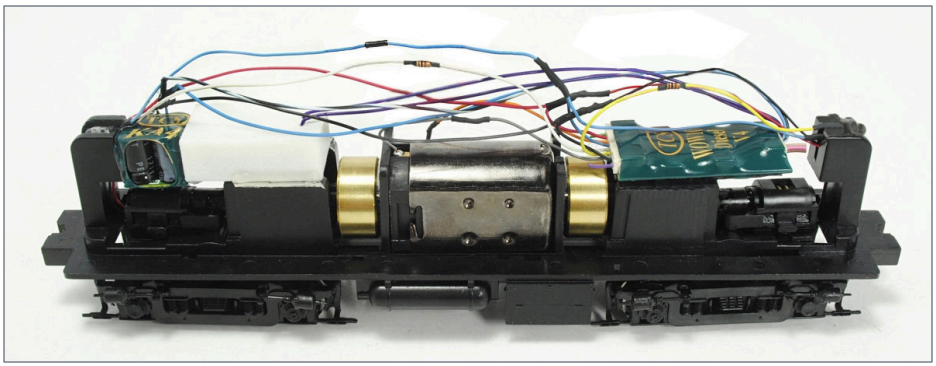
Additional functions may use other colors such as pink – consult your decoder's documentation.

Wire gauge selection: Standard 30 AWG stranded wire works for most installations. In extremely tight spaces, consider solid-core Kynar wire or ultra-fine enameled wire. Solid wire stays where you place it, making installations in cramped quarters easier.

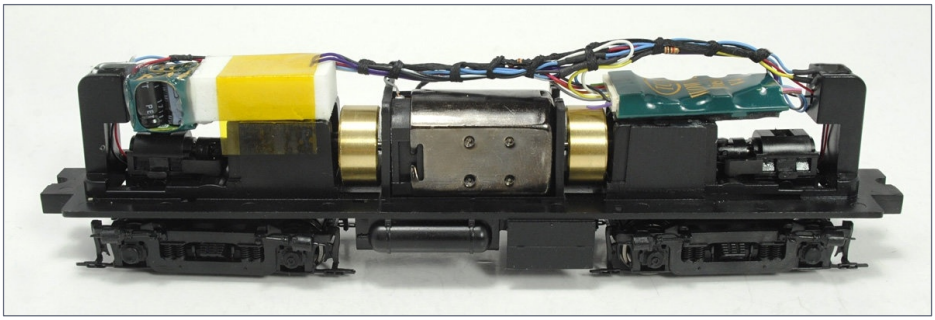
CONTROLLING THE MESS



5. With non-DCC-ready locomotives such as this Athearn bluebox, it can be helpful to add a styrene mounting platform to keep the wires out of the mechanism. *Train Control Systems photo*



6. LifeLike Proto 2000 RS2 sound decoder installation before managing the wire mess. *Train Control Systems photo*



7. After some careful bundling of the wires, the loco is now much easier to maintain, and putting the shell on without pinching a wire is super-easy. *Train Control Systems photo*

Here are some techniques to keep your wiring organized, make it easier to get the shell on and off, and make things easier when you need to service the locomotive.

Decoder mounting platform: Sheet styrene can provide a simple solution to getting a flat mounting space for a decoder [5]. Cut a platform from 0.010″ to 0.020″ styrene sheet, and attach it to the motor or other frame location using double-

stick tape. The platform can extend over flywheels and the truck gear towers to gain usable mounting area. Use 0.040″ if you need extra stiffness, particularly when cantilevering over a truck gear tower. Mount your decoder on top with double-sided foam tape, creating a stable, insulated surface that keeps the decoder away from metal chassis parts.

Kapton tape: Kapton tape is your best friend for tacking down

Choose that decoder mounting platform carefully

J. Regier

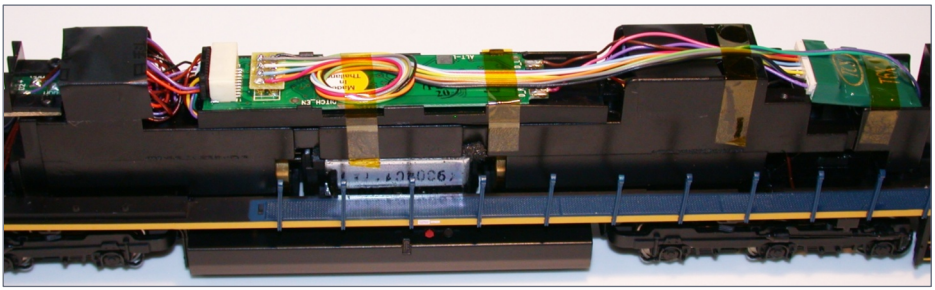
Over many installations, I have tested a few different methods for supporting hard-wired, nine-pin decoders, including an insulated lead bar for added locomotive weight, sheet styrene, a custom 3D-printed decoder cradle, and a 21-pin motherboard (discussed later).

Of these methods, I found that both lead and styrene can flex over time, eventually braking or otherwise interfering with the motor flywheels. 3D-printed decoder cradles work very well if you know how to design them and have a printer.

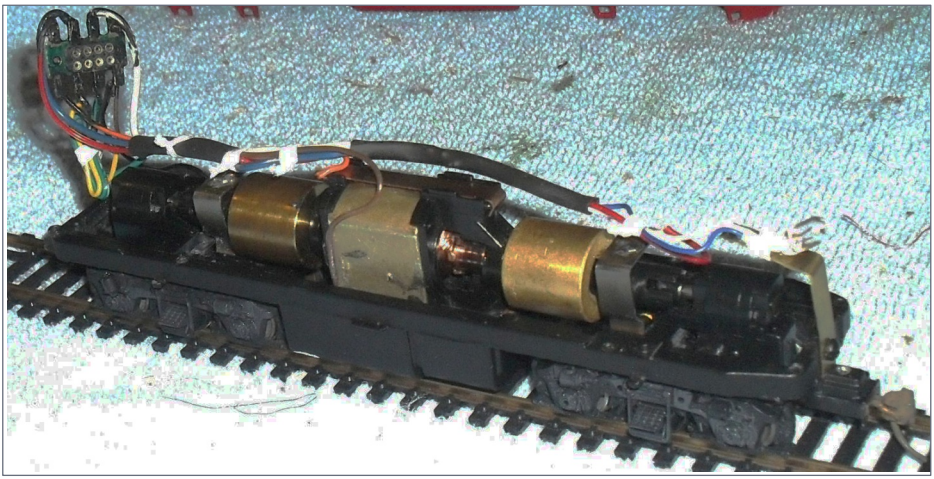
None is more rigid, effective, and efficient in usage of space than the PCB of a motherboard/21-pin decoder combination, and most decoders now have 21-pin versions. Although I resisted using 21 pin decoders and motherboards for some time – they cost a few dollars more – I have come to view the 21 pin motherboard/decoder combination as my go-to solution for all these reasons. ■

VIEW READER COMMENTS

loose wires and preventing shorts [8]. This high-temperature tape provides excellent electrical insulation and won't leave residue. Apply strips of Kapton tape to any metal chassis surfaces where bare wires might contact. You can also use a layer of Kapton tape on the bottom of the decoder for protection against accidental contact with the metal weight.



8. Kapton tape works well to tack down loose wires and keep them where they belong. *Train Control Systems photo*



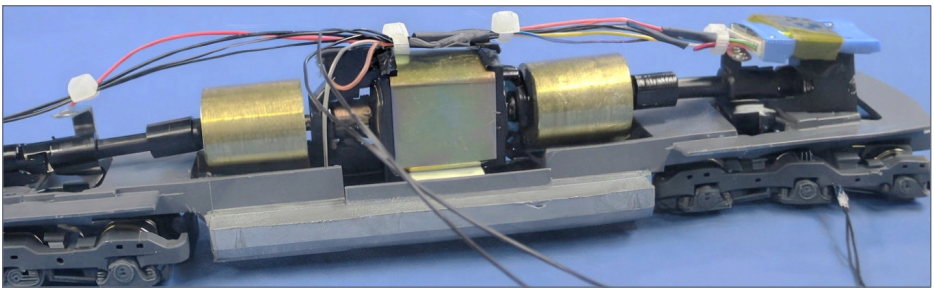
9. Shrink tubing also works to collect stray wires into a tidy bundle. *Photo by MRH forum member Prof Klyzr*

Heat-shrink bundling: Beyond insulating individual joints, use oversize heat-shrink tubing to bundle multiple wires together into neat harnesses [9]. Slide a piece of heat-shrink over several wires before you start soldering. Make sure that there is sufficient space between the shrink tubing and the solder joint that you don't shrink it prematurely.

After all connections are made and cooled, slide it into position and shrink it. This creates a clean-looking wire bundle that's much easier to route than individual loose wires flopping around inside the shell.

The accordion fold/loop: When you have excess wire length, fold the wire back and forth in small accordion-style folds or create a loop as shown in [8]. This technique prevents wire fatigue and allows the wire to flex naturally when you remove and reinstall the shell. Secure the folded/looped section with a small piece of Kapton tape.

Strategic wire routing: Study your locomotive chassis and identify natural channels and pathways for wire routing. Follow these channels and avoid routing wires across open areas where they might get pinched. Keep wires well-clear of shell mounting posts – these are common pinch points. Route wires away from moving parts like flywheels, gears, and drive shafts. If a wire must cross a potential pinch point, use extra heat-shrink or wrap it with Kapton tape for added protection.



10. You can use small 2″ or 3″ cable ties to gather loose wires into a nice, organized cable as in this Athearn blue-box install. *George Schreyer photo from his online blog*

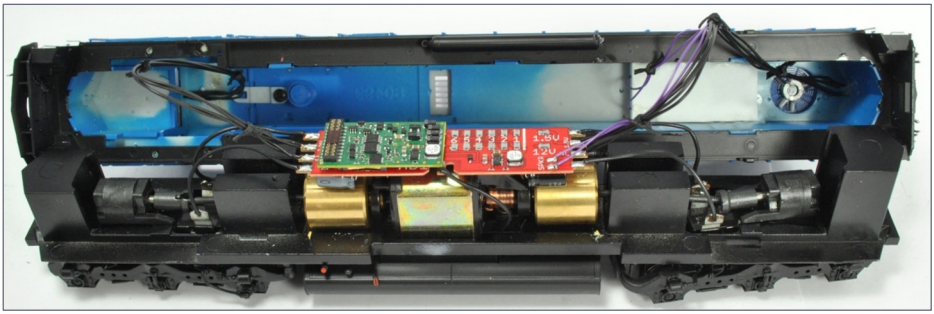
Micro cable ties: For locomotives with some room, miniature cable ties (2″-3″ long) can create very neat wire bundles [10]. Thread the tie loosely through convenient mounting holes or around frame members, bundle your wires, and snug the tie down – but don't over-tighten. Pulling cable ties too tight can damage wire insulation or even break the fine strands inside. The goal is to secure the bundle, not strangle it. Trim the excess tail close to the tie head.

Waxed thread securing: This traditional method still works beautifully. Use black waxed linen thread (available at leathercraft stores) to tie wire into neat bundles [11]. The wax helps the thread grip itself, and unlike plastic ties, this thread won't cut into insulation if you need to cinch it snugly. This method is particularly useful in tight spaces where cable ties won't fit.

Preventing Wire-Related Shorts

Even with careful soldering, wire-related shorts can happen. Here's how to prevent them:

- **Insulate every joint:** Every solder connection must be covered with heat-shrink tubing. No exceptions.
- **Separate power and motor wires:** Create physical separation between your track pickup wires (red and black) and motor wires (orange and gray). Bundle them separately.



11. You can also use waxed thread intended for leathercraft to tie the wires into a neat bundle. *Train Control Systems photo*

- **Test-fit repeatedly:** Test-fit the shell multiple times during installation to resolve potential pinch points early.
- **Kapton tape cushion:** Apply small "cushions" of Kapton tape to any sharp edges where wires pass.
- **The wiggle test:** After completing your installation, gently tug and wiggle each wire to ensure nothing can work loose.

Plan before you solder: Lay out your decoder and plan your wire routes before soldering anything. Measure wire lengths carefully – too-short creates tension on joints; too-long leaves a tangled mess. Leave just enough slack for adjustment and easy shell removal.

LED INSTALLATION AND LIGHTING

LEDs have become the standard for model railroad lighting – they're bright, efficient, and last essentially forever [12]. But unlike incandescent bulbs, LEDs are polarity-sensitive and require current-limiting resistors.

Here I focus on choosing and wiring the LEDs. Adding lenses to SMD LEDs is an article into itself, so I don't cover that.

12. I installed warm-white 0402 SMD LEDs in this Athearn Genesis GP9. The upper pair have been decoder-programmed to be oscillating Gyralights and they look great.

Testing before installation: Never solder an LED without testing it first. Use a 3V coin cell (CR2032) and touch the LED's anode lead to the positive terminal and cathode to negative. The LED should light immediately.

*When testing with any power source over 3V, always – **always** – be sure there is a 1K or 2K resistor in series with the LED and the power source (some LEDs have a built-in resistor). Applying excess voltage without a series resistor will likely ruin the LED.* If the LED does not light, reverse the leads. If it doesn't light in either direction, the LED is dead.

For a more sophisticated approach, use a multimeter that has a diode-test mode – the LED should light and display a forward voltage reading between 1.8 and 3.3 volts.

Color temperature matters: Pay attention to color temperature, which is measured in degrees-Kelvin:

- **warm-white (2700-3000K):** Yellowish light perfect for steam locomotives and older diesels
- **Cool white (5000-6500K):** Bluish light appropriate for modern diesels
- **Neutral white (3500-4500K):** Middle-ground that works well for all eras

Choosing the LED: SMD (surface-mount device) LEDs have become the most common choice for locomotive lighting. Their tiny size makes them perfect for headlight housings, number boards, ditch lights, and cab interiors where through-hole LEDs won't fit. Tiny 0402-sized LEDs work great for ditch lights, since they can fit inside.

Pre-wired SMD LEDs: Pre-wired SMD LEDs are much easier to work with. These come with wire leads already soldered and may include current-limiting resistors. Soldering leads onto bare SMD LEDs smaller than a grain of rice is frustrating.

Pre-wired SMD LEDs are economically priced and eliminate that hassle – simply connect the leads to your decoder's

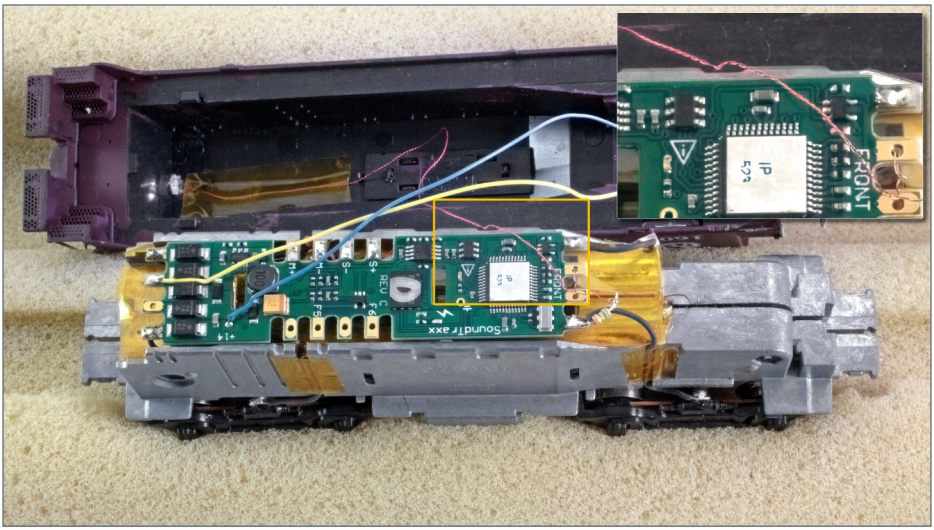
function outputs and add heat-shrink. With pre-wired SMD LEDs, polarity is handled for you – red lead is positive (anode), black lead is negative (cathode). Easy-peasy.

Smaller SMD LEDs often come with fine lacquered magnet wire having one lead painted with a darker varnish, making it easy to twist the two wires into a nice tight cable for easier wire management [13], and still identify polarity.

Through-hole LED polarity: If using traditional through-hole LEDs, identify polarity by:

1. The shorter lead is cathode (negative)
2. The flat spot on the base flange marks the cathode side (the tiny flat can be hard to see)
3. Looking inside the transparent LED, where the larger piece is the cathode

Choosing the right LED resistor: DCC systems operate at 14-16 volts, requiring resistor values between 1K and 2.2K ohms.



13. Here, the headlight SMD LED magnet-wire leads have been tightly twisted into a neat little cable for easy management (see inset, upper-right). *Train Control Systems photo*

A 1K resistor is most common – it provides excellent brightness while offering solid protection against voltage spikes. If an LED is too bright, step up to 1.5K or 2.2K ohms. Don't use lower values (470-680 ohms) recommended for DC layouts – they don't provide enough protection on DCC.

J. Regier

Resistor dimming

Many 21-pin decoder motherboards (see the section on decoder motherboards) include built-in current-limiting 1K resistors for LEDs. I have installed LEDs both with and without inline 1K resistors to these boards, and have noticed only very slight dimming from the extra 1K resistance. Working with LEDs with inline resistors has the advantage of safe testing using a 9V battery, so I continue to use the 1K resistors.

With the many lighting options available in modern decoders, I like installing step lights, walkway lights, ground lights, and separately lit number boards. All of these require constant-dim LEDs.

I also enjoy capturing video of my installs, and noticed that the constant-dim lighting functions had a flicker to them. The reason for the flicker is Pulse Width Modulation (PWM), which limits brightness by cycling power on and off up to 1000 times per second, with brighter lights being on 100% of the time, and dimmer lights flashing on for 20% of the cycles. To the naked eye, it looks dim, but for a video camera, which captures images at 24, 30, or 60 frames per second, a flicker becomes visible if some of those frames are captured during the LED off cycles.

Since I noticed a very slight dimming at 2K resistance, I went to my breadboard to experiment with resistance dimming. I found noticeable dimming at about 10K resistance, even dimmer at 20K. After the experimentation, I now use 10K LED for most of the constant dim features, and leave the decoder function setting at constant bright. The result is constantly dim lights with no flicker. ■

LED resistor placement: Common practice is to place the resistor on the cathode (black/negative) side. Solder the resistor lead directly to the cathode lead, then solder your decoder's function wire to the other end of the resistor. The anode (red/positive) side connects to the blue common positive wire. Add heat-shrink tubing over both joints.

Advanced decoder installations

Basic decoder installations with just motor control and headlights are straightforward. But modern sound decoders with full lighting effects create a different challenge entirely.

Add speaker wires and multiple function outputs for ditch lights, beacons, Gyralights, firebox glow, step lights, and running gear illumination, and you're suddenly managing 10-15 or more wires in the same cramped space.

Stay-alive circuits: Stay-alive circuits make this challenge even tighter. A stay-alive capacitor keeps your sound decoder and lighting functions running through track power gaps. That capacitor needs two more wires plus physical space to mount it.

Decoder motherboards

The most effective solution to manage this extra complexity is with an aftermarket 21-pin decoder motherboard like those from Decoder Buddy or TCS. These can be used as replacements for the factory motherboard – highly recommended if you're adding lighting functions, since many factory boards do not include resistors for all functions – or as a rigid base for an installation into non-DCC-ready locomotives.

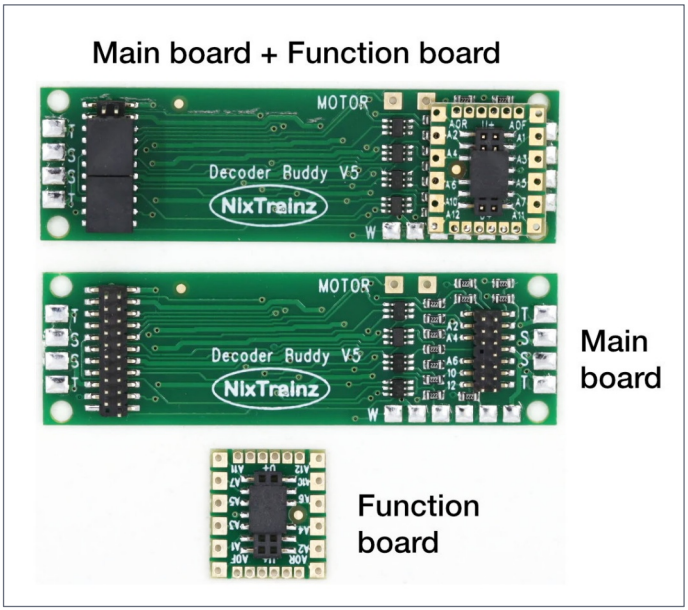
These boards transform a chaotic wire mess into an organized, maintainable installation.

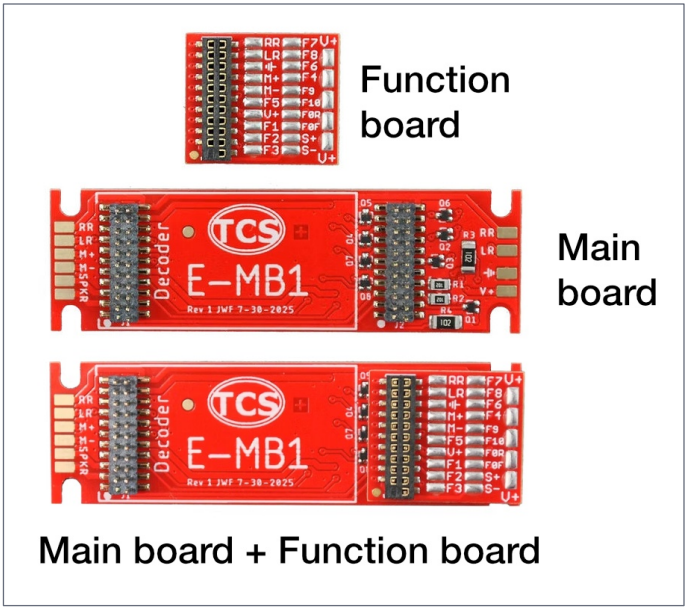
What motherboards provide: Instead of soldering directly to track pickups, motor tabs, and individual LED resistors scattered throughout the locomotive, you get clearly labeled solder pads for every function:

- **Track power inputs** (left/right rail)
- **Motor outputs** (positive/negative)
- **Function outputs** (F0-F6 or more, each with built-in current-limiting resistors)
- **Speaker connections** (positive/negative, sometimes with capacitor pads)
- **Stay-alive connections** (clearly marked polarity)
- **Common positive or negative** (depending on board design)

Benefits of motherboards: 21-pin decoders plug directly into the motherboard and all your lighting and accessories connect to labeled function pads. No more tracing wires. Need to troubleshoot a non-working ditch light? Just check the F3 pads. Want to add a beacon later? Solder to an unused function output.

14. The Decoder Buddy is a great motherboard option for advanced 21-pin sound decoder installations. It has a main board and a small function board that can be removed, making it easy to separate a shell full of extra function lighting for maintenance.





15. TCS also recently started selling their economy motherboard (E-MB1), also making it easy to wire up a complex 21-pin sound decoder.

Removable function plugs: Many quality decoder motherboards include a removable function plug – a small connector that accepts all your function leads in one centralized location. Instead of soldering individual lighting and effects wires directly to the board, you solder them to this plug. When maintenance time comes, simply unplug the connector, and the entire shell separates cleanly from the chassis without disturbing a single wire.

All your ditch lights, beacons, Gyralights, firebox glow, and other effects wiring stays bundled together in the plug, making troubleshooting straightforward, and future upgrades painless. It's the difference between a clean trouble-free installation and a messy one that you may regret later.

Cost vs. value: Yes, you'll spend $7-16 on the motherboard, but you'll save time and frustration on your first complex installation. For sound decoder installations or locomotives with extensive lighting, a decoder motherboard isn't a luxury – it's the foundation of a high-quality installation.

Motherboards that include stay alive: TCS makes an entire series of advanced motherboards that include their KA2 or KA4 Keep Alive® right on the board. This can solve space problems by allowing you to add stay-alive without needing to go out of your way to find space for it [16].

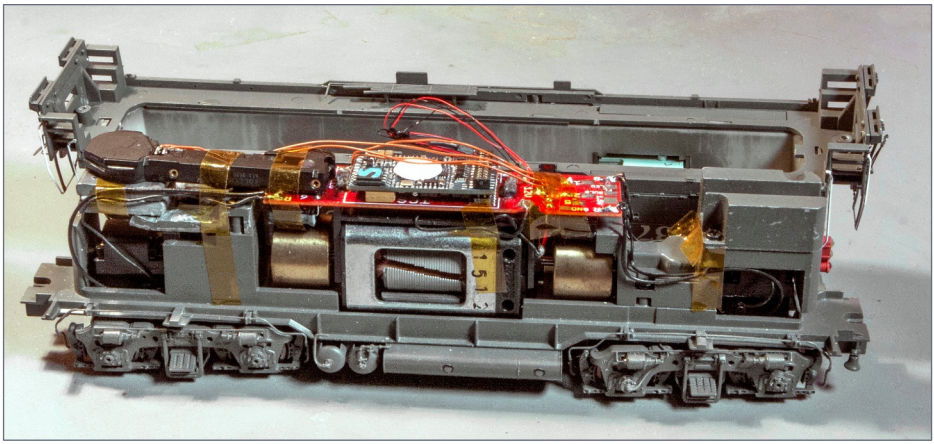
Testing and Troubleshooting

Proper testing prevents problems and identifies issues early.

Programming track first: Always place a locomotive with a new DCC decoder on the programming track first. The programming track has current-limiting that protects a decoder if there's a short-circuit in the wiring. If the command station reports a short, remove the locomotive and check your installation before proceeding.

Initial Testing Procedure

Step-by-step testing:



16. In this Genesis locomotive sound installation, I used a TCS "Genesis" motherboard with integrated Keep Alive – the capacitors cleverly fit into otherwise wasted space above the flywheels!

1. Place the locomotive on the programming track
2. Read the decoder address in CV2 – if successful, the decoder is communicating
3. Program a new address
4. Move to the main layout and verify operation
5. Use "programming on the main" (Ops mode) to set any further CV values

COMMON PROBLEMS AND SOLUTIONS

Troubleshooting guide:

- **Locomotive runs backward:** Swap the orange and gray motor wires, or change CV29 to reverse direction
- **Erratic operation:** Check for poor track pickup, dirty wheels, or inadequate red/black wiring
- **No response:** Verify red/black wires are connected to track pickups; check for shorts
- **Functions don't work:** Confirm blue wire connections and check function wire connections and routing

CONCLUSION

High-quality DCC decoder installations combine proper tools, careful preparation, good technique, and attention to detail. While the process may seem daunting at first, following these best-practices will result in reliable, maintainable installations that provide years of trouble-free operation.

Remember that every installation teaches you something new. Don't be discouraged by initial challenges – even experienced installers occasionally encounter unexpected issues. Take your time, work methodically, and don't hesitate to test frequently throughout the process.

The investment in proper tools and techniques pays dividends in reduced frustration, fewer failed decoders, and locomotives that operate as reliably as their full-size prototypes – and you will save money by not needed to pay someone else to do the installation.

Whether you're converting your first locomotive or your fiftieth, these best practices will help ensure success. ☑

Many of the items mentioned in this article are available in a shopping list here.

Bibliography

Photo 5, 6, 7, 8, 11, 13. *Train Control Systems* decoder install database. See: drupal.tcsdcc.com/installations

Photo 10. George Schreyer, blue-box loco, see: www.girr.org/girr/lamrs/lamrs_blue_box.html

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Sammy Carlile's HO Scale Santa Fe Hereford Subdivision

THE MRH STAFF TOURS THIS LAYOUT BUILT FOR OPERATION AND MAINLINE ACTION ...

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1. GP60s 4032 and 4023 lead this intermodal freight as it charges through farmland outside East Texico. The GP60 was the last of the four-axle road units built by EMD. They are designed specifically for high-speed intermodal service – you would often see them leading Santa Fe's priority "Super Fleet" trains across the Southwest.

Model Railroad Hobbyist | February 2026

VIEW READER COMMENTS

SAMMY CARLILE'S SANTA FE HEREFORD SUBDIVISION HAS BEEN RUNNING STRONG for over 20 years, quietly proving that a well-designed modest sized layout can deliver big operations. Built in his attached Oklahoma garage, this meticulously detailed HO scale layout is a masterclass in operations-focused design.

We sat down with Sammy to learn how he built it, what keeps him motivated, and why visitors from 39 states and four foreign countries keep making the trip to Tulsa to operate on his railroad.

Sammy Carlile: My name is Sammy Carlile, and I live in the Tulsa, Oklahoma area. I got started in the hobby when my parents took me on an Amtrak trip while I was very young. The old Midland Valley shortline railroad also ran behind our house so I got lots of exposure to railroading at a young age.

Getting started in the hobby

MRH: **Tell us how you got started in the hobby?**

Sammy: I recall the trains going by at a very young age, so I was fascinated by the real trains. Then I got my first Lionel train set when I was four years old.

That was a pretty good start in the hobby.

A couple years after that was when I got to take the Amtrak trip. We went from Kansas all the way to Los Angeles, up to Seattle, back to Chicago, and then back to Kansas. So we went about 2,500 miles, and I got to see a lot of great railroading. That was in the very early 1980s.

MRH: **Tell us about your journey in the hobby. Take us from those days when you got your Lionel set and did the train trip, up to just before you started this layout.**

Sammy: My journey in the hobby stemmed from the train trips and from my parents giving me my first train set. Of course, the Lionel train set morphed into the HO scale stuff I have now. I thought, you know, there's just something wrong with a rail running down the middle.

I wanted two rails because I wanted it to be realistic. So at a very young age, I leaned toward realism, even though I was dealing with HO scale. Tyco trains, though very cheap, gave me a good start.

In my teenage years, I picked up my first Model Railroader. My mom got me a subscription to MR, and of course I saw all those great articles, and I thought, "Wow, I wanna do that when I grow up!" Through high school, I still did a little bit of modeling, and went into the workforce at a very young age.

That's when I started railfanning quite a bit in the early nineties. Of course, when I got my driver's license and had a camera, I wanted to go out and see the real thing. Everything I was seeing around the Tulsa area catapulted me into wanting to go further.

I took a few trips up to Kansas City in the very early nineties, and that morphed into going to western Kansas, western Oklahoma, Texas, New Mexico. I've done a lot of miles chasing the old Santa Fe. I've got a lot of great photographs from the early to mid 1990s, and that's when I really started getting deep into modeling, wanting to model what I was seeing in the real world.

For modeling a lot of my locomotives on the layout, I used photographs taken in 1993, '94, and '95 of the actual locomotives. That's why they look the way they do. My realism hinged on

wanting to duplicate a lot of the things that I saw in the modeling magazines – *Model Railroader, Craftsman, Mainline Modeler*, all those guys that I grew up reading about.

And then as the '90s turned into the 2000s, I got fortunate, had a decent job, and a very understanding wife. We built this place in 1999, with the garage dedicated to the layout space. So I've been modeling this layout since 2004.

My first layout was an experiment, basically just to see what I could fit into the garage. It was a single level, railfan layout. I would just run long trains from staging yard to staging yard. Then I got invited to a local club layout around about that time.

At that time I got into operations. That pretty much changed my focus on modeling. First I was obsessed with operations at the large club layout – Clare Morton Southern by George Mosby. I owe him a debt of gratitude.

He's no longer with us, but I owe him a lot for that invitation. I was a lone wolf guy, and he ran into me at the hobby shop. He said he knew me and invited me to that op session.

And after that op session, I said, "Man, can I come back to this?" It was really neat. I went back to the next month's op session. After that, I came home and I thought, "Man, this layout is no good!"

It was fun just to run trains in a circle, but I wanted my trains to have a purpose, and operations was the way to go. So within the next two or three months, I had to devise new plans, and I tore that layout down. In 2004 I started on this layout.

This layout is a little over 20 years old now. It is geared for operations, but with a lot of mainline movements in between. It's the best of both worlds for me.

***MRH:* What do non-modelers think of your layout?**

Sammy: I have a lot of very close friends that have known me for years that are non-modelers. Everyone that is associated with me knows that this is my hobby, this is what I'm passionate about. They come out here, and a lot of them say how neat it is.

2. Here is the head end of Amarillo staging yard on the upper deck. You can see turnout control panel for this yard in [3], below.

3. This is the turnout control panel for Amarillo staging on the upper deck.

A lot of them shake their heads because they can't comprehend what we're doing here. But the ones that do model make up for the ones that can't comprehend. Having people come from several states away just to visit and operate is a great feeling.

I've had over 200 op sessions now, and I've had visitors from 39 states and four foreign countries. They are the reason why we do it. I don't really have an issue with people scratching their heads about this.

Even I can't understand some of my friends' hobbies. But you just realize that's what they like, and you accept it. This is my hobby that I like. I like to build and operate model railroads.

The Santa Fe Hereford Subdivision

***MRH:* How would you describe your layout to a fellow modeler?**

Sammy: A good description of the Santa Fe Hereford Subdivision layout is that it occupies a 25' x 25' space. It's in an attached garage to my house, so it's somewhat climate controlled. It's an around-the-walls design, and I tried to pack as much operations as I could in here.

That's why I went with the two-deck design. It's a point-to-point layout. I explain to them when they first arrive that we can run trains for three and a half to four hours.

We run mainline trains and switch jobs that take two and a half to three hours to complete the whole job. So it's got a little something for everyone that's familiar with what we do. It's got two yard jobs, so we move a lot of freight and stay busy.

The prototype section of this mainline hosted anywhere from 40 to 80 trains a day during the time period I model. 90% of it was the mainline stuff, but there is just enough local and road switcher activity to keep guys happy. So I've tried to hit on every button that I could.

***MRH:* Why did you pick this particular subject to model? Let us in on your rationale.**

Sammy: I chose this area of the country to model because my wife's best friend lived in Albuquerque, New Mexico at the time. We both

went to high school with her, and she said, "You guys need to come out and visit us in Albuquerque."

I'd been going out to Texas and New Mexico for three years at that point, taking exclusive train chasing trips. So when my wife said, "Can you take me to Albuquerque?" of course I was gonna say yes to that. We followed the Santa Fe all the way out there.

My major focal point in the late '90s, early 2000s was the Clovis subdivision between Clovis and Belen, New Mexico. That is a high-density mainline through the middle of New Mexico. The scenery is not great on 80% of it, but the 20% makes up for that.

Going through the Abo Canyon and climbing up the grade into Mountainair – that was my focal point. Little did I know when I was going between Amarillo, Texas and Clovis, New Mexico, that was where all the cool action was, the future subject of what I'm modeling now.

Grain elevators, packing houses, anhydrous ammonia, and a lot of local work for the trains to do with the road switchers and the

4. This is the upper deck Amarillo staging as it curves around toward the south Amarillo yard.

locals. Meanwhile everybody is doing their best to stay out of the way of all the mainline stuff. So there is high density mainline with a lot of switching.

That is basically why I picked that. I knew I wouldn't have to build that many trees for this line, because I'm not very good at building

5. Brand new units 250 and 209 lead an intermodal freight through rural Texas (near FM1172 on the layout). Locomotives #250 and #209 are both modern EMD SD75M units, part of the final group of locomotives ordered by the Santa Fe Railway before the BNSF merger.

trees, so it worked out. So flat lands, high density, single track, grain elevators, grain trains, auto rack trains, piggyback trains, stack trains, and general freight.

I've got a coal train, a coiled steel train, everything that you can imagine that I saw back there. That's what I have tried to capture.

MRH: **What era are you modeling, and why that particular era and not some other time period?**

Sammy: The era I model is September of 1995. That was when I had taken two trips out to the area I model. One was in the spring, and one was in the middle of September.

That was right before the merger between the Santa Fe and the Burlington Northern. After that, it still looked like the Santa Fe for about another year, but then it started gradually changing. There was more Burlington Northern that was starting to mix in, and that is the sweet spot for anybody that loves to model the modern Santa Fe.

Anywhere from 1993 to 1995 was the sweet spot. You still had all your old blue and yellow locomotives, but you also had brand new red and silver locomotives coming online, even up to the merger. The last couple of orders of the SD-75s were coming online that summer.

You could get anything from a GP-30 leading a vehicle train to a brand new SD-75 on a hot shot intermodal train. That's my sweet spot. That's why I picked late summer to early September, 1995.

Layout design & construction

MRH: **How did you develop the track plan? Was it easy, or did you have to go through a lot of iterations?**

Sammy: The development of the track plan was surprisingly easy. I doodled track plans a lot during my downtime at work, which I don't have any more of. I'd get some paper out and doodle track plans, so I was familiar with making track plans.

That was sort of a side hobby. This layout plan actually came together pretty easy, knowing what I wanted to do. I designed a point-to-point nolix design.

I did not want a hidden helix, because that is a space-taker. I knew I had minimal space, so I decided to go with an around-the-room helix and keep my minimum grade. That way it was manageable to run longer trains without having to run pusher power.

There was no pusher power back then. It was all flat land because the ruling grade on the prototype was only 0.5%, so unfortunately I couldn't mimic that. I have to go a lot steeper to get my mainline run as long as it is.

MRH: **What is your ruling grade?**

Sammy: My ruling grade on the layout is 1.85% for a very short stretch. If the trains can pull that stretch, they will have no trouble anywhere else on the layout.

MRH: **When did you start construction?**

Sammy: I started construction on this layout in 2004. I had the help of a few good friends. They'd come over and help me cut some wood on the weekends and I grilled steaks and burgers.

The same friends helped me pull wires. Then my oldest son, he was very young at the time, actually helped me with some of the scenery. I still have pictures of him standing on a step stool helping dad with scenery back in the day.

So from 2004 to about 2010 was all developmental, getting everything just right. Then we started on the scenery and adding details and refining operations. It grew as time went on.

Then a good friend of mine in Tulsa talked me into adding the CTC system back in 2012-2013, I believe. We have had a lot of operation sessions over that time, and it's worked out pretty good.

MRH: **Did construction go like you expected, and did it progress as fast as you would've liked?**

Sammy: The construction was surprisingly easy. During the week, I'd actually make lists of every piece of wood that I'd need my friends to cut for me. They would cut the wood on the weekends for me, then I would spend my evenings out here during the week putting things together.

6. Loco 9535 leads a freight train into Hereford, the layout's namesake town. In the right distance is Hereford Grain. Number 9535 was rebuilt by Santa Fe's own shops in Cleburne, Texas, using the frame and components of an older GE U36C, and designated as an SF30C.

7. At the far left of [6] is Holly Sugar, one of the many industries in Hereford serviced by the Santa Fe.

Then I'd start all over again. By Thursday or Friday I would make my list – cut this many 1x4s at this length. I'd set everything up, and I'd be in the backyard cooking the meal on the grill, letting them work.

It worked out great, and construction went fast. Within about eight months I ran the first train.

Track, control & detection

***MRH:* What kind of track are you using?**

Sammy: The track is Atlas flex track over cork. The sub roadbed is 5/8" sanded on one side plywood for a good base. The structure is 5/8" plywood ripped, plus 2x4s and 1x4s to hold everything up, so it's very rigid.

***MRH:* What was your greatest challenge in trying to do this layout?**

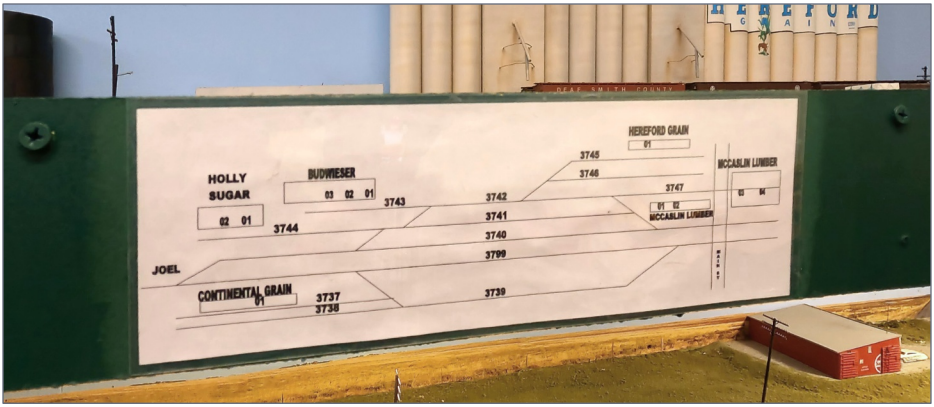
Sammy: The greatest challenge was trying to fit everything into this space that I had envisioned. I was reasonably successful. I did have to swallow my pride a few times and say, "This will not fit."

So even though I had settled on a nolix design, I still have the dreaded duck-under and swing gate. But everything else is pretty good. I've got moderately wide aisles everywhere except for one choke point.

The radius on the mainline is where I wanted it to be, with the exception of one place. So the plan fit as I had drawn it on paper. That's when you're using graph paper and you know how to make your curves fit in the squares.

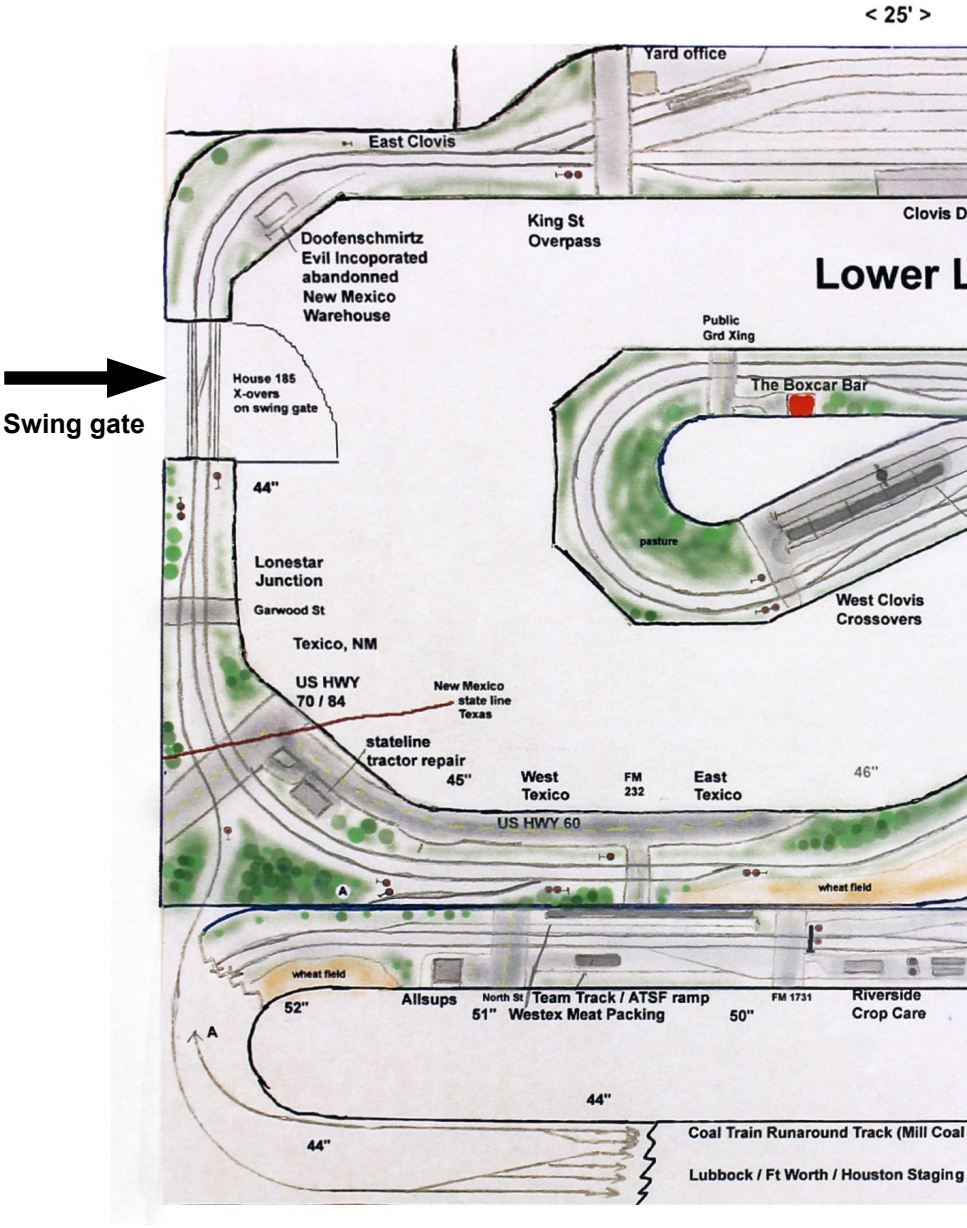
It makes it a lot easier so you don't have any surprises when you get into construction.

Text continues on page 19 →

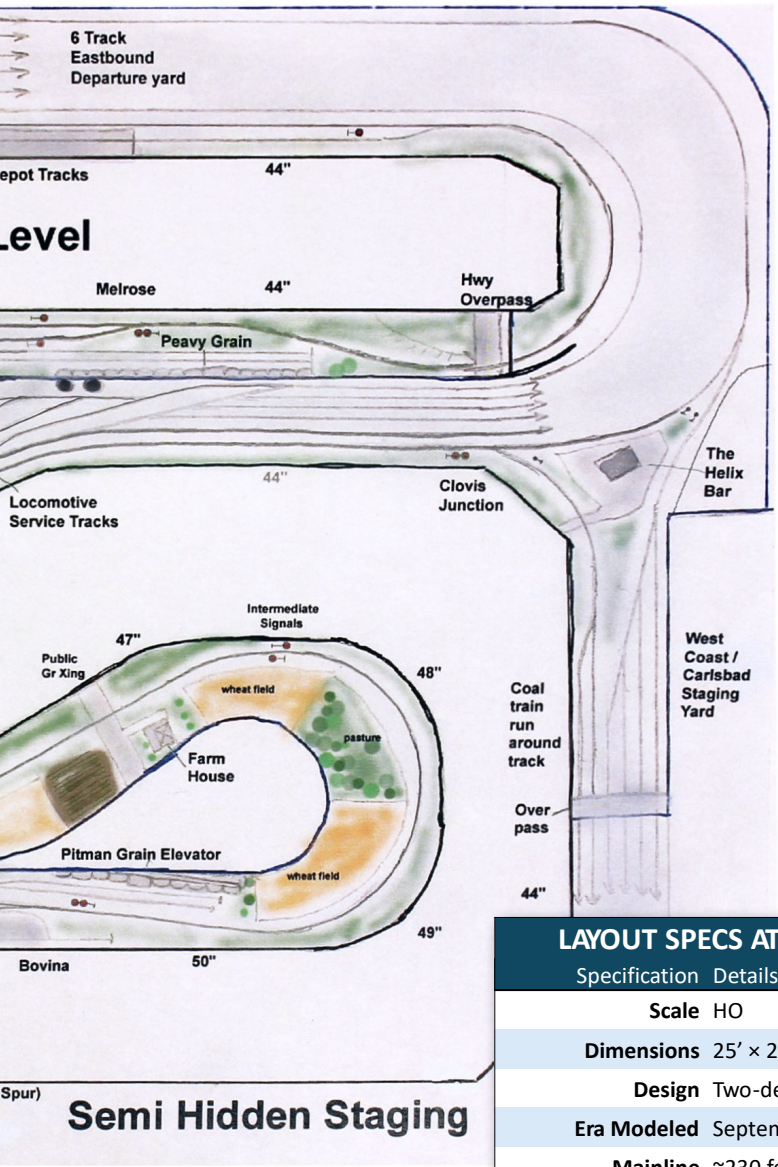


8. Here is the layout's namesake town track schemaic, Hereford. You can see Holly Sugar [7], Budweiser [23], Hereford Grain [6 in distance], two McCaslin Lumber spots, and Continental Grain.

9. SF30C #9508 leads a freight train rolling through Summerfield on the upper deck. In the background is another Hereford Grain facility, but in Summerfield. Behind the lead unit is #91, a wide body EMD FP45 built in 1967. Unit 5077 is an SD40-2, a locomotive model that's been the "backbone" of American freight railroading for decades.

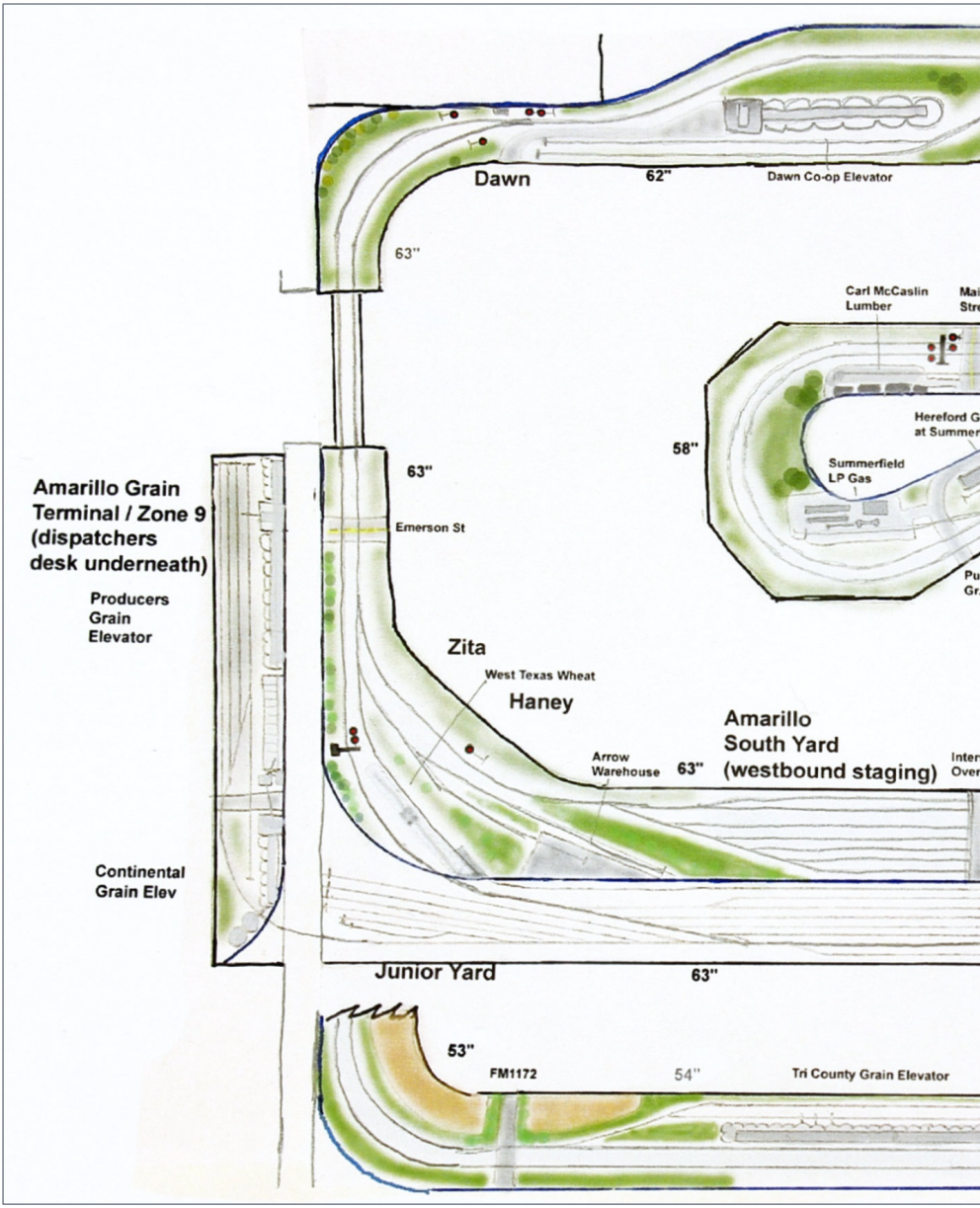


10. The Santa Fe Hereford Subdivision track plan, lower level.

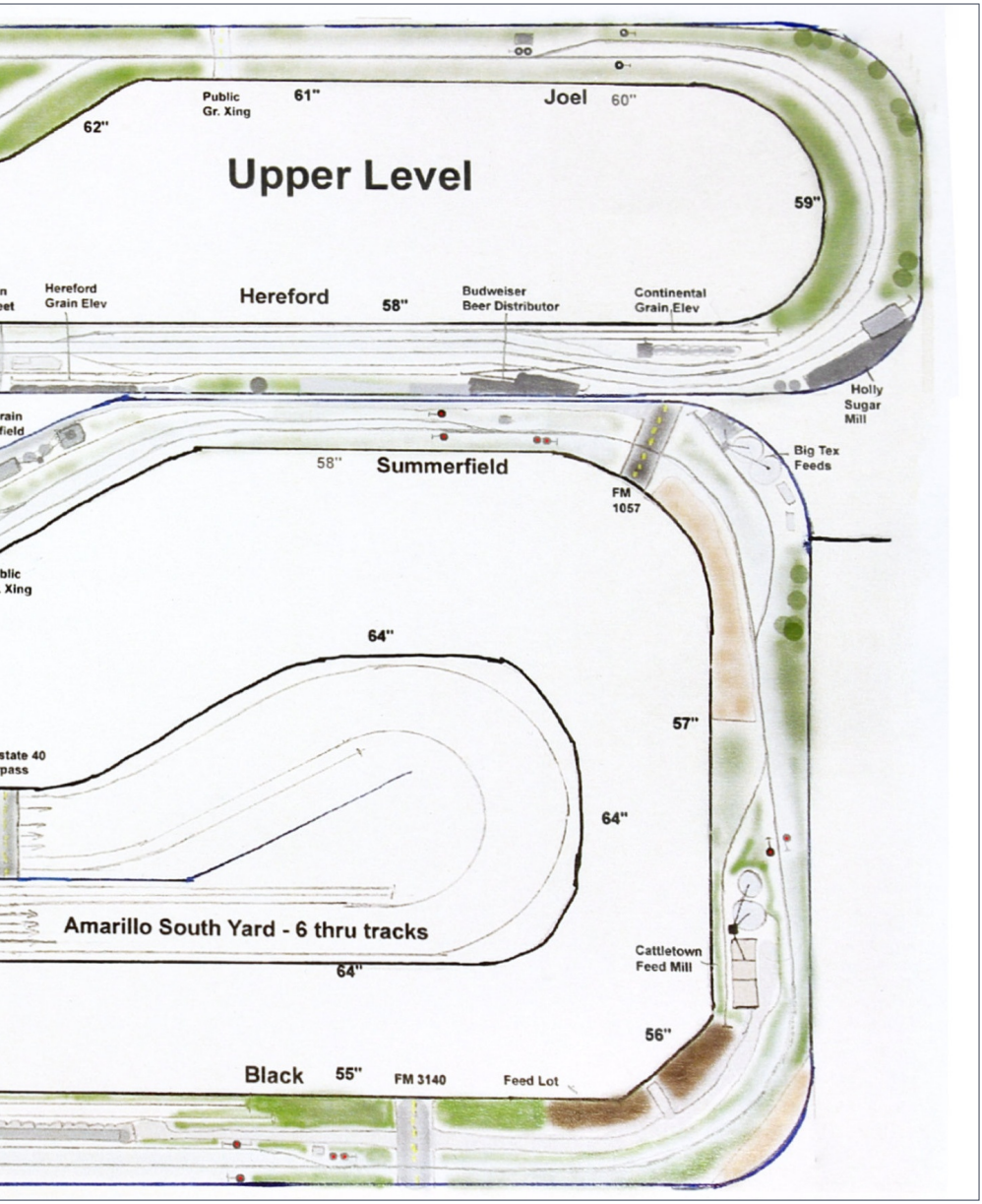


LAYOUT SPECS AT A GLANCE

Specification	Details
Scale	HO
Dimensions	25' × 25' (attached garage)
Design	Two-deck, point-to-point
Era Modeled	September 1995
Mainline	~230 feet
Minimum Radius	28"
Track	Atlas Flex Track
Control System	Digitrax



11. The Santa Fe Hereford Subdivision track plan, upper level.



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12. This is the West Clovis locomotive servicing facility on the lower level. Look at all that power!

MRH: **Did you encounter any nasty surprises?**

Sammy: No. I did not have any surprises during construction. Everything worked pretty good. When I was putting the benchwork together, I actually experimented with the open-grid on the grade areas, so I could adjust the grade as needed.

I had a level, and I learned how to figure my grades. I knew I wanted to keep it down to about 1.75%. I did get to 1.8%, so that's not very bad at all.

I tried to keep my grades off of curves as much as possible. The grade led up from one straightaway until the curve, and then I tried to ease the grade going through the curve. Then I would go up to another ramp.

Almost all the switching areas were on flat areas. I didn't want to have cars rolling away. So I tried to make the most of my mainline, climbing between switching areas as easy and as gradual as possible.

MRH: **What do you like most about the layout?**

Sammy: What I like most about the layout is that it feels like the area I'm modeling. I have photo backdrops that I actually took from the locations. Many of the exact road crossings are what I modeled.

It is flat. The tracks are right next to the highway almost the entire way. So it's not inaccessible by any stretch. A lot of these structures I built aren't exact models of what are out there, but it gives you a feeling of what's there.

Every grain elevator's a little bit different. Someday I'll go back and super detail some of the grain elevators to match. But it feels like you're in West Texas. Long straightaways, a lot of straight track, single track, high density, CTC mainline.

It is just getting the feeling, and almost everything is weathered, so it looks like it looked when I was there in 1995.

MRH: **What do you like least?**

Sammy: What I like least... there are a few choke points that are a little narrow. I dislike my entryway duck-under swing gate, but it's a necessary evil. Sometimes it gets a little busy in here when we get a full crew.

I try to plan around that. But invariably, four people will wind up in the same spot battling for space for about 30 minutes, but usually we manage.

MRH: **If you had to do it all over again, what would you do differently?**

Sammy: If I had to do this all over again, I would concentrate on having wider aisles, wider radiuses on the curves, and maybe a little bit more deck separation on certain scenes. I'm glad I don't have very much hidden trackage.

I've been successful on that venture. Someday, maybe soon, there will be improvements to this layout. Every layout reaches its point where it needs to have some major maintenance or a major rebuild, so maybe someday soon that will be in the plans.

MRH: **You have a base layout height that's basically the lowest level on the layout and how far that is from the floor. What is that and why did you pick that?**

Sammy: The base elevation on this layout is 44" in height. That is the loop that goes around the complete circumference of the layout. Staging Clovis yard, the Melrose turn back loop, they're all 44".

And then the track gradually climbs, and it gets up to 68" at Amarillo in the upper staging yard.

MRH: **What control system do you use and why?**

Sammy: The control system that I use for this layout is Digitrax DCC. I have both plug-in and wireless throttles. It also communicates with the JMRI CAT system for digital dispatching through the Digitrax components.

I have SE8C boards, and I have optical detection. All that helps run the CTC system. All the tortoises are wired into that, so the dispatcher can control it from a computer.

Or if I'm running by myself, or with a few others, I've got push button for all the local control on the mainline turnouts.

MRH: **So you mentioned your detection. There's different schools of thought – there's the resistance wheelset detection, and then you mentioned optical detection. Tell us a little bit about why you went with that particular detection versus another.**

Sammy: On the detection, I decided to go with optical just to see if it would work. I had read a few articles, and I thought I could make a go of it. My good friend Steve Davis is an electronics genius, he said he thought he could make that work with the system we were installing it on.

Basically it was to be lazy. I didn't want to add resistance wheelsets to over 600 freight cars. If I had it to do over again, that is probably the direction I would go because it tends to be more foolproof than the optical detection.

It works pretty well I think. Every once in a while some trains won't trigger the optical detector as well as others will. The signal won't

drop. But the next time I design a layout, I will definitely go block control and resistance wheelsets.

I learned my lesson there, so to speak.

MRH: **Oh, so you're gonna bite that bullet. Okay.**

Sammy: I've had people tell me they're willing to help me, so hey! 95% of everything you see in here is all me. I mean, I had a little bit of help, but as far as laying track, wiring, adding the CTC, pulling all the wires, that's all me.

MRH: **Tell us about the decoders you use: sound decoders, non-sound. What do you use, and what brand? Do you have a standard brand, or a mixture?**

Sammy: On the DCC decoder situation, I tend to stay with Digitrax and some TCS for certain applications on the sound. I use Tsunami2, which is SoundTraxx. I like that. But I have recently been experimenting with a lot of the TCS Wow Sound decoders.

13. We could not resist taking this shot of a patrol car hiding behind the Texas border sign along US Highway 60 on the lower deck. Welcome to Texas, indeed!

I really like the TCS Wow Sounds. They tend to make the locomotives run a little bit better, I think, without doing any fine tuning. They're good right out of the package. They've got the on-track programming, and they've got a little bit better option on the sound.

Unfortunately on a layout this size, I've got so many sound equipped locomotives, so I turn the volume down pretty low. When the crew is in here for three and a half to four hours with all 30-40 sound locomotives going, it gets a little bit loud.

So I've got everything turned down to around 50 or 60. When you get a brand-new sound equipped locomotive from Athearn, they've got that sound jacked up to over 200, and it's very overbearing. So the first thing I do is put it on the JMRI programming track and turn everything way down.

I don't have an issue with the factory sound, but I prefer to do a lot of my own sound installations. I get rid of all the old incandescent bulbs and standardize on the LED headlights and ditch lights. I prefer using the smaller sugar cube speakers, because to be

14. Here's the junction between Highway 60 and 70/84. Sammy has done a fabulous job with this scene!

honest with you, in HO scale you can only get to a certain level in sound fidelity.

That is because you're dealing with such a small speaker. I'm not a sound snob, I just want it to make a little bit of noise. I don't need it to be so perfect that you can hear each individual lifter clicking.

MRH: **What's your least favorite part of doing a layout, and what's your secret for motivating yourself to do it anyway?**

Sammy: I don't really have anything I hate or dislike. I mean, it's all a necessity, even cleaning track. I hate cleaning track, but I don't mind doing it.

MRH: **What about layout size. Can a layout be too large?**

Sammy: On layout size, I think I've hit a very good size for one person to take care of. Can one person take care of a little bit more? Yes, but a layout can become a monster.

I have a few traveling stories where I go to layouts, and the layout is really, really big. You can tell that they've run into a block, because there's just so much to do. For example, sometimes the scenery won't get done for 10 years.

I can respect that. Some people model mountains and forests. That's one thing that I was fortunate on when I picked this locale to model. There's not that much scenery, because it is just flat lands.

If I did another layout, I would do the same location based on that very reason, just laziness.

Scenery & structures

MRH: **Tell us about the methods you use when you do scenery. Plaster, foam?**

Sammy: When I was building this layout, I wanted to get to a completed look relatively quick. Everywhere that there was open grid, I would fill the gaps with plaster over screen wire the old school way. Even during the upper deck construction, it was pretty easy.

I just laid construction paper or newspaper on the bottom deck to keep the drippings at a minimum. I don't like cleaning up messes, so I worked pretty quick. Then as soon as the plaster was in and dry, I would paint it with a gallon bucket of tan paint.

I went to a big box store and said, "Hey, do you have any paint that somebody brought back?" Sure enough, there was a gallon of tan paint.

I'd take a two inch wide paint brush and slop that on the plaster nice and thick. I had a big coffee can that I had mixed up some really fine sand and some Woodland Scenics soil mixture. I took that by the handfuls and sifted it over the wet paint to give it texture and ground cover.

The layout was like that for a good two or three years, but it looked decent. Then after I got the operation plan squared away (to avoid scenery tear out), I'd come back and add the small bushes, static grass, fence posts, telephone poles, and all that. So using the tan colored paint, slopping it on there nice and thick, and throwing some of that ground cover on it gave it a nice texture right off the bat.

15. The intermodal freight in [1] crosses rural Texas road FM 232 in this scene on the lower deck.

MRH: **Tell us about your scenery backdrops. Where did you get those photos? Did you take those photos?**

Sammy: Every single one of them.

MRH: **Well tell us about that.**

Sammy: I got the idea out of one of the magazines about photo backdrops, and I thought if those could make the mountains look good, surely I could translate that into the flatland. This was an excuse to go railfanning again. So in between trains I'd take my camera and take level horizon photographs of various scenes.

Then I brought all those pictures home, ran them through Photoshop, and cleaned them up. I would stitch 3 or 4 photos together as they called it in the article. So doing most of the backdrop was pretty easy, and I took great care at road crossings in certain locations that I was trying to duplicate.

Like I mentioned earlier, some of the road crossings were the exact roads I was modeling. I would stand right in the middle of the road

16. This is the very west end of the siding at Summerfield. Note all the helps Sammy gives you so you know where you are – there's the railroad sign showing Summerfield next to the track, and then this fascia sign with the turnout throw button.

and take a photograph right down the highway. Fortunately I didn't get run off by anyone, because I was very careful while doing that.

A lot of the road crossings are the exact road crossings that I modeled.

***MRH:* What time of year is your scenery?**

Sammy: My scenery on this layout is late summer, right after a lot of the wheat has been taken out. There is still some wheat that's in – summer wheat – but most of the spring wheat has been cut. The scenery is basically late summer, right at the beginning of fall grain rush.

Locomotives & rolling stock

***MRH:* Tell us about the locos that you use. There's the prototype side – EMD, Alco, GE, that sort of thing. Then there's the model side. Do you have a favorite brand? Kato, Atlas, Life-Like, Walthers, ScaleTrains. What?**

Sammy: My locomotive fleet for this layout is one of my very favorite subjects of the hobby. I'm a Santa Fe detail nerd. I decided in the mid '90s that I wanted to try to duplicate one of every locomotive on the roster as it was in 1995.

I'm very successful in that. I only have a few that I need to get, but those few weren't seen that often. I standardized a lot on Kato locomotives. Their running gear is still great, even 30 years later on some of these that I've got running around.

I'm not ashamed to buy about anything to match a prototype. I do a lot of kitbashing, a lot of custom painting, and a lot of matching the details to a photograph that I'd taken in 1994 or 1995. Even some 3D printing shells have come out in the last few years that are very workable.

I've been super detailing locomotives for over 30 years, so I love that part of the hobby. I do it so much, and have done a lot of it for others, so that's a very rewarding aspect. People have been asking me for years, "Would you build X, Y, Z for me?"

I tell them that I'm too busy into operations, but someday I'll slow down and I'll start building stuff. I have done that the last few years,

and I've kind of pulled back on operations. I've done a lot of custom painting, or building, or weathering work for my friends.

So that's a very rewarding part of the hobby, especially when you go visit them, and I do a little bit of treasure hunt and see something that I have worked on that is running on their layout. That's very rewarding!

MRH: **Tell us about your rolling stock in this era. Was it box cars, double stacks, auto cars, all of the above? What was it?**

Sammy: For rolling stock choices for this layout, I'm not ashamed. I'll buy just about any brand to match a prototype. This line that I model is the transcontinental main, so it's heavy on intermodal equipment – piggybacks, double stacks, trailers, and containers.

I've got a lot of photographs of those from that time period. If something comes to market that matches something that I have a photograph of, I've gotta get one of those. And being a grain agricultural area, I've got a lot of grain hoppers from many different brands.

Fortunately a lot of those come ready-to-run. Now that's a great time saver, but I've spent many hours sitting at the workbench putting a kit together from the '90s. I go to a train show and see something that I missed out on back in the '90s.

I decide that I have to pick that up because it matches something that I remember from way back then.

Nowadays it's great to be able to take something out of the box, making sure the couplers are at the right height, gauging the wheels, and running it around a little bit. But it doesn't run around clean for very long. In my world, I always take it off the layout and run it through a weathering program.

Everything in the real world after it was manufactured and out of the paint shop has got a weathered look to it. That's one thing that I do enjoy from the hobby is weathering everything and making it look like it fits in.

MRH: **Talk about the structures on this layout. Kitbash, scratchbuilt. What?**

Sammy: The structures on the layout range anywhere from small kits – Walthers and anyone that made kits too. I've got a lot of scratchbuilt, kitbashed kits as well. Trying to capture a look from a certain grain elevator, I used a lot of PVC pipe to make them.

To do the head houses and the super structures, I use mat board from Hobby Lobby. That's almost as good as styrene, but it seems to work for large grain elevators. You just have to spend a lot of time cutting and squaring the windows out.

I use Walthers window inserts to add windows and clear plastic on the background. I do a lot of scratchbuilding and kitbashing for the loading apparatus that's coming out of the super structure. Then I got a lot of other Walthers Cornerstone kits.

I still like the old Rix stuff. Rix makes great telephone poles and overpasses. I use those quite a bit. They make a good grain elevator leg as well, but I do use a lot of Walthers kits.

I don't have very many bridges at all. I have overpasses, like here in Clovis, but as far as the railroad itself, I had very few major bridges on the subdivision. The only bridge they did have crossed Palo Duro Creek just near Canyon, Texas, and I didn't have room for that on my plan.

That technically would be where the duck-under is.

Operating philosophy

MRH: **Let's talk about operating sessions. Do you host regular operating sessions? And if so, how do you feel they go?**

Sammy: On the operating session subject, yes we do operate several times a year. We used to operate almost monthly, but I've kind of pulled back on that the last few years since I've been doing custom work on the side for my friends.

As far as regular operating sessions, we have invitationals in the spring where folks from out of town are invited to come to Tulsa to operate on the area layouts.

17. An eastbound itermodal freight rolls through Joel east switch on the upper deck.

18. This is Clovis staging on the lower level. We prefer open minially scenicked staging tracks and Sammy has a lot of visible staging on his layout. Far better than completely hidden staging!

I've always been on that. In fact, this is the first year that I'll miss it in 2026. I've been a part of that since 2011, I wanna say. So yes, a lot of visitors from out of state.

I feel they enjoy operating on the layout. When people pick what layouts they want to visit, my layout is usually one of the first ones that gets full.

I've had a lot of people come visit over the years. They seem to like what I'm doing here. But one of the major reasons the people wanna keep coming back is that my wife is pretty good at making homemade chocolate chip cookies for every session.

A lot of people are not shy. They'll tell me, "I like your layout, but I like your wife's cookies better." So it works out pretty good, and that is the truth. I run into people at op sessions around the country.

"Oh man, I remember you're the Santa Fe guy, and your wife's cookies are really, really good!" So that's the honest truth.

19. Speaking of staging, Sammy also has some "semi-hidden staging" on his lower level representing Lubbock, Ft Worth, and Houston. If you're going to have hidden staging, this is the way to do it.

MRH: **There's different ways to kind of see yourself when you're operating. You can see yourself as a railfan or you can see yourself as the engineer. Do you have a sense of which of those you are or which you prefer?**

Sammy: It's all about being comfortable at operating sessions for me. If I go to someone's place for the first time, I try to really buy into the scheme they're trying to portray. But after I get comfortable and I go back two or three times, I find myself railfanning a lot more.

I like to learn their operating scheme and get a feel for what each job does. I'm not really a yard guy or a hustler. I like to get a mainline run, do some switching out on the mainline, because this is what I portray.

That's what I relax into. Working with another person on your crew is fun. I do a lot of two-man crews here to listen to people working with one another.

Sometimes they work well with one another, and some people tend to disagree. And that is all in good fun. I make sure when I call crews that I call people who I know get along. There's really a good camaraderie here in Tulsa.

A lot of the people have known each other for years, so it's good to call a crew and have the regulars show up to run your layout. After the first hour, once everybody gets relaxed, they're gonna start throwing barbs at one another. They will pick on each other for picking up the wrong car or having a minor derailment, but it's all in good fun.

There are a lot of great people in this hobby. Like I say, learning to operate really well, taking your time, trying not to break things is important. Once you're comfortable, I think it's perfectly fine to do a little bit of railfanning.

Scale, focus & design philosophy

MRH: **How well do you like HO? Would you ever consider doing a layout in a different scale?**

Sammy: HO has been "it" ever since I got out of Lionel, so HO is the only thing I'd consider. I have been to some great N scale layouts. I've been to a few O scale layouts.

I've been to a few S scale layouts that were very well done, but HO is fantastic for me. I can super-detail a locomotive or a freight car. I'm older now, and my eyesight's starting to slide a bit, so I find myself using magnifiers.

You can't get enough magnification or bright lights, so that helps. N scale is great for modeling large areas, but I tend to love the super-detailing a little bit too much to consider N scale. I have installed N scale windshield wipers on a few of my locomotives.

That was very tedious. No, I'll stick with HO. Thank you very much! I'll never do that again, by the way. A guy said, "Can you put windshield wipers on my SD60?"

And I asked, "How many do you have?" He said, "I've got four." I told him, "Don't ever ask me to do that again! That was awful."

20. Here Sammy's son Samuel runs a train toward Black on the layout's upper deck. Of Sammy's two sons, Samuel is the one who got the railroading bug!

My philosophy on layout design ... I learned something from someone years ago. Keep it as simple as possible to start out with. You can build onto it, and you can change it later once you get comfortable. I mimic a lot of my track plans off the prototype.

The prototype railroads go out of their way to simplify things. They'll jack the freight rates up on a customer so they don't have to switch them anymore. On the area I model, I do a lot of agricultural grain elevators, so I have to make it as simple as possible.

You don't need a huge spaghetti-bowl of track. You don't need diamond crossovers. Make it as simple as possible and concentrate on making that work. That's one of my philosophies.

MRH: **Some people struggle to nail down exactly what it is they want to model because they have so many interests. Did you ever struggle with that? And if so, how did you narrow the focus?**

Sammy: I can answer that question pretty easy. As far as narrowing the focus, when I was younger and starting out in the hobby, I liked certain things. But in reading magazines, it was Chuck Hitchcock that said narrowing his focus was the best thing he ever did.

He was a Santa Fe modeler, and still is. I think it was an Allen Keller video that came out and stuck with me. In the mid '90s, I decided to get rid of everything that didn't fit the era I was trying to model.

I sold off all the older stuff I had at the time. I chose the present time ('90s), so I didn't have to worry about buying new stuff, the ultra modern stuff. I've really structured myself to keep things that fit in my time period.

Now I'll fudge a little bit if somebody gives me something that's a little bit older or a little bit newer. I've had a lot of people that ask, "Hey, can you use this?" I don't turn them down, I take stuff because I know it means a lot to them.

So there are some things that are a little bit too new for the layout, but I try to fit them in the best I can. As far as everything else, I'd say 98% of everything on this layout, from freight cars to locomotives, to vehicles, to signage, and my signaling system fits right in with 1995.

So narrowing the focus is one of the best things I've done in the hobby, because it keeps you from impulse buying just because something is new and shiny.

Advice for the hobby

MRH: **In that same vein, if someone brand new to the hobby came to you and asked you for advice, what would you tell them?**

Sammy: If someone brand new to the hobby came to me and asked me for advice, I would tell them that this is a great hobby. You can do anything from woodworking to very fine electronics work, and custom painting, and detailing. There are some people I know that build structures board by board.

There's so many things the hobby offers, anything from the ground up. But I really stress patience. These layouts do not come together in six months, or a year or two. If you're going to try to build a layout, it's gonna be a five year plan to get something very simple.

Some people have a lot more spare time than I do, but I would really preach patience. It just takes time to get things working correctly.

MRH: **You said that you have your layout open for the Layout Design OpSig meet in Tulsa. You're not gonna open it this year?**

Sammy: No, I don't think the layout will be down, but almost all the trains I hope to have packed up by then. And it will take me a while to start taking the details down, you know how it is.

I've given myself three and a half to four months just to depopulate. It's gonna take a while, because you can't just throw stuff in a box. I'm gonna pack stuff the best I can. I've kept a lot of my locomotive boxes, but I don't have a whole lot of freight car boxes.

You know how finicky this stuff is. I wanna salvage as much as I can.

MRH: **How many feet of mainline do you think you have?**

Sammy: On the mainline run for the layout, there's approximately 230 feet from Amarillo down to Clovis. That does not count the

21. The layout has a duck-under and a swing gate at the entrance to the room.

22. Son Samuel demonstrates the swing gate and the duck-under to get into the room.

mainline through the yards or the return loops. I would suppose that my entire mainline is about 230 feet.

MRH: **Minimum radius?**

Sammy: Minimum radius is 28 inches on the mainline. Yeah, I've tried to stick to about 32-34", but there are a few curves that I've had to go down to 28".

Hosting operating sessions

MRH: **When you have hosted your layout for the LD Sig meet, what has been your goal when people come to those sessions? What were you hoping they'd get out of it?**

Sammy: My goal for having operating sessions is for everyone that visits to have a good time. I've structured all of my jobs so that they're pretty simple and not too daunting. Some of them are very time consuming, but I don't want people to be stressed out.

I've gone to a lot of places where they really try to put the pressure on certain jobs. I want my visitors to come and think, "You know, that was pretty laid back. It wasn't stressful, and the trains were fun. The host was decent, the cookies were really good."

I use pre-printed switch lists. I don't have car cards, so when people do a local or road switcher job, they get a switch list on a clipboard. It shows everything on the front, and all the pickups are on the back.

I've even tried to simplify the paperwork so a novice can come in here and run a train, have a good time, and feel like at the end of the session (after three and a half, four hours) that they have accomplished something.

Building it together

MRH: **It looks like you are big on the family helping out.**

Sammy: When it comes to working on the layout, I have a family that's very supportive. My wife has been involved over the years, because my layout is attached to the house. So people come into the

house, and she's made a lot of friends from the train guys that have come back year after year.

I've got a few of them that are very good friends, almost like extended family. My oldest son has been a part of the hobby since he was very young. He wanted to start running trains with us when he was almost too young.

So I told him to hold back a little bit, and he would get his chance. He now travels with me to a lot of the places we're invited to. He's a very good operator, and now that he is older (20s), he has built a few models for me.

He's into custom painting and kitbashing like I am. I've taught him how to do that, and he's a very good modeler. He's also a very good railfan photographer, and he is a very good operator.

I'm very fortunate to have one son that enjoys my railroad hobby. My other son... well he hasn't really had the train bug bite him yet. I don't think he will. He's a musician.

23. Here is the Budweiser plant located in Hereford. Sammy has done an effective job of getting many industries onto the layout without needing a lot of depth.

That's one of my other hobbies. I like to play music, so that's one thing that I can do with him. I'm fortunate to have a family that's very supportive and in getting a lot of friends and guests that come for op sessions.

MRH: **Thanks for hosting us today on the Santa Fe Hereford Sub.**

Sammy: It's been a pleasure talking with you about the layout!

Final thoughts

What stands out most about Sammy's Santa Fe Hereford Subdivision isn't just the nice track work or the authentic scenery – it's his unwavering commitment to operations and his genuine desire to share the joy of model railroading with others.

With the support of his family and the friendship of modelers from across the country, Sammy has built something that goes beyond just a layout: it's a gathering place where those who love trains can come to relax, have fun, and remember why they fell in love with trains in the first place.

That's the real measure of a successful model railroad. ☑

24. This is the Cattletown feed mill on the upper deck. Note the stock yard just barely visible to the right.

25. On a shelf in the alcove next to the garage, Sammy has modeled the Amarillo Grain Terminal. This looks like it will keep someone busy switching for quite a while.

REGISTER *(free)*

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Making an asphalt road

Model Railroad Hobbyist | February 2026

VIEW READER COMMENTS

The finished Route 59 in place on the layout, showing the subtle but crucial road crown and properly weathered surface with crisp lane markings. The realistic crowned appearance is worth the effort.

Ken Anderson builds realistic crowned asphalt roads step by step ...

Route 59 snakes through rural Texas on my proto-freelanced HO scale railroad set in August 1958. Asphalt roads were predominant during this time. My first attempts at making an asphalt road with commercial materials resulted in a flat road that did not appear realistic.

Real asphalt roads have a crown, a peaked center that subtly curves to the edges of the road to allow drainage. Replicating this feature may

seem like a minor detail, but it transforms a model road's appearance from toy-like to convincingly realistic.

I put off road construction to pursue the right materials and techniques for creating a crown. I wanted 16 feet of road, so I needed to find materials that were easy to work with, economical, and able to hold the road's crown.

BUILDING A BASE

A properly crowned road is high in the center, and gently slopes toward the sides. To replicate this, I decided to use a spine to shim up the road at its center, and glue the edges of the road directly to the layout base. The base material needed to be flexible enough create this curve without creasing, and strong enough to hold its shape.

I used 0.020″-thick sheet styrene for the base because it is flexible, strong, and easy to cut. I purchased several 12″ square sheets for the project, and cut these to size for sections of road. I chose a general road width at 3″. I widened this to 3-3/4″ width at intersections, since intersecting secondary roads tend to elevate toward the main roads, which are more built up.

Styrene glue works well for joining the road sections end-to-end, and straight cuts are crucial to make good butt joints between the sections. My efforts to achieve this with scissors and a straightedge were inadequate, so I used a paper cutter instead. This paid off throughout the project, giving me perfectly straight edges every time.

To achieve the crown, I used 1/16″ square stripwood. Working in segments of road about the length of a stick of stripwood, I glued the stripwood down the center of what would be the underside of the styrene, using Walthers Goo [1].

Once the Goo had set, I flipped the segments right-side-up (stripwood side down). I trimmed the surplus stripwood from the

1. Adding the crown to the road. I glued the 1/6″ square stripwood down the underside of the 0.020″ styrene road. It is especially important to remember top from bottom on segments such as this that are asymmetrical.

section ends with the paper cutter, and glued them to the layout using Walthers Goo along the edges of the road. I then applied styrene glue to the joints to seal them. This created a continuous road base with a proper crown.

Please be sure to rate the article so that we can keep good articles coming!


K. Anderson

DO NOT REINFORCE THE JOINTS

I learned an important lesson the hard way during my first attempt: **Do not add reinforcing strips under the joints.** My first attempt included two-inch-wide reinforcements under each joint. As the asphalt dried, it leaked under all reinforced joints, leaving raised areas that looked like a roller coaster – all 16 feet were ruined!

Fortunately, I was able to salvage most of the road. Flipping it over, I cut out the bad joints with the paper cutter, and reconnected the sections without reinforcement. Reconnecting the sections without reinforcement worked well by butt-gluing the edges with styrene glue and allowing them to fully set up. ■

ADDING LANE MARKINGS

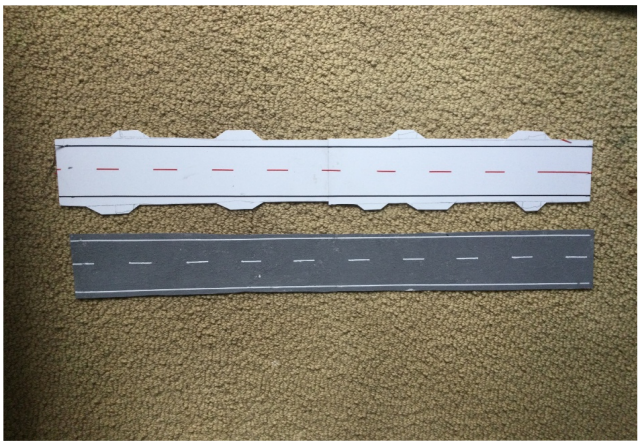
With the road in place, the next step was adding lane markings. Since the styrene was white, I decided to mask it off with automotive striping tape before applying asphalt [2]. Later, removing the tape would reveal the white lane markings [3].

APPLYING THE ASPHALT

With the styrene base completed and masked, I was ready to apply asphalt. I used two types of asphalt pigment material from Arizona Rock and Mineral: Asphalt Paving Powder (1030) and Extra Asphalt Paving (1210), along with AK Interactive Terrains Asphalt (AK8013) [4].

The materials from Arizona Rock and Mineral are powders, and the instructions call for mixing with white glue in a 50/50 ratio. The AK Interactive asphalt is a liquid that requires no additional glue. Both products yielded excellent results. Mix small batches – a little material goes a long way – and store in air tight containers.

2. Red striping tape has been applied to the styrene base to create lane markings. The tape will be removed after the asphalt material dries, leaving clean white lines.



3. The roadway at top has the striping tape applied. The roadway at bottom has had asphalt applied, and the striping is removed to reveal the lane markings.

4. The asphalt mixing materials and application tools. At upper right is a jar where I have mixed a batch of white glue and asphalt powder.

I initially used a two-inch paintbrush to apply the asphalt material to the styrene, but found the brush left streak lines. The streaking could be removed by applying additional asphalt using a stippling technique. I tried using a one-inch foam brush instead, and found it offered more precise control and left no streaks.

In applying the asphalt, I was careful to paint up to the edges of the automotive striping without painting on top of it. I wanted the masking to be readily visible later on so that I could more easily remove it. I found this much easier to achieve with the foam brush than the bristle brush.

THOUGHTS ON ASPHALT COLOR

Both Arizona Rock and Mineral and AZ Terrain asphalt materials dry black. This is good for representing freshly applied asphalt.

However, asphalt does not stay fresh for long. Over time, asphalt fades to gray. The drying action of the sun, combined with calcium carbonate leaching through the surface has a bleaching effect. As the black fades to gray, the colors of the various aggregates of stone or shell that compose 90% of asphalt begin to appear.

To make the model asphalt appear older and weathered, mix-in water-soluble paint before applying. I used flat white ceiling paint, but craft paints work perfectly.

You can use white, gray, or varieties of colors to represent aggregate content. Test a small sample section first and let it dry to see if you like the color before proceeding. It's important to have the color mix you want before applying any asphalt, so do not skip this sampling step!

The first layer of asphalt dried too dark, so I applied a second, grayer layer. This turned out to be a big mistake. The extra material made the asphalt too thick, and obscured my lane marking tape so I could not see it for removal. I had to redo all 16 feet of road; nothing was salvageable.

Fortunately, redoing the road for the second attempt was a much quicker process. I benefited from using the sponge brush technique from the beginning. This gave me much cleaner lines.

When the asphalt had dried, I was ready to remove the automotive striping. This revealed crisp white road marker lines.

Creating a realistic asphalt road with proper crown, weathered coloring, and clean lane markings is achievable with the right materials and techniques. While it took me several attempts, I learned a lot, and the final result is very rewarding. The crowned road surface and weathered gray asphalt bring a level of realism that flat commercial products simply cannot match. ☑

A birthday present of a red Lionel train at age two started Ken on a lifetime interest in trains, history, and train-modeling skills.

After completing his Bachelor of Science and Biology at Stephen F. Austin State University, his interest in trains rekindled, and several layouts in HO scale followed, improving each time. The largest layout was a 30′ x 15′ double-deck layout.

VIEW READER COMMENTS

5. A larger version of the final scene.

Now a retired RN EMT, Ken currently has a satisfying and successful business teaching CPR and life-saving techniques to healthcare professionals.

Ken's other interests include tennis, martial arts, and scuba diving. Ken's wife Carolyn is very supportive of his modeling activities, and they both participate in train conventions, meetings and shows. ■

Savvy Modeler Online

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Modeling wrapped lumber loads

YouTuber Terry of **River Mountain Model Railroad** demonstrates the entire process of modeling a wrapped lumber load.

VIEW READER COMMENTS

Terry starts with a piece of pine lumber and cuts it into tiny scale-sized wood blocks representing stacks of plywood. Then he shows how to build wrapping paper complete with the logo of your choice, and then demonstrates the wrapping process. Finally, Terry shows you how to stack the blocks with spacers and tie downs. The full video runs about 24 minutes. ☑

GREAT MODELER VIDEOS ON THE WORLD WIDE WEB

FEBRUARY NEWS column

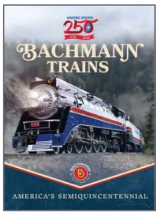
RICHARD BALE AND JEFF SHULTZ
REPORT THE LATEST HOBBY INDUSTRY NEWS ...

VIEW READER COMMENTS

INDUSTRY NEWS

R.I.P. Robert W. Brown 1933-2026
Robert W. Brown, founding editor of *Narrow Gauge & Short Line Gazette* passed away in his sleep the night of January 31, 2026, 18 days after his 93rd birthday. Bob founded *NG&SLG* in with Vol. 1, No. 1 in March/April 1975 and was its editor for more than 51 years. Chris Lane, who was scheduled to become the editor of *NG&SLG* in the May/June 2026 issue, has been appointed editor by White River Productions due to Bob's passing. Chris is currently editor of *On30 Annual, HOn3 Annual,* and *Garden Trains Annual.* Sharon Olsen, the current Gazette graphic artist will continue to fill that position.

NEW PRODUCTS FOR ALL SCALES



Bachmann Trains has released its 2026 Bachmann & Williams catalog, covering products in HO, N, O, On30, and Large Scale from the Bachmann and Williams product lines. To view the catalog online go to resources.bachmanntrains.com/Bachmann_2026 Info: shop.bachmanntrains.com

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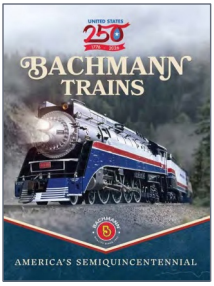
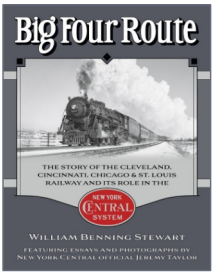
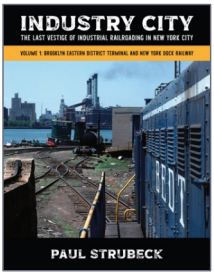
THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS



New from **Garbely Publishing Company** is *From the Great Lakes to the Upper Mississippi: Railroads of the Northern Midwest, 1972-1999.* Authored by Jeremy F. Plant and Jeffrey G. Plant, the softcover book covers the railroads of Michigan, Wisconsin, Minnesota, and Iowa through three decades of photographs. 80 pages.



Big Four Route: The Story of the Cleveland, Cincinnati, Chicago & St. Louis Railway and it's Role in the New York Central System by William Benning Stewart is an approximately 200 page limited edition hardcover book covering the titular railroad and its day-to-day operations, people and places. Including previously unpublished essays and photography of New York Central executive Jeremy Taylor, the book combines narrative and visual storytelling to explain the railroad's role in the New York Central System and the development of the American Midwest. Preorders are due by October 1, 2026 with the book being released around January 15, 2027.



Industry City – The Last Vestige of Industrial Railroading in New York City, Volume 1: Brooklyn Eastern District Terminal and New York Dock Railway by Paul Strubeck is an approximately 240 page limited edition hardcover exploring the rail-marine operations on the New York City waterfront, including the histories of the Brooklyn Eastern District Terminal and the New York Dock Railway. Including histories, photographs, maps, and rosters, Industry City, Vol. 1 covers the last days of industrial railroading from just prior to and through the Conrail merger and the New York Dock Agreement. Preorders are due by June 1, 2026 with a publication date of October 2026.
Info: store.garbelypublishing.com

O SCALE PRODUCT NEWS

Atlas has released the Atlas Premier O catalog for Winter 2026. See it online at download.atlasrr.com/0126MCPDF/Winter2026OMSRPOnly1.pdf All products in the catalog are available for preorder with a due date of March 4, 2026. All products have an estimated arrival date of 4th Quarter 2026 unless otherwise noted.

Products announced in the Winter 2026 catalog include 2 and 3-rail versions of the O scale Premier 2-8-0 steam locomotive, which will be available decorated for Duluth, Missabe and Iron Range, East Tennessee and Western North Carolina, Lake Superior & Ishpeming, Nickel Plate, Wabash, US Army, Canadian Pacific, and Southern.

Next in the catalog is the Premier SD70M-2/SD70ACe, which will be available in CIT Group, CSX, New York Susquehanna & Western, Norfolk Southern (Delaware & Hudson heritage), Norfolk Southern (Office Car Special), Kansas City Southern, Montana Rail Link, and Union Pacific.

A Premier O scale EMD F40PH locomotive model will be available in Amtrak, MBTA, Metra, Metro North, and NJ Transit paint schemes. Several of these are one-off heritage or tribute paint schemes.

The Premier O 50′ Gunderson High-Cube boxcar will be available in the following road names: Canadian National (GTW), Canadian American Railroad, CPKC Holiday Car (3-Rail

only), CSX "Big Blue", GATX, Stone Container, TTX (FBOX), and UP (Limited Edition). The CSX Heritage 3-pack includes Louisville & Nashville, Monon, and NC&StL. The CPKC Holiday Train 3-pack includes CPKC 220305, 220437, and 220476 and is 3-Rail only.

The Premier O 3-bay centerflow covered hopper in 2- and 3-Rail will be available in the following road names: BNSF "Swoosh", Cargill Salt, Chessie System (WM), French's (ACFX), Reading & Northern, and SOO.

Atlas Master O Comet II commuter cars will be available in 2- and 3-Rail in the following road names: Connecticut DOT(late), New Jersey Transit (Comet IIM), MBTA, MBTA 250th wrap, MBTA See Trains wrap, and Metro-North in multiple road numbers and paint schemes.

Atlas Master O Horizon passenger and food service cars will be available in 2- and 3-Rail in Amtrak Phase III and Phase VI.

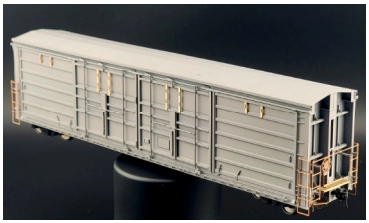
Atlas Master O extended vision cabooses will be available in both 2- and 3-Rail in the following road names: BNSF (Command Center), Burlington Northern, Guilford, Conrail, CPKC, CSX (Conrail heritage), CSX (Monon heritage), CSX (ACL heritage), Norfolk Southern (D&H), and NS (Executive Train scheme).

Atlas Master O troop cars in 2- and 3-Rail will be available in the following road names: Pullman Troop Sleeper, Kitchen Car, US Army Hospital Car, C&O (MOW) troop sleeper, N&W

(MOW) troop sleeper, Wabash (MOW) troop sleeper, BN express box car (kitchen car), and CB&Q express box car (kitchen car).

The Atlas Trainman O 50′ 6″ boxcar in 2- and 3-Rail will be available in the following road names: Conrail (Yellow door), Ferromex, Seaboard System (CSX patch), Southern Pacific, Ashley Drew & Northern, Railbox, and two limited edition paint schemes, Railbox (small logo w/graffiti) and Conrail (Reading door).
Info: shop.atlasrr.com

HO SCALE PRODUCT NEWS



3DCentral Trains is now selling undecorated 3D printed models of the Evans Side Slider all-door boxcar in both Phase I and II. The kits include the underframe, weight, body, etched metal details, and various detail parts. Trucks, couplers, and decals are not included.
Info: 3dcentraltrains.com

Announced for May 2026 delivery by **Accurail** are a limited run 3-car set of New York Central Pacemaker 40′ steel boxcar kits. The single door riveted AAR boxcars feature build dates between 3-59 and 5-59. Single cars featuring random road numbers from the 3-car sets will also be available.

Also announced is a 40′ Pullman wood stock car kit decorated for Northwestern Pacific with a built date of 6-13.

A 40′ PS-1 boxcar kit decorated for Monon with a built date of 6-49 is also part of the production schedule for May.

A Central Railroad of New Jersey ACF built 36′ double-sheathed wood boxcar kit with wood ends and a straight underframe is also scheduled.

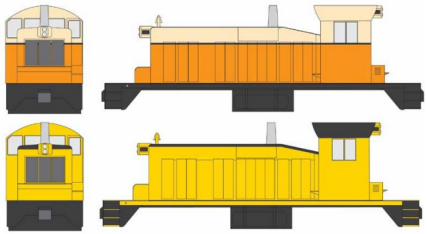
Finally, this 3-car set of 41′ steel gondola kits decorated for Georgia Railroad with built dates of 9-51 are also available as individual cars with random numbers from the set. All Accurail car kits come with appropriate trucks with Delrin wheelsets and Accumate knuckle couplers.
Info: accurailinc.com

Bachmann Trains has announced the availability of an ACF 56′ 4-bay centerflow covered hopper. Road names in this release are BNSF, Cargill Salt, Chicago & North Western, Conrail, Continental Polymers, CP Rail, CSX, Great Northern, New York Central, and Shell. The models include metal wheels and E-Z Mate Mark II knuckle couplers.
Info: shop.bachmanntrains.com

Black Cat Decals has released a new accessory to the CPR Little Otis gondola, a set of coke racks that sit on top of the gondola to

increase its capacity for the lightweight load.
Info: www.blackcatdecals.com

Bowser is taking preorders for HO scale models of the EMD SW1 in Phase II and III. An end-cab switcher, 661 SW1 locomotives were built between late 1938 and late 1953 using the 600hp V6 version of the 567 prime mover. The SW1 model



will be available in DC and DCC/Sound with an E24 plug ESU LokSound decoder. Road names in this first run are Boston & Maine, Burlington Northern, Chicago NorthWestern, Conrail, Great Northern, Lehigh Valley, Luzerne Susquehanna (ex B&M), New York Central, Nickel Plate Road, Penn Central, Pennsylvania, Portland Traction Company (w/trolley pole), generic orange & cream, generic black & yellow, and generic black. Preorders are due March 19, 2026.

Also announced by Bowser is a new run of the HO scale GMD SD40-2W locomotive. Equipped with a 21-pin plug for the DC/DCC ready version, the sound-equipped model features ESU LokSound 5. CN locomotives will be available in the CF30n (w/dynamic brakes), CF30p (w/o dynamic brakes), and CF30t versions, with paint schemes including as-built, Sergeant Stripe 1990s+, Sergeant Stripe 2010s+, Sergeant Stripe w/reflectors 2010+, North America Map 1990s+, North America Map 2010s+, Noodle 2000s+, Website 2010s+ and Website 2010s+ w/RCL beacons. Additional road names are Ellis & Eastern and Pennsylvania Northeastern. Preorders for the SD40-2W are due April 9, 2026, with an ETA of Fall 2026.

Finally, Bowser has announced a new run of HO scale 70-ton offset hopper cars. Road names in this run are ATSF, Baltimore

& Ohio, Bangor & Aroostook, Bessemer & Lake Erie, Blue Coal (RDG), Canadian National, Chicago Burlington & Quincy, Delaware Lackawanna & Western, Illinois Terminal, Missouri Pacific, Nickel Plate Road, Pittsburgh & Lake Erie (PC era), Seaboard Coast Line, and Toronto Hamilton & Buffalo. Six numbers will be produced for each road name. Preorders are due by April 2, 2026.
Info: bowser-trains.com

A new run of the Union Pacific FEF-3 4-8-4 Northern locomotive from **Broadway Limited** in HO scale has been scheduled. Featuring die-cast construction, era-specific paint schemes, and road specific details, the model will be available decorated as UP #8444 between 1962 and 1973, between 1973 and 1987, between 1987 to 1989 in the Greyhound scheme, and in its original UP #844 number in Greyhound from 1989 and 1991. UP #837 and #839 will be available in the standard black paint scheme, and two fantasy schemes are #842 in an Ornate scheme reminiscent of the 1800s and #838 in a scheme inspired by the 49er.

The FEF-3 model will be available in a no-sound/ DCC-Ready version with a 21-pin NMRA decoder socket and pre-installed speaker or equipped with Paragon4 sound/DCC/DC with smoke.

Broadway Limited made several announcements for the Railroad Hobby Show in West Springfield, MA, the first of which is an HO scale brass-hybrid AT&SF 2900 Class 4-8-4 Northern. Built between 1943 and 1944, the 2900

class was the last class of steam passenger locomotives rostered by the Santa Fe.

Paint schemes and road numbers planned for the Santa Fe 2900 class are #2926 in its current appearance as an excursion engine in the Albuquerque, NM area, #2912 and #2921 in an "as-built" appearance, #2903 and #2925 as they appeared after a 1947 rebuild that included new siderods, #2905 with a dual beam headlight that was installed in 1950, Unlettered in the post-1947 appearance, an unlettered and painted brass version of the current #2926, #2914 in an ornate 1870s fantasy paint, and #2917 in a fantasy paint scheme featuring large Santa Fe heralds on the tender. The fantasy paint schemes feature the pre-1947 rebuild siderods.

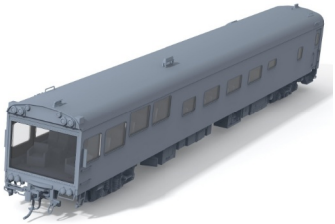
The brass-hybrid models include a hand-crafted brass boiler and tender mounted on a heavy die-cast metal chassis. The models will be available in both the Stealth version with a pre-installed speaker and a 21-pin decoder socket and with Paragon4 sound DCC with smoke. The Sound version will feature sound recordings made directly from Santa Fe #2926. The pre-order deadline for the model is September 17, 2026 with delivery expected in the Summer of 2027.

Also announced for the Railroad Hobby Show is a brass-hybrid model of the New Haven R3a 4-8-2 Mountain-type locomotive. A three-cylinder steam locomotive, the R3a was the largest and heaviest steam locomotive owned by the New York, New Haven, and Hartford RR.

Two road numbers are available for each of three periods – 1928 to 1939 (3556, 3560), 1940-1945 (3558, 3562), and 1945-1950 (3555, 3557). The periods are determined by hardware changes on the locomotives, including changes in the sand lines, air pumps, and other modifications. Unlettered and brass painted versions of the 1945-1950 version will also be available.

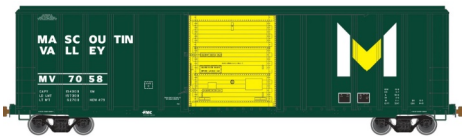
The models will be available in both the Stealth version with a pre-installed speaker and a 21-pin decoder socket and with Paragon4 sound DCC with smoke. Pre-orders are being taken until December 10, 2026 with an estimated delivery date of Fall 2027.

The final announcement from BLI for the Amherst Model Railroad Society Railroad Hobby Show is the Conrail #9/CSX "W. Thomas Rice" theater car in HO scale. Two sets of tooling, Conrail and CSX, are being created for this car that went through significant changes in appearance and paint schemes from 1992 to present day. For the Conrail tooling it will be decorated as Conrail Track Inspection Car #9 in green and yellow as it appeared from 1992 to 1999, as CSX Track Inspection Car #994009 "Massachusetts" from 1999 to 2006, as CSX Track Inspection Car #994009 "Alabama" from 2006 to 2010, and in an unlettered/primer gray version.



The CSX tooling will be decorated as CSX Track Inspection Car #994009 "Alabama" as it appeared from 2014 to 2021, CSX Track Inspection Car #994009 "W. Thomas Rice" as it appears since 2021 to current day, and

also in an unlettered/primer gray version. Pre-orders are being taken until August 6, 2026 with an estimated delivery date of Spring 2027.
Info: broadway-limited.com



HomeShops has announced two new releases using the HO scale Atlas FMC 5347 boxcar. The first is for Brian Banna's Copper State Railway and the second is Andy Dorsch's Mascoutin Valley Railway. Both road names are available in three new road numbers with a built date of 4-79 for all of the cars.
Info: homeshops.net

January's announcement from **InterMountain Railway** is the HO scale Trinity 5161 cu. ft. 3-Bay covered hopper. A modern covered hopper, the Trinity 5161 was first built in the mid-1990s and is still marketed by TrinityRail. It is approximately 60′ in length over the coupler faces.

The announced run includes paint schemes for Agrium (GACX), Archer Daniels Midland (ADMX), BNSF, CITI Finance (CEFX), CSX (CSXT), David J. Joseph Company (DJTX), Ferromex (FXE), GATX Leasing (GACX), Kansas City Southern (ex-FLIX), Union Pacific, and Data Only in both mineral red and gray.
Info: www.intermountain-railway.com

The January 2026 car from **Kadee** is an HO scale Norfolk & Western 40′ PS-1 boxcar. Featuring 8′

Youngstown doors and a Champion Peacock brakewheel, the model has a built date of 3-53 and a shopped/repaint date of 8-79.

The 50-ton AAR flat car produced by Kadee is now available as an undecorated model, painted in red oxide. 53′-6″ in length, the prototype was built between 1940 and 1956.
Info: www.kadee.com

Lionel has announced a line of Maxon scale test cars in HO scale. Used by prototype railroads to certify the scales used for determining car weights and thus billing, this version of a scale test car was patented in 1974. Unlike their short predecessors, the cars are self-propelled for short distances and include four legs that descend to lift the car off the rails, applying the weight of the car to the scale segment. Originally manufactured by Maxon Corporation, FMC manufactured later cars. Unlike their predecessors the cars include air brakes and hand brakes.

Road names in this first release of scale test cars are Burlington Northern, Chicago North Western, Conrail, KCS, Norfolk Southern, Santa Fe, Southern, and Union Pacific. The models include metal knuckle couplers, metal wheelsets with rotating bearing caps, and separately applied detail parts.
Info: lionel.com

Prairie Shadows is taking preorders for an HO scale Thrall 5150 covered hopper.

Built between 1994 and 2001, there are multiple phase variations in a car normally used for grain service but also used for dry chemicals and sugar. Road names in the first release are Crandic (CIC), Montana Rail Link (MRL), AG Processing Inc. (AGP), First Union Leasing (FURX), First Union Leasing (NDYX), and Canadian National (CNA)
Info: prairieshadows.com

Rapido Trains has announced a new run of the HO scale General Electric U25B locomotive with refined details including newly tooled end handrails, the Rapido dead-straight metal handrails with plastic stanchions, and the Phase IV body used on late U25Bs and early U28s.

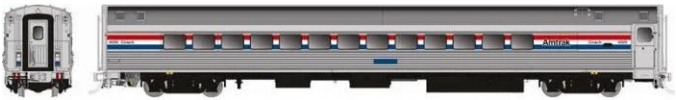
The U25B will be available in Burlington Northern, Conrail, Family Lines (CSX), Family Lines (L&N), Great Northern (BSB), Maine Central, Milwaukee Road, New York Central, Pittsburg & Lake Erie, Rock Island, Southern Pacific, and St. Louis-San Francisco (Frisco).

The Great Northern Historical Society is offering the U25B in the green and orange scheme with the correct “five-step” step well with road numbers 2515 and 2523.
Info: store.gnrhs.org/collections/engines

A new car model from Rapido, the Trinity 6221 and 6241 plastic pellet hoppers are HO scale 4-bay covered hoppers. The prototype was first manufactured in 1997 and continues today. The Rapido model features two body designs, multiple roof hatch styles, multiple outlet gate

designs, etched roof walks and end walkways, factory installed grab irons and end cage details, and multiple road numbers available for each scheme. The cars are available individually and in six-packs.

Road names or reporting marks for the 6221 are: Sunoco (ARSX), General American Marks (GPLK), Trinity Industries Leasing (TILX), Exxon-Mobil (XOMX), and data only grey. The 6241 will be decorated for Dow Chemical (DOWX), Equistar Chemicals (EQUX), General American Marks (GACX), INEOS Olefins & Polymers (GISX), Sasol Chemicals (GSOX), SMBC Rail Services (SOXX) and data only grey.



An Amtrak Phase III paint scheme has been added to the previously announced Budd Coaches with HEP details. Three numbers will be available.

Rapido announced several new HO scale locomotive models at the Amherst Railway Society Railroad Hobby Show, including the General Electric U30CG locomotive. Used only by the Santa Fe Railroad, the U30CG began as a passenger locomotive when introduced in 1967 but were renumbered and converted for use on freight trains in 1969-70. Paint schemes announced by Rapido are red and silver warbonnet, blue and yellow bookend, yellowbonnet, and two weathered schemes where the warbonnet red is visible through the yellowbonnet paint.

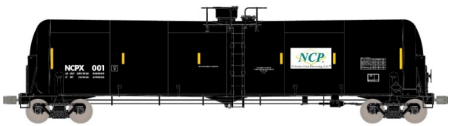
The second announcement at the Railroad Hobby Show was for the General Electric U33C and U36C locomotives. The six-axle

high-horsepower GEs were built between 1968 (1971 for the U36C) and 1975 when they were superseded by the Dash 7 line. Road names in the initial release will be Burlington Northern, Clinchfield (U36C), Delaware & Hudson, Erie Lackawanna, Illinois Central, National de Mexico (U36C), Northern Pacific, Penn Central, Santa Fe (U36C), Southern, and two Southern Pacific versions.

The final Rapido locomotive announcement from the Railroad Hobby Show is the GE U34CH locomotive. Designed for Erie Lackawanna and the New Jersey Department of Transportation as commuter locomotives, they featured the first shaft-driven Head End Power equipment in the US. In 1976 Erie Lackawanna became part of Conrail and in 1983 NJ Transit took over from Conrail as the commuter services operator. Paint schemes for the U34CHs first run are the "as delivered" Bluebird, Bluebird with the NJT logo on a silver nose, the "disco" stripes silver scheme, and Conrail 1776, a Bicentennial tribute locomotive rebuilt from the wrecked 3351. Rapido also noted that they intend to produce Pullman-Standard Comet I "Dieseliners" that were commonly pulled by the U34CH but are not quite ready to make an official announcement.

Info: www.rapidotrains.com

All artwork and graphics are courtesy of Rapido Trains



Announced recently by **ScaleTrains** is a new run of Rivet Counter and Operator line HO scale Trinity 31,000-

gallon tank cars. Road names announced for this run are Bridger Rail Shipping (BRGX), Ferromex (FXE), Nebraska Corn Processing (NCPX), Siouxland Ethanol (SIOX), and Trinity Leasing (TILX).

Also announced were HO scale Rivet-Counter Trinity 31,000-gallon tank cars with head shields. Road names for this run, which includes 24 road numbers per road name, are Bridger Rail Shipping (BRGX), Ferromex (FXE), High Sierra Energy (HSRX), Siouxland Ethanol (SIOX), and Trinity Leasing (TILX).

In the Fox Valley Models line, Scale Trains has announced a run of HO scale Pullman-Standard passengers cars decorated for Norfolk & Western and Norfolk Southern. Designed to fill out a Powhatan Arrow or NS excursion/office car trainset, the models being released include the P1 class 48-set coach with crew room (N&W and NS), the P2 class 66 seat compartment coach (N&W only), P3 class 56-seat coaches in four N&W and six NS numbers, the D1 class 36 seat diner (N&W and NS), and the P4 class lounge-tavern-observation car (N&W and NS).

To pull those passenger cars, a second run of the Fox Valley Models Line Norfolk & Western Class J 4-8-4 steam locomotive has also been announced. The model will be released in several different road numbers and variations, including the as-built 601, 604, 606, and 609, and three variations of the 611 – 1980-1990s excursion, post-2015 Excursion "Spirit of Roanoke," and Norfolk Southern.

A new run of Rivet Counter EMD SD40-2 locomotives is also planned, with several variations and road names included. Road names in the run are Burlington Northern (with

and with blanked class lights), BNSF (three variations with ditch lights), Family Lines (L&N, two variations), Frisco, Missouri Pacific, Soo Lines (two variations), and Union Pacific (SD40-2R, United Way, Pulling for Safety). Two America 250 paint schemes are included in this run for Wheeling & Lake Erie and Reading Blue Mountain and Northern. Preorders for the Trinity 31,000-gallon tank cars, the Fox Valley passenger cars, the Class J, and the SD40-2 closed on February 2, 2026. Check with Scale Trains or a Scale Trains dealer for availability.

Announced at the Amherst Railway Society Railroad Hobby Show is an all new model, the HO scale Rivet Counter RD-6 coal hopper. Designed by Ortner, they built 10,000 of the rapid discharge cars from 1980 to 1986 when they were acquired by Trinity, which has continued to build versions of the car to the current day. The RD-6 car was introduced by Trinity in 2003 with a combination of aluminum and steel construction.

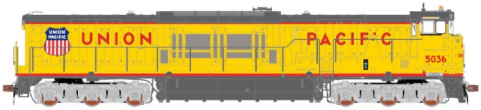
Road names for the first run of the RD-6 cars are BNSF (two versions), Georgia Power (GALX), Norfolk Southern (H66), Schere Electric (RWSX), South Carolina Public Service Authority (SCWX), and Trinity Leasing (TILX). The cars include a magnetized coal load that can be lifted out with a piece of steel.

Also announced at Amherst was the HO scale Rivet Counter Wabtec CM44AC locomotive. Rebuilt from AC4400CWs by CSX, they have upgraded control systems, wiring and a high-pressure common-rail fuel system. Visually they have raised radiator shutters, a modernized cab, number boards above the windshield, and revised long-hood cabinets. They will be available in YN3 with the CSX.com logo and YN3 with the boxcar logo.

Another newly announced AC4400CW rebuild, the Union Pacific Wabtec C44ACM locomotives also received new control

systems, wiring, and fuel systems. Like the CM44AC locomotives, the C44ACM can be identified by the raised radiator grilles, updated long-hood cabinets, and ET44-style cabs on some of them. Two UP paint schemes, the Building America scheme with the winged nose logo and the Small Flag scheme with a shield nose logo, will be available. Depending on the road number, the locomotive will have its original AC4400CW cab or the updated ET44-style cab.

Finally, ScaleTrains announced a new Museum Quality model of the Union Pacific General Electric U50C, a 5,000hp locomotive powered by two 12-cylinder 2,500hp prime movers. Developed from the eight-axle U50, the U50Cs used three-axle trucks from scrapped GE Big Blow turbines and were built in 1969-1970. Unsuccessful due to aluminum wiring fires, cracks in the cast trucks, and prime mover problems, all 40 U50Cs were placed out of service in 1976 and sold for scrap over the next two years.



The Museum Quality model will feature road number specific details, grouped into five paint schemes – "As Delivered Early" (5003, 5005), "Dependable Transportation/ modified nose door" (5000), "Modified nose door" (5009), "As Delivered Late" (5024, 5036), and "We Can Handle It" (5017). The models will be available in each road number in a DC/DCC ready version and ESU LokSound 5 equipped with a new ESU-designed single speaker housing with a built-in passive radiator and two-capacitor ESU PowerPack. A minimum radius of 24″ is recommended.

Preorders for the RD-6, CM44AC, C44ACM, and U50C are due Monday February 23, 2026, with an estimated time of arrival of September-November 2026 depending on the model.
Info: www.scaletrains.com

Tangent Scale Models has introduced two new models, the Bethlehem Steel 3350 cu. ft. quad coal hopper and the Erie Railroad International Car Corporation Bay Window Caboose System. The quad coal hopper is a 100-ton car built between 1974 and 1980 for use with Appalachian coal mines. The Tangent model is available now in six railroad schemes and four unlettered black versions. Road names for this run are Clinchfield, Louisville & Nashville, Seaboard/CSXT, and Wisconsin Central (2 versions). The assembled and ready to run unlettered versions are the 1974 body, the 1976-1978 body, the 1979 body, and the 1980 body.

The Erie Railroad International Car Corporation Bay Window Caboose System covers 50 cabooses purchased in 1953 and still in use into the 1980s and beyond. The cabooses feature riveted body construction, an overhanging Stanray diagonal-panel roof edge, large windows, and a "wagon wheel" antenna. The models feature working interior and exterior lighting features with wand control and full interiors. Eight ready-to-run paint schemes and four undecorated kit options are available now.

The paint schemes are Erie "Delivery Red 1953", Erie Lackawanna "Simplified Repaint 1966", Erie Lackawanna "Gray & Maroon 1973", Conrail N7D "Blue Repaint 6-1976", Conrail N7D "Blue Repaint 1981+ era" D&H "Bridge Line Repaint 1981+ era", D&H "Simple repaint 1980+ era," and Reading and Northern 2014+. The four undecorated kits are unlit – the electronic power board is not included. The kits are "Erie/EL body 1953-1970 era", "EL Modernized body 1971-1976+ era", "CR modernized body 1976+ era", and "D&H body 1978+ era". Info: www.tangentscalemodels.com

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Walthers' January 2026 announcements include a WaltersProto 65′ mill gondola in HO scale. Road names in this run are Burlington Northern, Canadian National, Conrail, CSX, Denver & Rio Grande Western, and Milwaukee Road. Equipped with metal wheels and factory installed grab irons, the model has an expected delivery date of Summer 2026.

A WaltersMainline 37′ 2980 cu. ft. 2-bay covered hopper is expected in Fall 2026. Featuring separately molded and applied hopper gates and metal wheelsets, paint schemes for the model are Chicago & North Western, CSX, ERCX, GACX, MECX, Wisconsin Central, Undecorated, and Data Only.

A new run of WalthersMainline 72′ centerbeam flatcars is expected in Fall 2026. Featuring a die-cast metal underframe the model comes in two centerbeam styles. The "opera window" centerbeam will be available in Burlington Northern, BNSF, Milwaukee Road, TTX, and Union Pacific and the truss-style or standard centerbeam will be available in CSX. Info: www.walthers.com

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N SCALE PRODUCT NEWS

Bachmann Trains has announced the availability of an ACF 56′ 4-bay centerflow covered hopper. Road names in this release are Chicago & North Western, Conrail, Continental Polymers, CP Rail, CSX, Great Northern, Hammond Plastics, Kansas City Southern, and Santa Fe. The models include metal wheels and E-Z Mate Mark II

knuckle couplers.
Info: shop.bachmanntrains.com

Broadway Limited has announced a new run of the USRA 2-8-2 light and heavy Mikado locomotive in N scale. The heavy Mikado will be available for Fort Worth & Denver (Burlington Route), Milwaukee Road, New York Central (PLE), a Christmas 2026 scheme and undecorated. The light Mikado will come in Canadian National, Central of Georgia #699 (Southern #4501 2025 excursion scheme), Nacionales de Mexico, and Southern #4501.

Available in both stealth/DCC ready and Paragon4 versions, the order deadline for the USRA 2-8-2 is April 16, 2026 with an estimated delivery date of Fall 2026.
Info: www.broadway-limited.com

InterMountain Railway's January 2026 announcement includes a Trinity 5161 cu. ft. 3-bay covered hopper. Built since the mid-1990s, this is an extremely common covered hopper both in railroad and lease service for a number of commodities. Each model will be available in six road numbers.

Road names in the announcement are Agrium (GACX), Archer Daniels Midland (ADMX), BNSF, Canadian Pacific, Cargill (CGOX), CITI Finance (CEFX), CSX, Daniel J. Joseph Company (DJTX), Ferromex, GATX Leasing (GECX), Illinois Central, KCS

(ex-FLIX), Norfolk Southern, Potash Corp (GACX), Union Pacific, and data only in red and gray.
Info: www.intermountain-railway.com

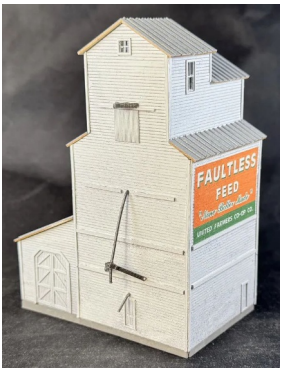
Jackson Railcar has announced a 73′ centerbeam flatcar in N scale. Road names for the truss-style car are Arkansas Oklahoma Railroad (AOK), Atlantic & Western (ATW), Canadian National (WC), Northwestern Oklahoma (NOKL), and Nebraska Kansas Railway (NKCR).
Info: www.jacksonrail.com

Rapido has announced a new paint scheme for the N scale RDC-2 model. The model will be available in the Amtrak Phase I "Pointless Arrow" scheme.
Info: www.rapidotrains.com
All artwork and graphics are courtesy of Rapido Trains.

ScaleTrains has announced a run of the N scale Rivet Counter line EMD GP30. Produced in both DC/DCC ready with an E24 connector and with ESU LokSound 5 Nano sound, the model will be produced for B&O (two schemes), CB&Q, Conrail (2 schemes), CSX (ex-B&O), Norfolk & Western, and Santa Fe. Preorders for these models ended on February 2nd, so check with ScaleTrains or a ScaleTrains dealer for availability.
Info: www.scaletrains.com

NEW STRUCTURES & SCENIC SUPPLIES

Atlas has announced a new O scale turntable featuring a more powerful motor, a flat cogged anti-slip belt, redesigned metal track power contacts, and new deck support with more roller bearings. It is 24 inches in diameter, runs on AC or DC power and is compatible with DCC, TMCC, and DCS. It requires 26 inches clearance for installation.
Info: shop.atlasrr.com



Berkshire Valley Models has released a Country Grain Elevator in N scale. Measuring 3.75″ long x 2.25″ wide x 5″ high, the kit is constructed of laser-cut basswood and thin veneer plywood.

In HO and N scale, Berkshire Valley has released a One Story Section House model. Based on a Rio Grande section house, it includes a covered front porch, clapboard siding, and peel and stick windows, doors, and roofing. It could be repurposed as a small commercial or residential building.
Info: berkshirevalleymodels.com

Bollinger Edgerly Scale Trains has released Bartlett's Hot Rods/Chevrolet Dealership. Based on a Chevrolet dealership in

Vancouver, BC, Canada, the kit includes laser cut wood, Downtown Deco brick wall castings, peel-and-stick roofing materials, signs for both Bartlett's Hot Rods and a Chevrolet dealership, and step-by-step instructions. The footprint for the HO scale kit is 7″ x 6.5″.
Info: besttrains.com

miniprints has released several new 3D-printed scenery details. The first is a ruined flagstone foundation, suitable for an abandoned, possibly burned, structure. It is available in N, HO, S, and O scales.

For those modeling the east coast of the United States or Tillsonburg, Ontario area who feel the need for additional agricultural products, miniprints is producing tobacco plants, with 18 plants to a row, and 8 40-foot rows to a package. Available in N and HO scales.

Available in HO, S, and N scales is a set of four miniature western saddles, ready for an equestrian or old west scene. Fence not included.
Info: miniprints.com

New from **Monashee Laser Engineering** is the HO scale Canadian Northern Railway Third Class 'Special' Enlarged Station kit. Designed from CNR drawings and photos, the kit is an accurate scale reproduction of the prototype that includes an enlarged general waiting room and freight room, as well as a

ladies waiting room. The kit consists of laser cut floors, walls, windows/doors, roof, trim, shingles and chimneys. Stripwood is included for the platform. The kit's footprint, based on the combination of the roof and platform outlines, is 15 1/8″ x 6 1/2″.

Also new from Monashee Laser Engineering is the No.2A Freight Shed/Office and No.2B Freight Shed/Expansion kits. Designed from CPR drawings, the both kits can be built as standalone structures or combined to add bays to the Freight Shed/Office building. The photo shows both kits combined into one structure. Most of the structural elements are laser cut with materials included to build interior details, the platform, and loading dock. A bag of sand is included to finish the tar and gravel roof. The footprint of the No.2A building is 5 3/4″ x 7 3/4″ and No.2B is 5 1/4″ x 4 1/2″.

Planned for release in early 2026 is the Canadian Northern Railway Combination Station and Section House. The kit is based on CNR plans 100-47 and 100-98 and will include the parts to assemble the structure shown. The exterior will be shingle and clapboard siding with cedar roof shingles.
Info: www.monasheelaserengineering.ca

VIEW READER COMMENTS

ELECTRONICS

Accu-Lites has introduced the Model 6001 Tortoise DCC decoder, designed to operate a single Tortoise as a DCC accessory device. Info: acculites.com

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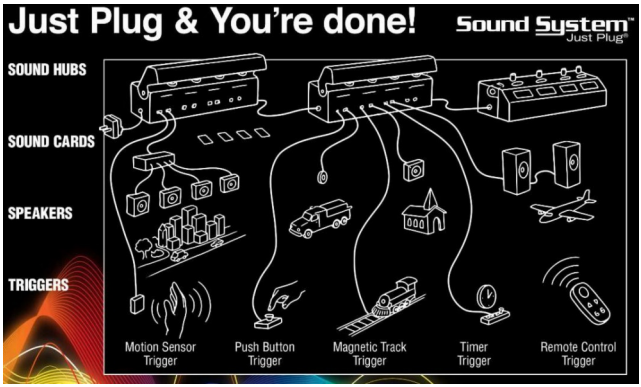

Woodland Scenics has announced the upcoming Just Plug® Sound System, to add environmental sound to layouts, dioramas or other projects. Based around a Sound Hub that contains Sound Cards, the illustration provided by Woodland Scenics indicates that multiple trigger types, such as motion sensors, push buttons, magnetic track triggers, timers, and a remote control will be available or usable with the system. The illustration also indicates that multiple speaker types will be supported. Info: woodlandscenics.com

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Briefly noted at press time ...

Accurail has announced a special run 2-bay ACF covered hopper decorated for the American Semiquincentennial, Great Northern 40′ double sheath wood boxcars, a Soo/CP 3-bay ACF covered hopper, a Pittsburgh & Lake Erie/PC 50′ welded side insulated steel boxcar, and a Schuyler Packing Company 40′ steel reefer car. Info: accurailinc.com

Online sources have indicated that both **Plano Model Products** and **Details West** have been sold to PF&S of Pasco, Washington. PF&S currently also owns the Precision Scale Company, Tomar, Utah Pacific, Alexander Scale Models and Stewart Products brands as well as TJ's Model Trains and Things hobby shop.

Info: www.planomodelproducts.com

Info: alexanderscalemodels.com

Info: tomarindustries.com

Info: detailswest.com

Info: www.ebay.com/str/tjmodeltrainsandthings ...

Lowell Smith has announced two new cars for the Union Pacific Heritage Fleet, the Columbia River and Portola. Also announced is the Western Sunset, a 12-4 Wabash sleeper car and a single fluted coach in Amtrak livery. Complete information on these announcements will be in the March 2026 *Model Railroad Hobbyist.* Info: lowellsmith.net ■

SELECTED EVENTS

February

Please submit your event information, including website, to 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_VhPb5pjdkAYTdXLceJA

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

February – March 2026

CANADA, ONTARIO, KINGSVILLE, January 23 – February 22, 2026. RailExpo 2026, Freemo N and HO scale layouts. Canadian Transportation Museum & Heritage Museum, 6155 Arner Townline.
Info: www.railexpo.ca

CANADA, ONTARIO, KITCHENER, March 15, 2026. Kitchener Model Train Show. Marshall Hall, 426 Bingemans Centre Drive.
Info: www.facebook.com/KitchenerModelTrainShow

CANADA, ONTARIO, POINT HOPE, February 21 & 22, 2026. Ganaraska Railway Modelers 31st Annual Show. Town Park Recreation Centre, 62 McCaul Street.
Info: www.facebook.com/ganaraskarailwaymodellers

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

CALIFORNIA, BUENA PARK, February 22, 2026. The California Express Railroadania & Transportation Show. DoubleTree by Hilton, 7000 Beach Blvd.
Info: www.facebook.com/calexpressbuenapark

CALIFORNIA, MOUNTAIN VIEW, March 6-7, 2026. O Scale West 2026. 432 Stierlin Rd.
Info: oscalecentral.com/event/o-scale-west-2

GEORGIA, CARTERSVILLE, March 14-15, 2026. The Piedmont Division Model Train Show. The Clarence Brown Conference Center, 5450 GA HWY 20.
Info: themodeltrainshow.com

GEORGIA, MACON, March 27-28, 2026. Central Georgia Railroad Prototype Modelers. Lundy Chapel Church, 2081 Forest Hill Rd.
Info: centralgarpm.com

INDIANA, FRANKLIN, March 28, 2026. Indy South Train Show, sponsored by the Pacific & Eastern Model Railroad Club. Johnson County 4-H Fairground, 260 Fairground Street
Info: www.facebook.com/profile.php?id=61567675147560

INDIANA, NAPPANEE, March 21, 2026. 21st Annual Elkhart Model Railroad Club Nappanee Train Show. Claywood Event Center, 13924 N 1100 W (County Line Road).
Info: emrrc.com

KANSAS, LAWRENCE, February 28-March 1, 2026. 24th Annual Train Show and Swap Meet, sponsored by the Lawrence Model Railroad Club. Crown Toyota, 3400 South Iowa St.
Info: lawrencemodelrailroadclub.org/2026-train-show

KENTUCKY, LOUISVILLE, March 21, 2026. 36th Year - Division 8 Train Show & Sale. Holy Family Parish Saffin Center, 3938 Poplar Level Rd.
Info: div8-mcr-nmra.org/train-show

NEW YORK, ROCHESTER, February 21-22, 2026, RocRPM – Rochester Railroad Prototype Modelers Info: www.facebook.com/RocRPM

NEW YORK, HENRIETTA, March 1, 2026. The Greater Rochester (NY) Train Fest 2026, sponsored by the Genesee Society of Model Engineers. ROC Dome Arena, 2695 East Henrietta Rd.
Info: gsme.org

NORTH CAROLINA, HICKORY, March 27, 2026. 24th Annual Hickory Train Show. Hickory Metro Convention Center, 1960 13th Ave SE.
Info: newtondepot.org/event/24th-annual-hickory-train-show

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

OHIO, WEST CHESTER (Cincinnati), March 7, 2026. Annual Spring Model Train Market. Lakota West Freshman Campus, 5050 Tylersville Rd.

Info: www.cincy-div7.org

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

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

OREGON, PORTLAND, February 28, 2026. Willamette Model Railroad Club annual swap meet. Kliever Armory, 10000 NE 33rd Avenue.
Info: wmrrc.com

PENNSYLVANIA, DUNMORE, March 1, 2026. The Great Northeast Model Train Show. Holiday Inn Scranton East, 200 Tigue Street.
Info: www.facebook.com/events/865310829818082

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

SOUTH DAKOTA, SIOUX FALLS, March 21-22, 2026. Greater Sioux Falls Model Train Show, presented by the Dakota Southeastern Division, NMRA. Grand Ballroom, Sioux Falls Convention Center, 1201 N West Ave.
Info: dakotasoutheastern.org/event/greater-sioux-falls-model-train-show-march-22-2026-sioux-falls-sd

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

WASHINGTON, MONROE, February 21-22, 2026. The 33rd Washington State Train Show & Market Place, presented by the United NorthWest Model Railroad Club. Evergreen State Fairgrounds, 14405 179th Avenue SE, Buildings 600, 604, and 501.
Info: www.unwclub.com/unwshow

Future 2026 by location

AUSTRALIA, SYDNEY, April 18, 2026. Sydney RPM. Concord Community Centre, NSW.
Info: sydneyrpm.com

CANADA, ALBERTA, CALGARY, April 25-26, 2026. Supertrain. Olympic Oval at the University of Calgary, 288 Collegiate Blvd NW.
Info: www.supertrain.ca

CANADA, BRITISH COLUMBIA, BURNABY (Vancouver), May 22-24, 2026. Online Kickoffs April 30, May 14th. Railway Modellers Meet of British Columbia. 3rd Floor, West Mall Centre, Simon Fraser University.
Info: railwaymodellersmeetofbc.ca

CANADA, ONTARIO, HAMILTON, April 18, 2026. 2026 Steel Town Railway Prototype Modelers Meet. Eva Rothwell Centre, 460 Wentworth St.
Info: steeltownrpm.wordpress.com

CANADA, ONTARIO, PRESCOTT, April 11, 2026. 3rd Annual Prescott Model Train Club Model Train Show. Leo Boivin Community Centre, 444 Prince Street.
Info: www.facebook.com/PrescottRailroadModelClub

CANADA, SASKATCHEWAN, SASKATOON, February 15-16, 2026. All Abord Model Train Show 2026. World Trade Center Saskatoon, Prairieland Park Hall D, 503 Ruth Street West.
Info: prairierailworkshop.com/train-show

ALABAMA, GADSDEN, April 11, 2026. Coosa Valley Model Railroad Association 39th Annual Spring Train Show. Mary G Hardin Center for Cultural Arts, 501 Broad St.
Info: www.facebook.com/events/1324022532563856

ARIZONA, MESA, June 3-7, 2026. Santa Fe Railway Historical & Modeling Society Annual Convention. Includes RPM on June 5-6. Delta Hotel By Marriott Phoenix Mesa, 200 North Centennial Way.
Info: sfrhms.org

CALIFORNIA, LOMITA, May 30, 2026. Southern California N Scale Meet. Calvary Assembly of God-Lomita (Gymnasium).
Info: socalnscale.com

COLORADO, DENVER, April 11-12, 2026. Rocky Mountain Train Show. National Western Complex, 4655 Humboldt St.
Info: rockymountaintrainshow.com/Default.aspx

GEORGIA, POOLER, April 11-12, 2026. Coastal Bluffs 37th Annual Model Railroad and Train Show. Pooler Recreation, 900 S Rogers St.
Info: www.facebook.com/events/1275566837941026

MASSACHUSETTS, SPRINGFIELD, May 29-30, 2026. New England/Northeast RPM. The Sheraton Monarch Hotel, One Monarch Place.
Info: www.nerpm.org

MICHIGAN, MUSKEGON, April 25, 2026. Annual Hobby Expo and Train Show, sponsored by the Muskegon Railroad Historical Society. Cardinal Elementary School, 2310 Marquette Avenue.
Info: mrhsonline.wordpress.com

MICHIGAN, TAYLOR, March 15, April 12, October 11, 2026. Taylor Town Train Show and Sale. 22525 Ecorse Rd.
Info: www.instagram.com/taylor_town_train_show

NEW JERSEY, BURLINGTON TWP, May 9, 2026. Burlington Train Show. Burlington Lodge #32, 2308 Mt. Holly Road (Rt. 541).
Info: https://www.facebook.com/StrasburgModelRailroadNJ

NORTH CAROLINA, CHARLOTTE, May 2-3, 2026. RPM Carolinas: School of Railway Prototype Modeling. 9140 Arrowpoint Blvd, Suite 140.
Info: www.facebook.com/groups/1895473627515807

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

OREGON, TIGARD, May 13-16, 2026. Oregon Rails 2026, the 2026 Pacific Northwest Region NMRA annual convention. Embassy Suites By Hilton Tigard-Portland, 9000 SW Washington Square Road.
Info: oregonrails2026.com

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

TENNESSEE, CHATTANOOGA, July 27-August 2, 2026. 2026 Scenic City Express, NMRA National Convention. Chattanooga Convention Center, 1 Carter St.
Info: www.nmra2026.org

TEXAS, GALVESTON, April 25-26, 2026. RailFest: Model Train Rally. 1932 Union Station Train Depot, 2602 Santa Fe Place.
Info: galvestonrrmuseum.org/railfest ■

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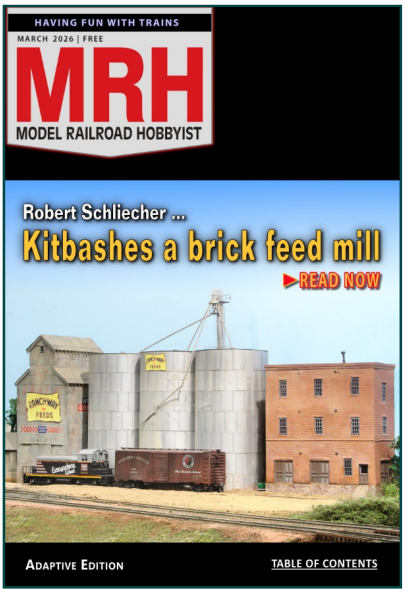

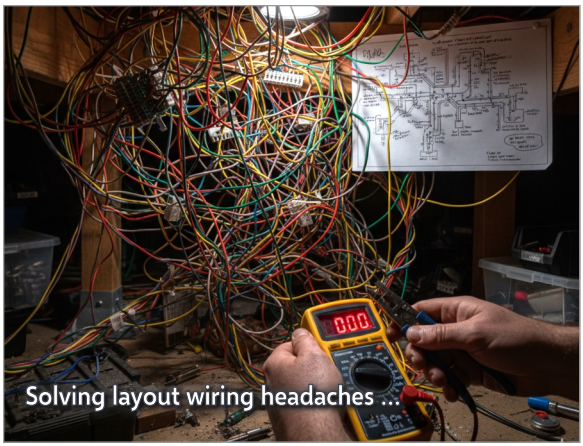

... coming March 15th in the March 2026 MRH

Coming next month in Running Extra ...

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Thom Driggers upgrades an undec'ed Atheran SD39 to an SD38-2 ...

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