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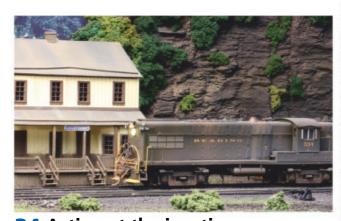




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Remaining flexible as we "grow"



On the cover: A train comes off the Mount Carmel branch on Jim Hertzog's HO scale Reading Co. Shamokin Division. Mike Rinkunas photo



#### **Next issue**

In June, we visit Rapido Trains founder Jason Shron's HO scale VIA Rail layout. Plus, expanding Lou Sassi's Sandy River, decaling a diesel, making a smashboard, and more!

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## **Trackside Photos**

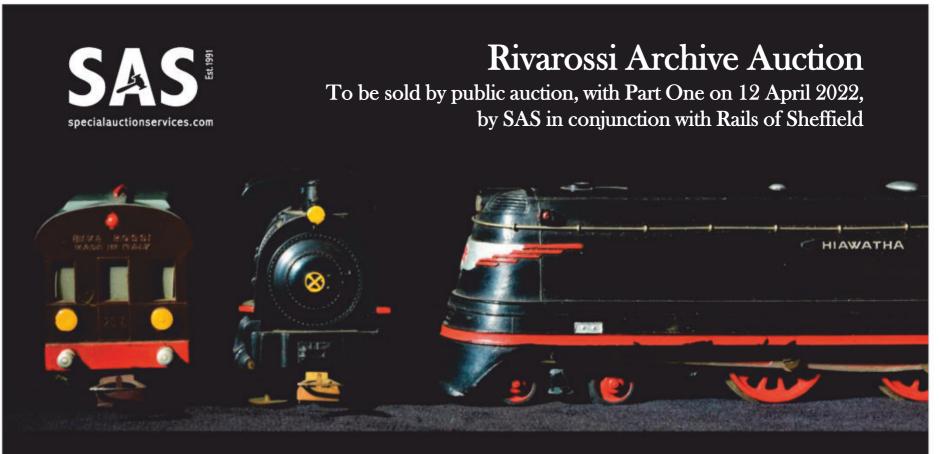
**Looking for modeling inspiration?** Take a look at what other model railroaders are building on their layouts in Trackside Photos. On our website, you can view a gallery of images from the print version, plus bonus photos available only online! Go to Trains.com and search for "Trackside Photos" to find a collection of photo galleries from past issues of Model Railroader. And, of course, you can look even farther back in our online Archive. Go to Trains.com, select MODEL RAILROADER MAGAZINE from the menu, and select Archive Access.



# Jim Herzog's Shamokin Division

If you want to see more of Jim Hertzog's HO scale Reading Co. Shamokin Division, head to Trains.com and look up the November 2018 Model Railroader. Jim's article "Ride along on a mine run" includes the Shamokin Division's full track plan, as well as more photos of his superb Appalachian scenery. Check it out!





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# Things to see and places to go – at last

#### There's something in this

issue that's been missing from our pages for far too long. On page 12, you'll find a news report from the 2022 Amherst Railway Society's Railroad Hobby Show, held in late January in West Springfield, Mass.

There were plenty of new products announced at the

show, which are covered in this issue and on Trains.com.

It's always fun to see what's new in the hobby but let's take a moment and appreciate the Amherst folks for going forward with a major train show, something largely absent from the hobby since the start of the COVID pandemic in early 2020.

Nerly 6,000 attended the 2022 Amherst Railway Society Railroad Hobby Show, held Jan. 29 and 30. Eric White photo

The Model Railroader staff is currently making plans to attend the National Model Railroad Association's annual convention Aug. 7-13 in St. Louis along with the National Train Show, Aug. 12-14.

#### Our own hometown show.

Trainfest, held for many years at the Wisconsin State Fair Park in the Milwaukee suburb of West Allis, was cancelled in 2020 and 2021. I'm happy to announce that Trainfest is slated to return in November with a significant change.

Formerly run by NMRA's Wisconsin Southeastern Division (WISE), Trainfest 2022 will be produced under license from WISE by Kalmbach Media and the Great American Train Shows.

"We are excited to have the show return after a two-year hiatus," says Brian J. Schmidt, Kalmbach Media's vice president of operations. "We plan to



make this year's Trainfest one of the best ever."

Trainfest features about 200,000 square feet of space, 70 operating model railroads, and up to 300 exhibitors, manufacturers, and retailers.

It's great to see conventions and shows reopening. I guess it's true you never fully appreciate what you have until it's gone.



# Model railroading is fun!

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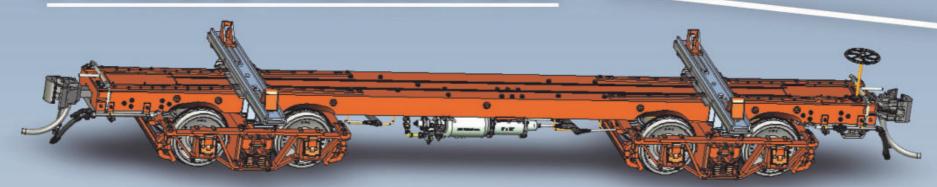
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# PRESS RELEASE





KR Models proudly announce that we will be producing a logging car to complement our model of The Shay.

Logging railways used three basic types of log cars, the disconnect, skeleton and the flatcar. Skeleton cars were the most common, basically consisting of a wooden reach betweentwo freight car trucks. This arrangement allowed for the use of air brakes (unlike the disconnect), while maintaining its light weight and easy maintenance.

We will be producing 3 variants each at \$60.00, which comes complete with logs. A single log or a three log configuration.

To register your interest in this model please go to

https://www.krmodels.ca/products/expression-of-interest-ca

We will announce further details as the project progresses.





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**Electro-Motive Division GP30 and GP30B diesel locomotives.** ScaleTrains.com made a splash when it announced its latest HO scale locomotives. The Rivet Counter line GP30s will be decorated for Union Pacific (as-delivered A unit, as-delivered B unit [freight and passenger], and no. 844 [Nevada State Railroad Museum edition with ditch lights]), Chicago & North Western (Original Yellow and Original Yellow repaint), CSX (RDMT slug/stealth), Denver & Rio Grande Western (billboard and Flying Grande lettering),

Norfolk & Western (Pevler Blue), and Pennsylvania RR (Brunswick Green). Features on the model will include a detailed cab interior with a separate floor, seats, and control stand; light-emitting-diode lighting; and era-specific treadplate patterns. Direct-current models with a 21-pin connector will be priced at \$194.99. Versions with a dual-mode ESU LokSound sound decoder with Full Throttle, two cube-type speakers, and two super capacitors will sell for \$289.99. ScaleTrains.com, 844-987-2467, scaletrains.com

# Amherst show returns after year hiatus

Despite a snow storm and ongoing concerns over the COVID-19 pandemic, the Amherst Railway Society Railroad Hobby Show returned to the Eastern States Exposition Fairgrounds in West Springfield, Mass., in late January. Attendance for the two-day show was 5,925. The show was also live streamed to more than a quarter million viewers.

ScaleTrains.com kicked off the Railroad Hobby Show by announcing its new HO scale Rivet Counter line Electro-Motive Division GP30 and GP30B diesel locomotives, shown above.

English's Model Railroad Supply displayed test shots of the new Bowser HO scale Canadian Pacific SD30C-ECO diesel locomotive.

Bachmann showed samples of its N scale Siemens SC-44 charger diesel locomotive (opposite). The company also announced it will be producing an N scale ALC-42 in 2023.

To read the full show report, and view senior editor Eric White's coverage from the show floor, visit Trains.com/mrr and click on the News & Reviews tab.

#### HO scale



#### Canadian Pacific (CP) Class H1a and H1b 4-6-4 Hudson steam locomotives.

Rapido Trains will offer its next steam locomotives in the as-delivered (early walkway, with and without smoke deflectors), "Spans the World" (late walkway, with and without smoke deflectors), beaver shield herald (late walkway, with and without smoke deflectors), and no. 2816 excursion (ditch lights and oil tender, with dual-mode sound decoder only) paint schemes. The Hudson will have road-number-specific details; separate, factory-applied handrails and grab irons; and blackened metal wheels and driving rods. Direct-current models will sell for \$599.99. Versions with a dual-mode sound decoder will be priced at \$699.95. Special edition CP no. 2816 excursion unit will retail for \$749.95. Rapido Trains, 905-474-3314, rapidotrains.com

#### **HO scale locomotives**

 Canadian Pacific SD30C-ECO **diesel locomotive.** Models based on 2013 and 2015/2016 prototypes in six road numbers each. Can motor with flywheels; blackened-metal RP-25 contour wheels; separate, factory-applied details, including air horn on long hood, air hoses, windshield wipers, grab irons, uncoupling levers, fuel tank, and window glazing; and operating headlights. Direct-current model, \$239.95; with dual-mode ESU LokSound V5 sound decoder, \$339.95. For dealer direct (with Bowser) and consumer ordering only. Early 2023. Executive Line. Produced by Bowser, available from English's Model Railroad Supply, 570-368-2379, bowser-trains.com



• Union Pacific 4-12-2 steam locomotive. Modernized with standard cab (one road number with Oregon Short Line sublettering) and modernized "E-2 Nine cab." Three numbers per body style. Both body styles have 18,000-gallon tender and aluminum lettering. Separate, factory-applied handrails, grab irons, and brass bell; crew figures; and dualmode Paragon4 sound decoder with Rolling Thunder. \$799.99. Brass-Hybrid series. Broadway Limited Imports, 386-673-8900, broadway-limited.com



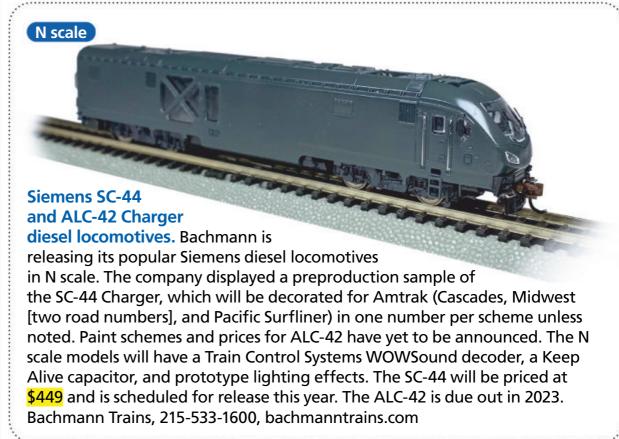
#### MPI HSP46 diesel locomotive.

Unpainted cast-resin shell. Designed to fit on Athearn General Electric P42 chassis with little modification. \$49.99. Decals available separately. Island Model Works, islandmodelworks.com



# Montreal Locomotive Works M420R and M420W diesel locomo-

**tives.** M420R (conditional releases): Providence & Worcester (as-delivered and 1990s schemes). Canadian National versions: CN (stripes) class MR-20b and MR-20c and North America scheme, Minnesota Commercial Ry. (conditional release), and Oil Creek & Titusville RR. BC Rail version (all conditional releases): British Columbia (two-tone stripe and lightning stripe, A unit and A/B set), BC Rail (red, white, and blue; A unit, A/B set, and B/B set in "hockey stick" scheme), and Delaware-Lackawanna. Conditional releases must meet minimum pre-order requirements to proceed. Prototype-specific details, metal side handrails with plastic stanchions, and wire grab irons. Direct-current models with 21-pin connector for Digital Command Control decoder: A unit, \$249.95; A/B set, \$469.95. With dualmode ESU LokSound sound decoder: A unit, \$369.95; A/B set, \$699.95. Release date to be announced. Rapido Trains, 905-474-3314, rapidotrains.com



#### N/HO/O scales

#### **Carver's Butcher Shoppe.**

Woodland Scenics offers this factory-assembled, painted, and weathered structure in three scales. Carver's Butcher Shoppe features a meat counter, signs, stairs, a water hose, and an entryway porch. The building also includes factory-installed lightemitting diodes for use



with Just Plug Lighting System. The Built & Ready line structure is priced at \$57.99 (N scale), \$89.99 (HO), and \$129.99 (O). Woodland, 573-346-5555, woodlandscenics.com



This plastic kit is the latest addition to the Walthers Cornerstone Series. The N scale modern transload terminal (\$59.98) has a large end door for loading and unloading railcars inside of the structure, truck docks, a block foundation, and steel upper panels. The kit includes separate doors and windows, weather bellows for truck dock doors, and printed signs. The assembled kit measures  $10^{1}/_{2}$ " x  $6^{5}/_{16}$ " x  $2^{13}/_{64}$ ". Wm. K. Walthers Inc., 414-527-0770, walthers.com

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offers this well-known locomotive in the Greyhound version with gloss paint, a graphite smokebox, and wheels with black rims. The N scale 4-8-4 has a coreless motor with dual brass flywheels, an illuminated headlight and number boxes, and factory-installed detail parts. The pricing structure for the model is \$275 (direct-current model), \$360 (with Train Control Systems Digital Command Control motor decoder), and \$475 (with ESU LokSound sound decoder). Kato USA Inc., 847-781-9500, katousa.com

#### HO scale

#### Protein feed hopper top.

This one-piece 3-D printed part is offered by MAC Rail LLC. The HO scale protein feed hopper top is offered in tall (no. 846T) and short (no. 846S) versions with an aluminum finish. The part, \$15, is designed to fit



Johnstown America Bethgon gondolas offered by numerous manufacturers. The hopper top includes a modeler-installed vinyl tarp and a link to installation instructions. MAC Rail LLC, macrailproducts.com

#### HO scale

#### Lima 50-ton two-truck Class B Shay geared steam locomotive.

KR Models provided an update on its latest locomotive project. The HO scale Shay geared steam locomotive will be decorated for Arcata,



Canadian Pacific, Merrill & Ring Lumber Co., Southwestern Portland Cement Co., Sugar Pine Lumber Co., and West Side Lumber Co. in one road number per scheme. A painted black but unlettered version will also be offered. Features on the model include a die-cast metal chassis, working external valve gear and drive shafts, and directional headlights. The model will be priced between \$299 and \$449, depending on features. Sound-equipped versions will have an ESU LokSound V5 decoder. KR Models, 780-863-2330, krmodels.ca

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#### **HO scale freight cars**

• Department of Defense (DODX) 68-foot heavy-duty flatcars. Buffer car, Cascade Green, nuclear cask car, Olive Drab, and Urethane Green. Road-number-specific lettering and details to match builder, period, and paint scheme. Die-cast metal underframe, wire grab irons, metal wheels, and Kadee couplers. \$64.95. Spring Mills Depot, smd.cc

### **HO** scale passenger equipment

• Southern Pacific-rebuilt Official Cars. Del Monte (1959 and 1967 rebuilds), Pine Bluff (1986 rebuild), Oregon (1982 rebuild), Sacramento (1952 and 1957 rebuilds), Salt Lake (1955 rebuild), San Jose (1958 rebuild), Santa Barbara (1953, 1957, and 1959 rebuilds), and Shasta (1958 rebuild). Factorypainted and lettered brass models with interiors. The Coach Yard, thecoachyard.com



• Amtrak ICE 3 starter set with roadbed track. Four-car set with directional headlights and marker lights, oval of PIKO roadbed track, and power supply. Set can be expanded with PIKO no. 57698 (Amtrak ICE 3 coach car with pantograph) and no. 57699 (Amtrak ICE 3 coach), both sold separately. Price and release date to be announced. PIKO America, 619-280-2800, piko-america.com

#### **HO scale structures**

- Whitby's Mill. Kit features Rail Scale Models real cedar shake shingles, corrugated metal roof, working lamp, and waterwheel (wheel can be motorized). Based on mill from John Allen's first Gorre & Daphetid. \$55. Conowingo Models, conowingomodels.com
- Nick's Ice House. Laser-cut wood and resin craftsman kit. Includes Sylvan Scale Models 1940-49 REO 1½ ton pickup truck kit, detailed oversized hoist kit, and 60 metal and resin detail castings (33 different items). \$199. Seaport Model Works, seaportmodelworks.com

# N scale freight cars

• Pullman-Standard PS-2 two-bay covered hopper. Separate, factory-applied roof hatches and see-through plastic running board; 33" metal wheels; body-mounted couplers with blackened trip pins; etched-metal brake wheel platform; and air hoses. Road names and price to be announced. 2022 release. Micro-Trains Line Co., 541-535-1755, micro-trains.com

#### N scale details and accessories



• 53-foot intermodal containers with 8-55-8 corrugation pattern. Amazon Prime (dark blue with hazmat placards), Canadian Pacific (red), EMP (green with centered logo and green Hub patchout), FedEx Multimodal (white), Florida East Coast (dark blue with hurricane herald and dark blue with "Florida East Coast" lettering), and Walmart (white). Inter-box connecting pins at scale 40-foot locations, JTC magnetic connecting system, and prototype-specific details and decorating. Two pack, \$33.95. Jacksonville Terminal Co., jtcmodeltrains.com

#### **Electronics/controls**

 ESP32 pulse width modulated "half **siding" board kit.** Features two stall motor drivers with point sense, two opto-isolator type occupancy detectors (will work with either direct current or Digital Command Control power), and 16 PWM light-emitting-diode drivers for LED signal lamps. Kit includes base board with all of the SMD components installed. Small number of through hole parts (terminals, connectors, and pinand-socket headers, all included) need to be soldered on. Also included will be a Lily Go TTGO-T1 MCU; a thumb drive containing the software; and a 40-plus page booklet showing how to assemble the board, compile and upload the software, and how to install, wire, and configure the board on a model railroad. Price to be announced. Deepwoods Software/The Country Robot, 978-633-5364, the country robot.com



Greenville 86-foot high-cube quad-plug-door boxcar. This big auto parts car is the latest release from Tangent Scale Models. Paint schemes on the HO scale model (\$56.95) include Chessie System with Baltimore & Ohio reporting marks (1979+ repaint), Conrail (1976+ X60GR repaint with large herald and 1988+ X60R repaint), Grand Trunk Western (December 1969 as-delivered scheme, eight road numbers), Southern Ry. (1987+ NS-era BS-84 Claytor repaint), and Union Pacific with Southern Pacific reporting marks (2011+ "Building America" scheme). Each paint scheme is offered in four road numbers per scheme unless noted; undecorated kits are also available in two versions. Tangent Scale Models, 828-279-6106, tangentscalemodels.com



Pullman-Standard plan 4119 lightweight duplex sleeper. RailSmith Models displayed a pre-production sample of its newly tooled passenger car. The first run of the N scale lightweight duplex sleeper will be decorated for Northern Pacific (1947 North Coast Limited pine tree scheme: single car \$48, three-pack \$134; 1954 North Coast Limited in Loewy two-tone green: two-pack \$94) and Great Northern (1967 Big Sky Blue: single car \$47, three-pack \$134). The model will be offered with and without skirting as appropriate and will feature metal wheels and prototype details. The sleeper is scheduled for release this summer. RailSmith Models, lowellsmith.net/railsmith

#### HO scale

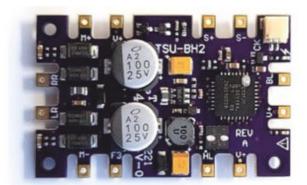
#### Lenny's Truck Repair.

Bar Mills Scale Model
Works made several
announcements at the
Amherst show. Among
them was Lenny's Truck
Repair, an HO scale
craftsman-style structure
kit featuring vertical siding,
a laser-etched brick office,
and an etched "concrete"



base. The kit (price to be announced) measures 3" x 6". Bar Mills Scale Model Works, 207-929-3400, barmillsmodels.com





Tsunami2 TSU-BH2 decoder.

Upgrade for Bachmann HO Sound Value 2-6-0, 2-8-0, 4-6-2, Norfolk & Western Class J, and Southern Pacific class GS-4 steam locomotives. Eight function outputs; 2A maximum motor stall current; 2 watt, 8Ω load audio amplifier; 100mA maximum function current (each output); and 16 sound channels. Can be used on 7.5V to 22V DCC track voltage. Decoder measures 45 x 28 x 7.5mm. \$121.95. SoundTraxx, 970-259-0690, soundtraxx.com

• **CS-105 5-Amp command station.** Layout Command Control command station. Continuous 5A power, Wi-Fi and wired throttle support, and Rail Com support. Can be updated in the field.

Price to be announced. Train Control Systems, 215-453-9145, tcsdcc.com

#### **Tools**

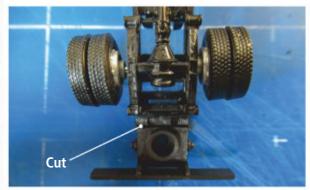
• 5-in-1 Deluxe Pro kit. Includes Deluxe Pro Variable-Heat Pro Power Station, choice of four Hot Wire basic hand tools (see website for options), 2 foot Bow Cutter with four spare cutting wires, 6 foot extension cord, 85-minute Hot Wire Foam Factory instructional DVD, carrying case, and printed instructions. \$349.95. Hot Wire Foam Factory, 866-735-9255, hotwirefoamfactory.com

#### Scenery

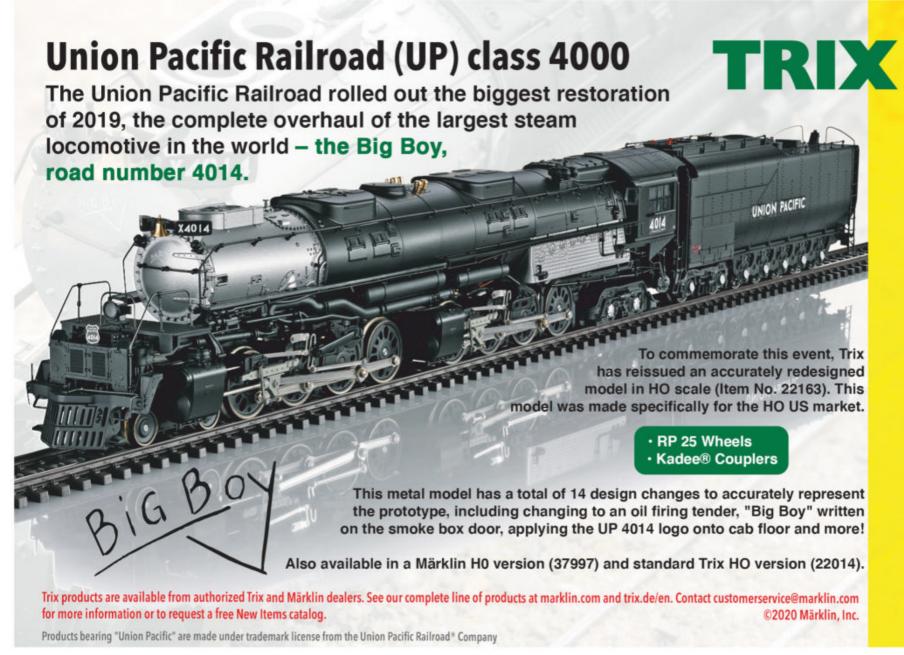
• Blocky Rock tunnel portal. Depicts a "bare rock" tunnel (one that's cut in rock strong enough to not require additional support). Rubber rocks feature sharp, blocky fracture pattern that matches with company's Blocky Rock 1 and Santa Fe Canyon 1 and 3 outcroppings. Contains rock detail on all four sides.

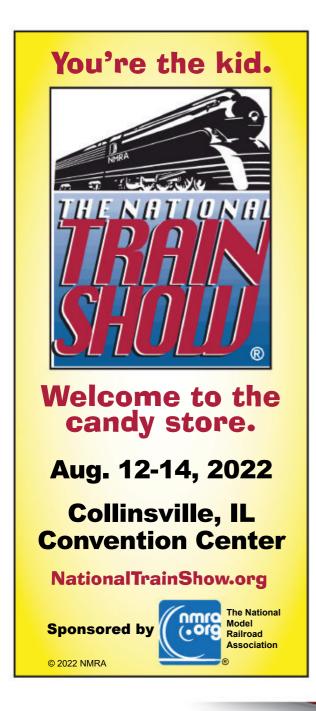
Flexible, can be cut with scissors. Fits single-track openings in HO, HOn3, and S scales. Turned sideways, it's usable in O scale or as a double-track portal in HO. \$25. Cripplebush Valley Models, 518-868-2218, cripplebush.net

• Snow-covered pine trees. Ready-to-use trees feature metal trunk. Trees measure 3.6" tall and 4.3" tall (eight each per pack). Sixteen-pack, \$32.98. Rock Island Hobby, rockislandhobby.com



• **Correction.** In Grant L. Graeber's article "Model a propane delivery truck" (January 2022, pp. 54-58) we incorrectly labeled a cut location in Step 2. The correct location to make the cut is shown above. We apologize for the error.

















Burlington Northern scale test car no. 979004 rests on a siding in Crookston, Minn., in August 1995. Placards on top of the car give instructions for the car's careful handling. Cody Grivno photo

## What does a scale test car do?

What was the purpose of a scale car? Was it to check the track? Where was it located in the train? Were all Class 1 railroads required to have these cars? Were there measuring instruments in those cars? I do realize that with today's technology they are obsolete.

Gilles Bouthillier

Those cars are far from obsolete. You might get a clue what these cars are for if you heard the full name: scale *test* car. Bulk materials like coal, grain, wood chips, gravel, and sand are shipped by weight. In order to know how much coal or whatever is being shipped, the car must be weighed, first empty, then loaded. In both cases, a scale track is used. Cars are pulled or shoved onto a scale track and their weight recorded. The car's empty weight – ascertained on a regular basis as part of scheduled maintenance and stenciled on the car's side for easy reference – is subtracted to give the weight of the lading. The shipper is then billed accordingly.

So, what does a scale test car do? In order to guarantee the shipper that the weight they're being charged for is accurate, railroads must keep their car scales calibrated. This is done with a scale test car, a small maintenance-of-way car whose weight is known and carefully maintained. There's no instrumentation on the car beyond its brake equipment; most are basically a cast steel slug on wheels, though some railroads use retired covered hoppers brought up to a standard weight with a load of sand or the like.

The scale test car travels in special movements around the railroad, from scale to scale. Since the scale test car needs to be handled as little as possible, it's usually moved on the end of a consist and dropped off before any switching maneuvers. Checking a scale usually involves numerous moves on and off the scale to establish a baseline and check all the scale's moving parts. Testing a weigh-in-motion scale is more time consuming, involving repeated run-throughs. If any discrepancy is found between the car's known weight and the scale's readout, the scale is adjusted.

If you want to add a scale test car to your model railroad, Bachmann Trains makes them in HO scale, while Atlas O offers an O scale version. Walthers no longer makes its HO scale version, but you might still find one in a train shop or at a hobby show. The same is true for N scale test cars from Micro-Trains. Bringing the test car to a scale track for calibration is a complication that could add a lot of interest to an operating session, not to mention a lot of frustration to your engineers waiting to use the scale.

My wife and I are discussing purchasing our forever home and there are questions about including room for, and the cost of, a model railroad. We are also struggling with what becomes of the layout and rolling stock when it comes time for my wife or adult children to sell the house with a layout in the basement.

Thirty years ago, I had a nice sized layout well underway, with about 250 feet of HO track. The home buyer had two young boys about ages 8 and 10, but he broke my heart when he said the room was destined to become the home of a ping-pong table. He asked me to demolish the layout. I'd like to avoid such a loss in the future.

Ken House

As we grow older, we inevitably begin to accumulate infirmities. Though you plan for this to be your "forever home," plans change, and you may find yourself downsizing from a house to a condo to an assisted-living home. The key is to plan a layout you can take with you.

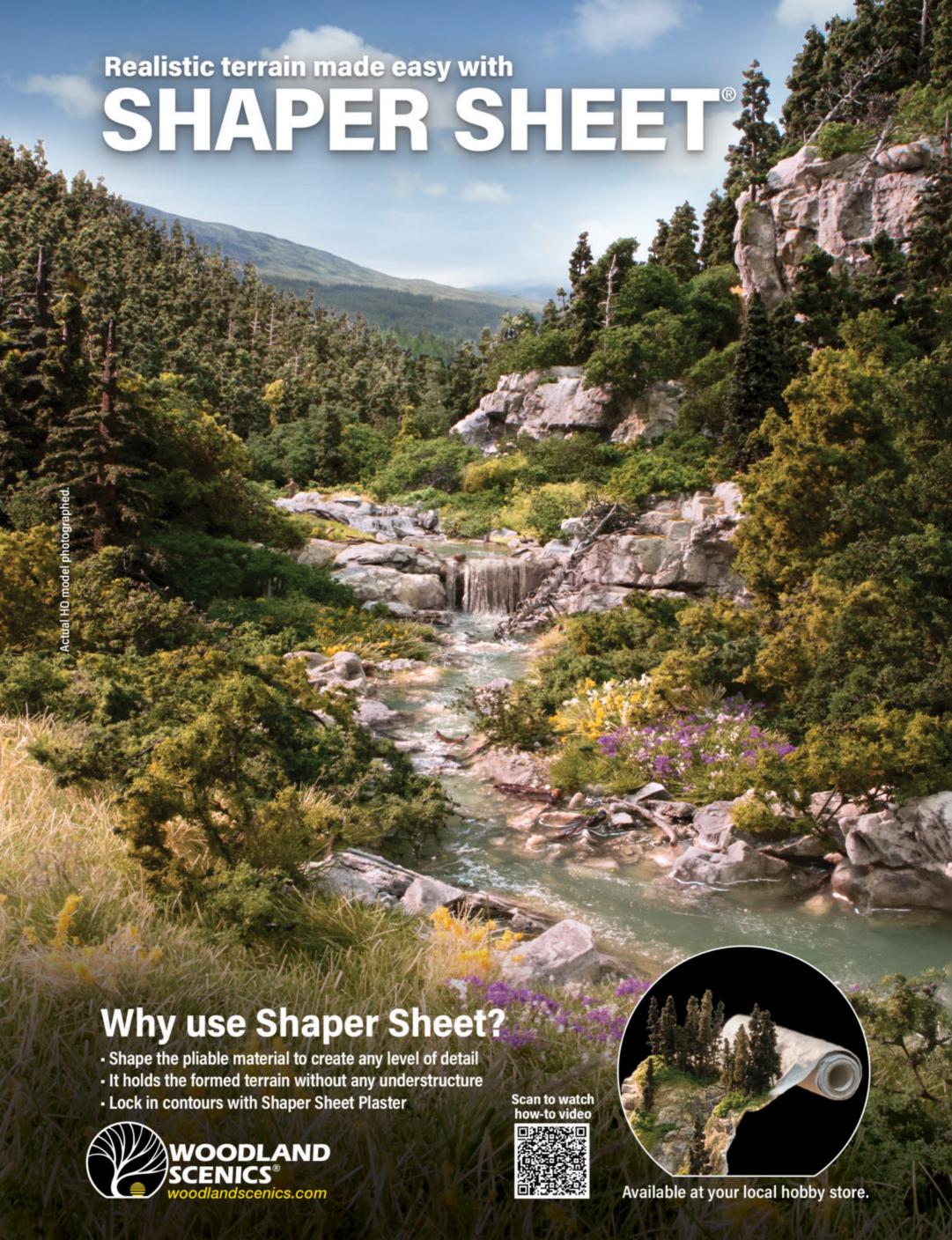
When you build your next layout, make it sectional. Place it on removable wall brackets or stand-alone legs. Build key scenes on modules so that when the time comes they can be removed from the layout and incorporated into a new one. Design each town to have plenty of switching opportunities on its own, so if you have to downsize to a dwelling with limited space, you can still operate with just one section. A removable staging track may be all you need to add.

Even if you are lucky enough to stay in your next home the rest of your life, building a sectional, movable layout gives your survivors the option of selling it separately from the house to a hobbyist who will appreciate it.

Q I'm looking to build an HO scale
Rock Island Rocket and its ElectroMotive Corp. TA diesel locomotive.
I know that Model Railroader published
Rock Island Rocket drawings several
years ago, and I was wondering where
I might find these plans? I think that the
TA plans were reprinted in an MR book
of locomotive plans, which would help,
but I also need the drawings of the cars
to go with it.

Larry Mager

Send questions and tips to senior associate editor Steven Otte at AskTrains@Trains.com.

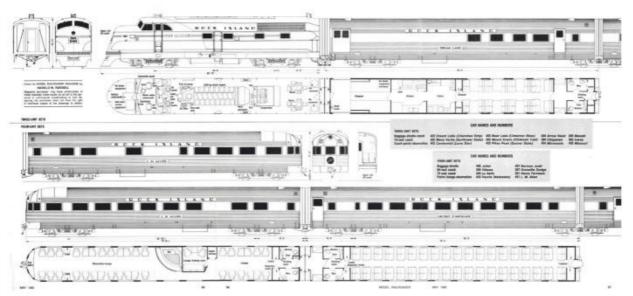




A The Rock Island Rocket was not one passenger train, but rather, a group of trains. The Peoria Rocket made two round trips a day between Chicago and Peoria, Ill. The Des Moines Rocket made one round trip from Chicago to the Iowa capital and back a day. The Texas Rocket ran between Houston and Fort Worth, Texas, on joint Rock Island-Fort Worth & Denver trackage. The Kansas City-to-Denver *Denver Rocket* ran just three days a week, and the Kansas City Rocket raced from its namesake city to Minneapolis, Minn., and back. (Except for the *Texas* Rocket, the trains were named for their westernmost terminus.)

All those routes began service in 1937, the year the Chicago, Rock Island & Pacific bought TA locomotives 601-606 from Electro-Motive Corp. Each *Rocket* was made up of a three- or four-car streamlined, semi-articulated consist built by Budd in Philadelphia and pulled by a single TA diesel-electric locomotive.

The drawings you're looking for were published in our May 1980 issue. If you're a subscriber to our Trains.com



Information, photos, and detailed drawings of the Rock Island *Rocket* were published in *Model Railroader's* May 1980 issue. Subscribers to the Trains.com MR Archive can read, download, and print this article. Drawings by Harold W. Russell

digital archive, you can read the issue there. The car plans were on a multi-page foldout, which means if you view the article on our website, those pages will appear compressed and distorted. However, if you click the "Download PDF" button (on the right of the bottom menu bar), you can see and print the pages in their proper proportion.

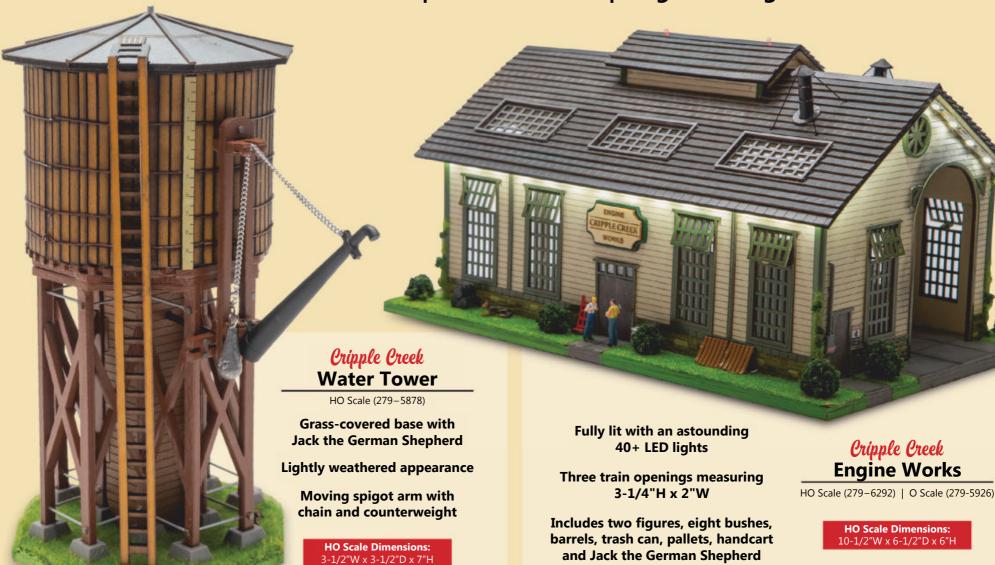
Q I'm designing a layout that will include an old mountain main line that's due to be closed after a bypass is built. I'm thinking of something like the old Colorado Midland Hagerman Pass line or the Denver & Salt Lake's Rollins Pass line. My question is, what ballast should I use for this kind of line?

Kevin Stibbe



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# J. Shepherd Dog Food Factory

# HO Scale (279-5023) | O Scale (279-4494)

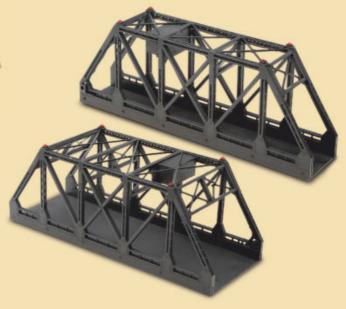
Electronic sign with dog food pouring animation. Over \$30 value!

Four blinking red LED warning lights

Includes six workers, loading dock, two silos, dumpster, water tower and tank, and five red LED warning lights

**Built-in tunnel for a minumal footprint** 

**HO Scale Dimensions:** 10"W x 6"D x 6"H



## **HO Scale Lighted Train Bridges**

Single Track (279–6917) | Dual Track (279-6918)

Four blinking red LED warning lights

Metal base is strong enough to span a 13" gap, yet thin enough to sit flat on any layout

3-3/8" clearance through bridge. Interior width 2-1/8" (single track), 4-1/4" (dual track)

**HO Scale Dimensions:** 13"L x 4-5/8"H x 2-3/4"W (single), 4-13/16"W (dual)



#### **Gamer & Thrones**

HO Scale (279-5141) | O Scale (279-4428)

Animated, revolving "throne"

Over 15 LED lights, including three red warning lights on the roof

Includes loading dock, with three workers, pallet with sink and toilet, 28 intricate windows, four roof dormers and chimney

**Built-in tunnel for a minumal footprint** 

**HO Scale Dimensions:** 10"W x 6"D x 6-1/8"H

A If you have a prototype inspiration, follow the ballasting processes of that prototype. Even though your road is freelanced, you can look to prototype railroads in the area you're modeling for an idea of what kind of ballast to use.

The primary factors behind prototype railroads' ballast choices were – after suitability for the purpose, of course – convenience and cost. What ballast can the railroad get most easily and inexpensively? How convenient is the quarry to the rail line? How far would the ballast have to be hauled? For these reasons, the ballast you use should resemble the stone seen on your layout: granite in the Northeast, limestone or quartzite in the Appalachians and Midwest, limestone or dolomite in the West.

Whatever color of ballast you choose, don't feel you have to stick with that color throughout your whole layout; track constructed or rebuilt at different times could have received ballast from different sources, so short patches or even long stretches of different color ballast are prototypical.



Eric White soaks ballast on the HO scale Milwaukee, Racine & Troy with alcohol. The kind of ballast you choose for your freelanced railroad should reflect the stone available in the area you're modeling, though variations are prototypical. Bill Zuback photo

Q It was fairly common in the days of steam for a locomotive to run tender-first because of a lack of turning facilities. Would that engine crew have been expected to signal the locomotive's direction "Moving in Reverse" (o-o-o) or indicate the train's direction "Moving Forward" (o-o)?

Chuck Fink, Allen, Texas | layout construction.

A The whistle signals indicating moving forward or reverse should be based on the direction the locomotive is facing. Imagine if the locomotive were switching in a yard; if the signal changed depending on whether the cars were coupled on the front or the rear, it would get confusing. And what if the locomotive was switching with cars both on front and rear? Regardless of direction, both signals boil down to "look out, this locomotive is about to move," and a quick glance will clarify the situation.

• What's the best way to attach a Homasote panel to a plywood panel?

Peter Remch

A Both are porous materials, so my recommendation is to use yellow wood glue (aliphatic resin). If you already have adhesive construction caulk on hand, you could use that instead. Whichever you use, be sure to use plenty of it and apply weights while it cures. Let it cure for a day or so before continuing with layout construction.



#### Q Can I use extruded-foam insulation board as a substitute for plywood on my layout?

Michael Sturonas

A For some applications, yes. You can use foam board as a base for a module or layout shelf, though it will still likely need wood framing to attach to the walls, legs, or other supports. Foam board is also great for carving into hills, cliffs, and mountains. However, it's more rigid than plywood, and tends to crease (if thin) or snap (if thick) rather than bend smoothly. So it's not as good as plywood for subroadbed that will make elevation changes. If you're going to use foam subroadbed and want track that changes elevations, laminate layers of foam together with foam-safe construction adhesive and carve it away to make the grades you want between layers.

#### • How close can a track be placed to the edge of a train table and be safe? Four to six inches?

Robin Berry

A If your trains never derail, you can run your tracks right up to the edge if you want. But since accidents do happen, you'll want to have a space between the outer edge of your ties and the edge of the benchwork at least as wide as the height of your tallest railcars. For HO scale, shoot for 2" or more; make it 4" for O scale. You'll want this space to be wider in places where the terrain slopes down away from the track. Adding trees, fences, structure flats, a plexiglass barrier, or other such obstructions between the track and the fascia can also help spare your trains from that sickening plunge when the inevitable occurs.

# • What number switch should be used for a yard ladder?

Mike Adams

A That depends on how long your rolling stock is and how much space you have for a yard. Longer turnouts are more reliable, but short ones let you include more yard trackage. If you're modeling the transition era or earlier and mostly running 40-foot boxcars, you can get away with no. 5 or even no. 4 turnouts. But if you're building a coach yard or running long equipment like 89-foot piggyback flats and auto racks, no. 6 should be your lower limit.

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This river scene went from bare plywood to placid waterway in just over 48 hours. With easy-to-use off the shelf products, you can have a water scene like this on your model railroad as well. Connor Bruesewitz/Saturn Lounge

# Realistic water under the bridge

#### Water scenes on a model railroad

are always showstoppers. Most visitors immediately reach out to touch the water's surface to see if it's real or not. For a long time, I tried every technique I could think of to avoid using resin because I thought it would be too hard to work with. But as I have since learned, resin is easy to use. Thanks to some modern products on the market, resin water scenes are almost foolproof to create.

The Rock River bridge is a signature scene on our N scale State Line Route project railroad, and following are the steps I used to create it over the span of just a couple of days. These are easy to do and yield great finished results.



# FLAT & SMOOTH



pouring resin for the river, we had to be sure the surrounding scenery was complete. Resin water is easily damaged and should always be the last feature in any scene. With that in mind, we completed all plaster and ground cover work in the river area before starting to work on the water itself. Part of

Before even thinking about

the prep was to make sure the plywood river bottom was clean and flat. Leftover scenery materials are easily removed from the

plywood with a bit of sanding.

# **STEP 2** PAINT THE BASE



Many of the larger rivers in Illinois and Wisconsin are full of silt, so they often appear to be various shades of brown. This is an easy type of river to install because you can't see the bottom. So instead of installing a sandy riverbed like I did for the Turtle Creek part of the layout (see the April 2022 issue of MR), I painted the plywood with Woodland **Scenics Water Undercoat Olive** Drab (CW4534). This is silty brown acrylic paint and applies easily with an ordinary brush in one coat.

## **STEP 3 SEAL UP THE RIVERBED**



Resin will seep away from the riverbed any chance it gets, so you must be careful to fully seal the edges. The plaster scenery did a good job of sealing the banks of the river, so I just needed to build a simple styrene dam along the front edge of the layout. I used clear acrylic latex caulk to hold the styrene in place.



When the resin hardens, the clear caulk will become part of it along the front edge. To keep it from showing, I used my finger to smooth the bead of caulk between the river bottom and the back of the dam. Because they're both acrylic products, you can do this step while the painted riverbed is still drying.



Before doing anything else, be sure your riverbed is level. The slower curing time of the resin will allow it to settle. If the river slopes in a particular direction, that's where all your resin water will end up. Most of the time you can make temporary adjustments to a scene with shims under one or more of your layout's legs.

# **STEP 4** MIX, TINT, AND POUR THE RESIN



For our project, we used Woodland Scenics Deep Pour – Murky (CW4511) resin water system. This is a two-part resin that needs some special preparation. I placed the bottles of resin in a plastic bag and soaked them in a hot tap water for 10 minutes.



The mixing ratio is two parts resin to one part hardener. The kit comes with mixing cups and instructions for determining just how much resin you need. In our case, a full bottle of resin was required. The instructions provide specific steps for mixing the parts.



The Murky water kit comes with pre-colored brown resin. However, it's not opaque enough straight from the bottle. To tint it, I add Woodland Scenics Water Tint Olive Drab (CW4523) and a few drops of Yellow Silt (CW4524). Stir it well.



To avoid high water marks along the banks, I poured the resin into the center of the riverbed. I then worked it to the shore using the mixing stick, making a single 1/8" water layer.

# **About curing and layers**

As long as it is left alone, the resin will cure to a smooth, hard surface in about 24 hours. Avoid touching it or removing the dam until then, or you could cause uneven spots on its surface. You can make deeper water by pouring the resin in layers, waiting 24 hours between each pour. By pouring partially tinted resin into



a riverbed with a detailed bottom, then covering it with a layer of clear resin, you can create some neat illusions of deeper water. – David Popp

# **STEP 5** TOUCH UP THE EDGES



Once the resin hardened, I removed the dam by peeling it away from the front of the layout. Since the caulk keeps the resin from sticking to the styrene, you can reuse the dams for other water projects. The resin caused a slight lip where it met the dam, so



I carefully sliced it flush with the water's surface using a sharp knife.

Because much of our scenery materials are porous, they tend to soak up the resin, causing it to appear to creep up the banks of the river. This is easy to fix by first applying a fresh



coat of white glue along the bank.
Next, sift more scenery material into
the glue. Be sure to vacuum up the
excess off the water's surface. Don't
soak this layer with alcohol or diluted
white glue, as it runs the risk of
seeping under the resin layer.

## **STEP 6** WATERCRAFT



I wanted to add a boat or two to our river scene, and I found this easy-to-install canoe set from Woodland Scenics.



I filed the bottom of the canoe flat, then attached it to the water's surface using Woodland Scenics Water Ripples paste (CW4515).



Using more ripple paste, I added a small wake behind the canoe to make it look as if it's being paddled down river.

# **STEP 7** ADD WAVE DETAIL



The smooth water surface reflects the surrounding scenery so well, I didn't want to disturb it much with waves. I used a little Woodland Scenics Surface Water – Water Ripples to simulate a bit of moving water in places, such as the tail of the island shown here. The clear paste is easy to apply with a soft brush.

You can often see how a light breeze plays upon the surface of open bodies of water, as it makes



little pockets of ripples. I used more of the ripple paste under the bridge to make three small wavy areas. Use an upward sweeping motion when applying the paste to limit brush marks in the waves.

Our finished water shows the ripples and canoers well, but still provides plenty of reflection from the surrounding scenery. This was an easy project that added a lot of scenic interest to our project railroad.



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This is a model of the original 1914 San Francisco Muni streetcar the "Lucky 130." The four-axel streetcar got its nickname because it was saved from being scrapped in 1958 to tow broken down PCC type streetcars. The streetcar includes an mfx/DCC digital decoder with many light and sound functions, for the first time! Running sounds work in analog. The wheelsets are driven by two Bühler motors.



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This is a model of a NS rescue and training train used to educate and train first responders. The train consists of a diesel locomotive, a tank car and boxcar. The locomotive includes an mfx/DCC decoder for many digitally controlled light and sound functions, and both trucks are driven by two powerful Bühler motors. Running sounds work in analog. The tank car can be filled with water and sprayed using the digitally controlled pump.





A portion of the proceeds from the sale of this product will be donated to First Responders Foundation.

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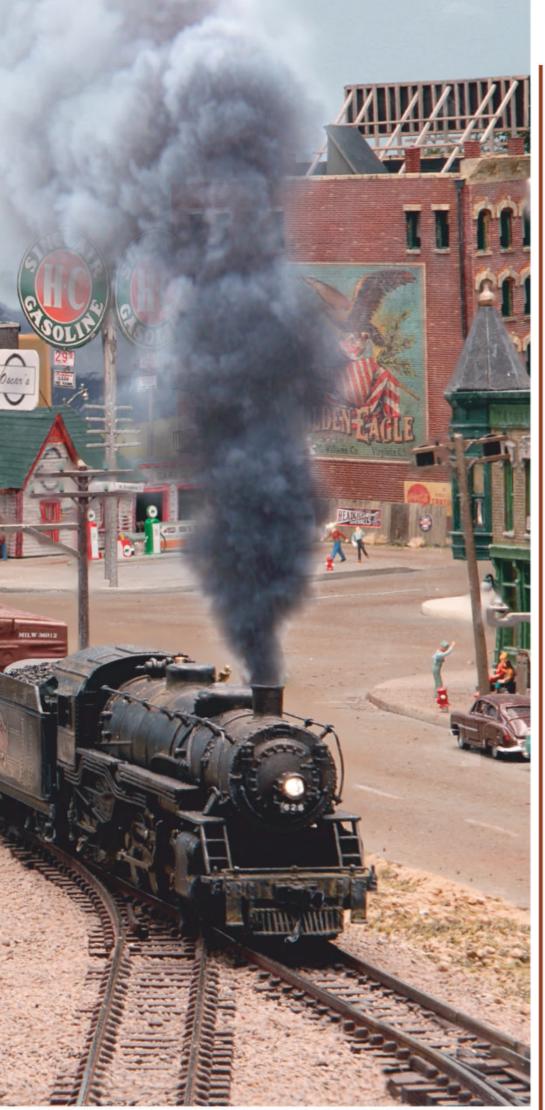
Make those right angles less obvious with these layout-tested techniques

**By Dan Lewis** • Photos by the author

oday, most model railroads are constructed around the perimeter walls of the layout space, whether in a basement, a garage, an extra room, or a dedicated outbuilding. This means you have to deal with corners. Though you may consider corners a challenge, I prefer to view them as opportunities.

Some of the methods presented here are tried-and-true, such as bending tempered hardboard to cove corners. Others might be new to you, such as modeling a town scene with businesses and industries that aren't rail served.

The seven tips presented here are ones that I've used on my 18 x 24-foot N scale Milwaukee Road layout. Hopefully, one or



Dan Lewis shares seven creative ways he dealt with corners on his N scale Milwaukee Road North Montana Line layout. He used the space behind the tracks to model a city scene depicting Lewistown, Mont.

more of these ideas will work for your model railroad. By putting corner spaces to work, you can maximize your model railroad space without infringing on the aisles.

You can learn more about Dan Lewis' N scale Milwaukee Road layout in the September 2011 Model Railroader.



A curved piece of tempered hardboard helps the backdrop flow through the corner uninterrupted. Dan left a 1-inch gap between the top of the hardboard and the drop ceiling.

# 1: COVE THE BACKDROP

One of the most common methods for eliminating the angle where two walls meet is to cove the corner. Since this can be a messy process, do the work before the track, scenery, and structures are installed.

There are various ways to hide corners. One technique is to use 1/4" drywall. This material can be wet and bent to the curve. However, the flexibility of drywall is limited, and the risk of the material breaking is considerable.

Some modelers have used aluminum flashing and the reverse side of linoleum with success. Check out Lance Mindheim's article "Aluminum trim coil backdrops" in the June 2018 *Model Railroader* magazine for more on the former technique.

My go-to material for coved corners is tempered hardboard. The material can be bent without wetting and taped and plastered where it connects with drywall. It also offers a smooth surface for priming and painting.

To install the hardboard, start by removing a section of drywall at the corners. Locate a stud and make the cut directly over the center of it. I find it works best to make the cuts 2 feet from the corner on each side. You may wish to install a second stud on each side, which can be nailed directly to the stud you've uncovered. This will provide you with additional material to which you can attach the hardboard.

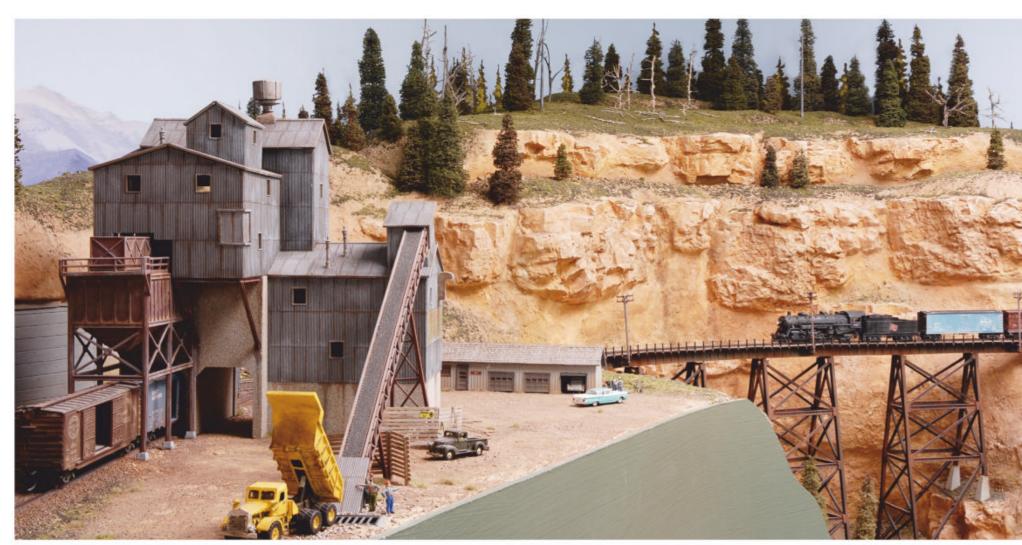
Next, install shims so the surfaces of the drywall and hardboard are flush. The hardboard can then be bent to the necessary curvature and secured with drywall screws.

Once the corner has been coved, mud and tape the seams where the hardboard meets the drywall. After sanding (or sponging), the hardboard can be primed and painted.

Expansion and contraction from humidity and temperature changes are absorbed by the curvature in the hardboard instead of at the seams. The coved corners on my layout have been in place about 20 years, and none of the seams have cracked.



Believe it or not, this scene at Judith Gap, Mont., is looking straight into a corner. Dan layered the scenery here so the foreground elements don't block out the items in the background.



Hanover, Mont., is another corner scene on Dan's layout. Behind the train passing over Teton Gorge is a lift-out section that provides access to a hidden track. The two bare tree trunks (stained bamboo skewers) serve as handles for removing the liftout.

## 2: CREATE EXTRA SPACE

Corners are prime real estate for modeling deep scenes. These locations offer the chance to model eye-catching panoramas. Some of my corners expand from 12" to 36" or more before narrowing back down on the other side.

Instead of following the narrow width of the shelf through the corner, move the curvature outward. Creating this additional space will pay big visual dividends. Of course, any turnouts should be placed within easy arm's reach from the aisle. Structures or scenery may be damaged if you have to reach deep into a scene to line a turnout or operate a ground throw. If the turnouts have to be placed beyond an easy arm's reach in a scene, consider using a switch motor and a fascia-mounted controller.

When adding scenery to corners, build it up in layers so foreground elements don't block out items in the background. In the corner scene at Judith Gap, Mont., shown at left, I had sufficient space to model a prototype configuration where the Great Northern (GN) crosses over the Milwaukee Road (MILW) on an elevated deck girder bridge. There are several layers here, made possible because of the extra space in the corner.

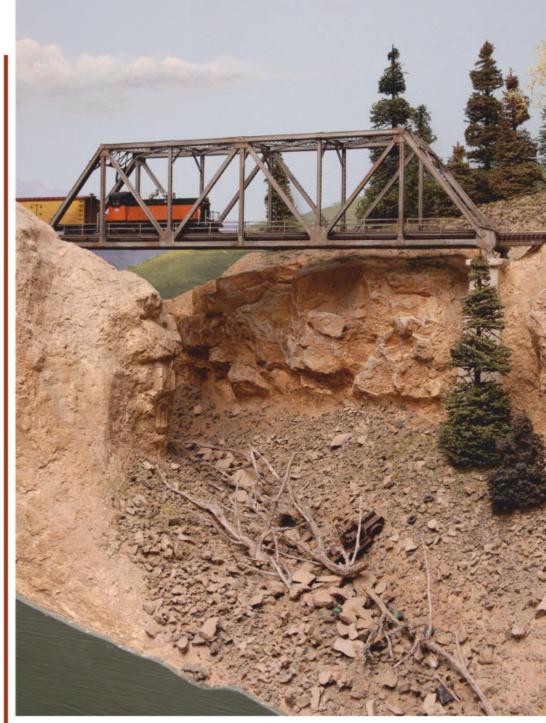
In the immediate foreground, there is the MILW track and the highway. About midway through the scene is a dirt road to a ranch, a police car, cattle at a windmill and water tank, and a billboard. Higher up is the seven-span GN deck-girder bridge. Farther back are snow fences, some low hills, and then the Judith Mountains painted on the backdrop. By layering the scenery, visitors and operators are pulled into the scene step by step.

# 3: DISGUISE HIDDEN TRACK

All along I've been advocating the usefulness of extra space in corners. This is especially true when a branch line wraps around a corner and parallels the main line. I wanted to avoid running through the same scene twice, so I hid the branch line in the corner by constructing a large bluff. Beneath this bluff, the branch follows along out of sight until it emerges on the other side.

As is always the case with hidden track, even if relatively short, you must be able to maintain it. After more than 15 years of operation, I've never had a derailment on this line. However, the track requires periodic cleaning, so I made it easy to reach. I built the substructure beneath the scenery with layers of extruded-foam insulation board so the lift-out would be lightweight.

Since the top section of bluff is populated with trees, I installed two bare tree trunks (stained bamboo skewers) deep in the foam. These serve as handles when I need to remove the lift-out and clean the track.



This small corner scene is only 13" deep, but the landforms aren't flush with the backdrop. The crest of the hill behind the bridge is about  $2\frac{1}{2}$ " from the backdrop. The trees on the top of the crest further disguise the seam.

# 4: MASK THE SEAM

A challenge for all modelers is the transition between the three-dimensional layout and the two-dimensional backdrop. This is true whether or not you're dealing with a corner. However, since corners are deeper, they offer better options for disguising the seam.

Probably the most important way to disguise the transition is to match colors between the layout and backdrop. If you're painting the backdrop, purchase ground foam, trees, and other scenic items first. Then match the backdrop colors to those items. If you use commercially printed backdrops or make your own photo backdrops, color match the foreground elements to the backdrop.

Small elevations are another way to conceal the horizontal seam between the layout and backdrop. Place the hills near the backdrop, but not flush against it. This leaves enough space to slope the terrain down toward the backdrop. The crest should be an inch or more in front of the vertical plane. The terrain that slopes toward the backdrop will be largely unseen by the viewer, but that's OK. What's most important is that the seam between the layout and backdrop is hidden from the viewer.

Other elements, such as trees, fences, shrubs, and structures, can also be used to hide the seam.



This corner scene depicts the Denton, Mont., Milwaukee Road station. Behind, and somewhat under, the hill in the background is a track Dan uses to simulate the run between Falls Yard and Great Falls, Mont.

### 5: HIDE STAGING TRACKS

Most often, we think of staging as the link between our model railroad and the outside world. Typically, staging is set up at the beginning and/or end of the layout space. I do the same.

However, I needed hidden staging for the Industrial Job that ran from Falls Yard into the city of Great Falls, Mont. On the prototype, the freight yard was some 5 miles outside the city. Though I model the yard, I don't model the city. A daily turn to and from the yard into hidden staging representing the city simulates this arrangement.

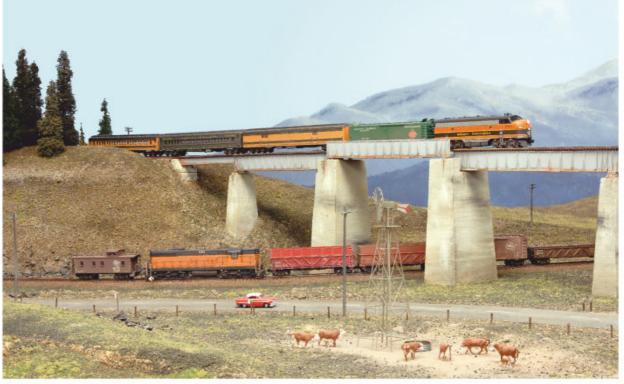
I was able to find space for a hidden Great Falls track in one of my corners. The corner had sufficient space to create a sizable hill behind the Denton station. Obscured by the hill is the track representing the run into the city.

When the Industrial Job disappears behind the scenery in the corner, the suspension of disbelief is successful. The Industrial Job has left Falls Yard with its consist of cars to deliver to the industries in the city.

# **6: GAIN ELEVATION**

Also at Judith Gap, Mont., the Milwaukee Road track (lower) has room to form a large balloon curve. This is important, as it's working up a 2 percent grade that will eventually connect with the Great Northern line above at a junction. The extra space in the corner makes it possible to gain elevation while decreasing the percentage of the grade.

Prototype railroads also used large balloon curves to gain elevation. You may not have the corner space to model the Pennsylvania RR's (now Norfolk Southern's) famous Horseshoe Curve. However, you might have enough space to re-create Union Pacific's Tehachapi Loop in California or the Milwaukee Road's former Red Coulee Curve in central Montana.



This photo, looking in the opposite direction of the image at Judith Gap, Mont., on page 30, shows a Milwaukee Road train climbing a 2 percent grade. Electro-Motive Division SD7 no. 510 is in front of the caboose to help the train up the grade.



The depth of the Lewistown, Mont., scene begins at 18" wide and broadens out to 42" in the middle of the corner. The coved corner is behind the tree grouping in the upper right. The rest of the Lewiston scene can be seen in the photo on page 28.

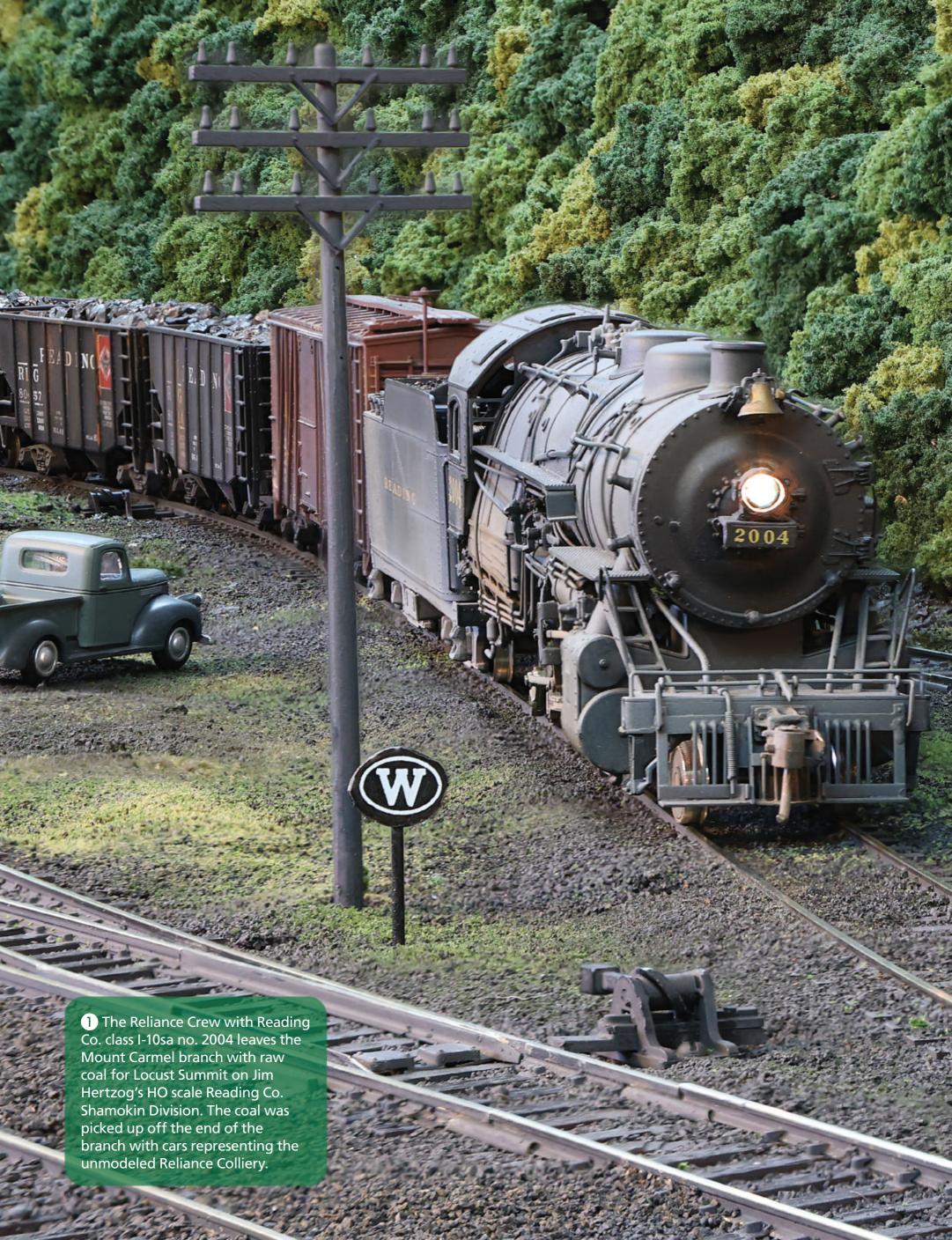
# 7: CREATE A TOWN SCENE

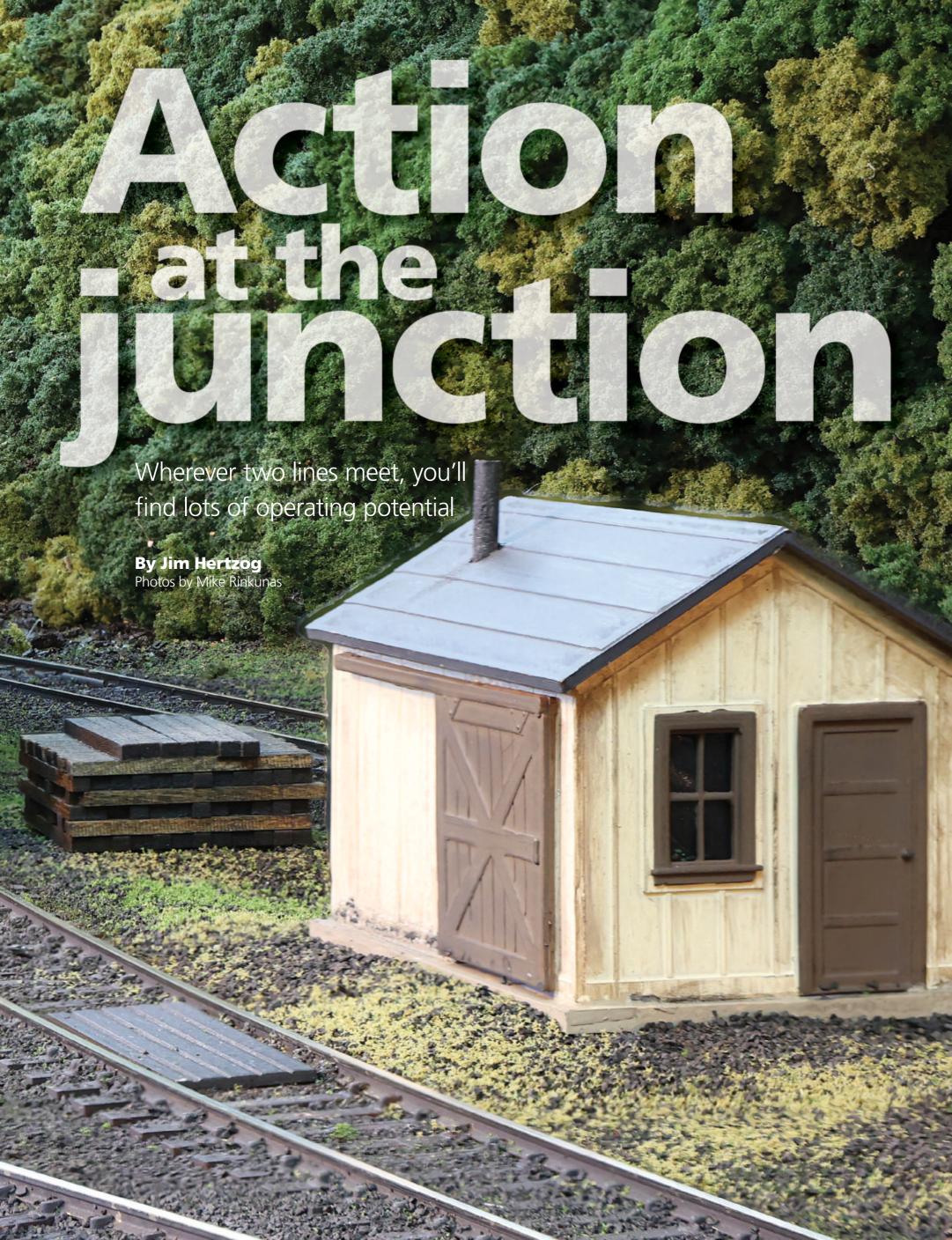
When building a layout, we usually focus our efforts on trackside scenes but are less apt to model what lies beyond it. Re-creating a town or city is a viable option if you put the space in corners to use.

In one of my corners, I modeled Lewistown, Mont. I resisted the temptation to fill this space with more track, a trap some modelers fall into. Remember, on prototype railroads every track has to have a purpose. Track materials, installation, and maintenance are all expenses. If a switch, siding, or line is no longer necessary, it's removed. Another reason I kept the track near the front edge of the layout is to avoid reaching over buildings to uncouple freight cars.

Beyond the track and immediate foreground buildings in the photo above is a sizable town scene. In addition to trackside industries, I included a city street and a variety of structures, suggesting that Lewistown is an active community beyond the railroad. Leaving space between the foreground structures enables the viewer to see through the first layer and into the rest of the scene.









2 Alco FA no. 303 leads westbound symbol freight TN-3 on approach to AR Office. The train originated in Tamaqua and will terminate at Newberry Junction.

unctions have always been interesting places on any railroad. Some could be very busy, while others saw only sporadic action. My HO scale Reading Co. Shamokin Division depicts the anthracite (hard coal) mining region of eastern Pennsylvania, where numerous junctions branched off to serve distant mines during the steam-to-diesel transition era. The junctions on my layout represent such places found along the 40-mile main line between the Pennsylvania towns of Tamaqua and Shamokin.

I've always been fascinated with the history and operating patterns of railroads in this region. As a longtime member of the Anthracite Railroads Historical Society, I appreciate the many resources they offer, especially their publication *Flags, Diamonds, and Statues*. One article from 1984 written by the late professional railroader Robert Malinoski has been a tremendous resource to me. In it was an article called "Action at the Junction." He described the actual trains and operating patterns of the Reading's coal-region operations from the mid-1930s through the mid-1950s.



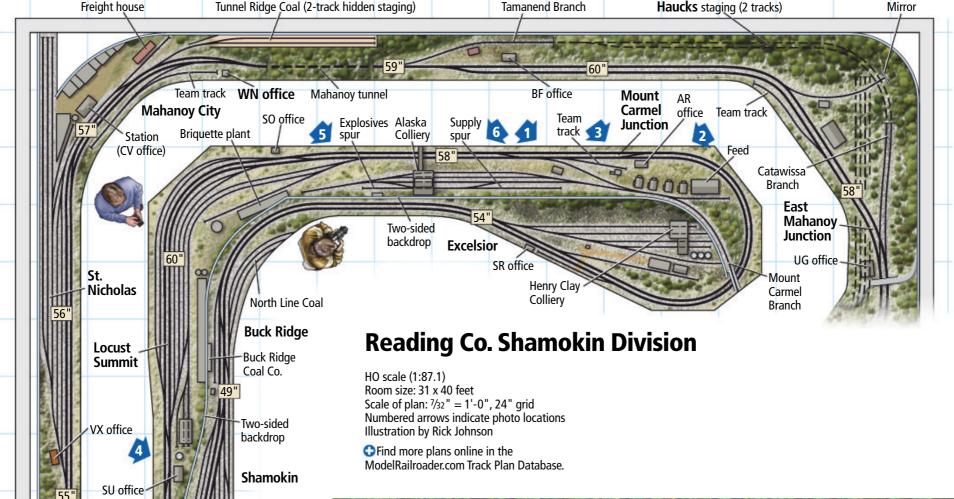
3 Class K-1 2-10-2 no. 3006 is running tender-first with the Gordon Western, a westbound coal turn that originated at Gordon, Pa. It wasn't uncommon for mine runs and coal turns to run tender first, as many branch lines lacked the means to turn long-wheelbase power. To the right are Alaska Colliery company houses.

Bob had relatives living in the Mount Carmel area, and he spent much of his free time photographing trains and chatting with the trackside operators. His article, as well as in-depth discussions with him during several phone calls, greatly shaped my modeled operating patterns. Bob often visited AR Office at Mount Carmel Junction and described the trackside action in great detail, a

great resource for any modeler. Before his passing, Bob allowed me to duplicate of some of his original 1950-era color slides from that area.

#### **Mount Carmel Junction**

Mount Carmel Junction (telegraph code AR) was located along the Reading's double-tracked main line that



ran through the heart of the anthracite region. The junction office, which was painted in the standard Reading colors of brown and cream, controlled movements in the area and onto the branch to the nearby town of Mount Carmel. Located 130 miles timetable west from Philadelphia, this remote junction featured a wye and some runaround tracks. Crossovers giving access to the wye were at both the east and west ends.

The branch owed its existence to three large anthracite collieries, as the actual town of Mount Carmel generated very little traffic for the Reading. On the outskirts of Mount Carmel stood the Reliance Colliery, and less than a mile from the junction was a 5-mile branch leading to the Natalie Colliery. Alaska Colliery was near the junction. All three produced a great deal of revenue during the heyday of coal mining, so of course all three play essential roles on my model railroad.

My depiction of Mount Carmel Junction is modeled in an area 15 feet long and less than 2 feet wide. The focal point of the scene is the towering Alaska Colliery, with its four mine tracks and two spurs that serve a company stores building and an explosives shed. The colliery is accessed off the branch, which helps to keep the mainline fluid, particularly when the Alaska mine crew arrives to work the mine.



The westbound Alaska Crew has just left Gordon Yard and is passing GK Office, which controls the west end (not shown on the partial track plan above). Soon the train, powered by Baldwin AS-16 no. 534, will climb the steep Locust Summit grade.

Reliance Colliery is unmodeled but represented by a few loaded hoppers staged at the end of the branch. These are picked up at the beginning of each operating session by the Reliance crew, who also set out a block of empties on the branch.

A morning Natalie Crew with its handful of loaded hoppers is staged on the branch at the start of each operating session. It simply enters the mainline and heads to Gordon. Similarly, near the end of the operating session an evening Natalie crew takes a block of empties into the branch and terminates,

implying it was heading to work the implied colliery.

Although the Mount Carmel branch is only 9 feet long, not enough for a wye or runaround, AR still sees a lot of traffic. Besides the mine runs, the junction also features a team track and the feed mill. Symbol freight WMT-2 (West Milton-Tamaqua) is a local that works both these trailing-point spurs. Just like on the prototype, the AR operator controls a pair of crossovers. Several company houses and a tool shed are nestled along the branch and help reinforce the theme of a remote coal region setting.



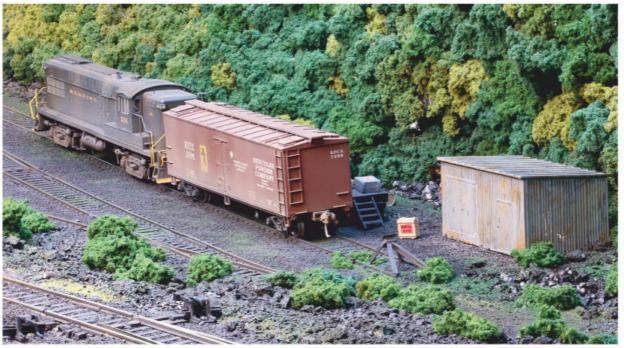
4 The westbound Alaska Crew turn has just crested the 2.6 percent Locust Summit grade and is passing by SU Office, which controls all movements at the east end of the massive coal yard and central breaker. The train will continue west for a few more miles and diverge onto the Mount Carmel branch in order to work the Alaska Colliery.

During a typical operating session, several mainline symbol freights, an assortment of other mine turns, and six passenger trains pass the junction. Since AR was the midpoint on the 1.4 percent ascending eastbound grade from Shamokin to Locust Summit, many eastbounds got helpers. The grade on my layout is a bit steeper, nearly 2 percent, which helps to reinforce the image of mountain railroading. Once at the summit, helpers cut off and return to Shamokin, occasionally being held at AR.

Although the junction represents a small portion of my layout, it could easily stand alone as a Layout Design Element (LDE). By adding staging at each end, trains could enter, pass through the scene, and exit. Others would have to stop and work the branch.

## Some other junctions

No two junctions on my layout are the same. For example, at East Mahanoy



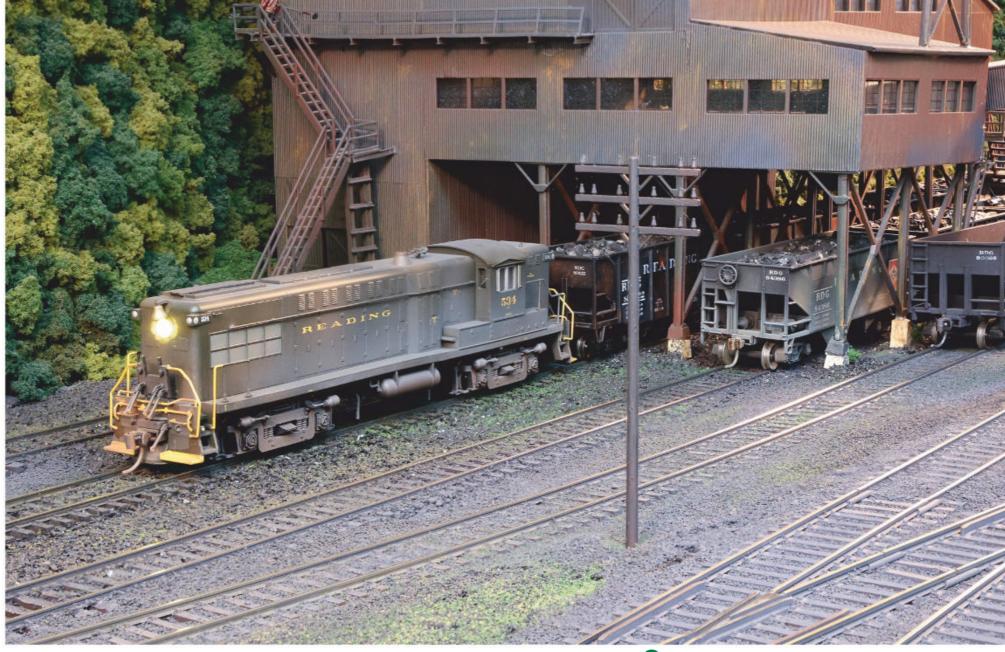
**5** The Alaska Crew picks up an empty Hercules Powder boxcar whose contents have been safely transferred to the explosives shed. If the car was still loaded, idler cars would have been placed between the diesel and the explosives.

Junction, the Reading's Catawissa Branch joined the Mahanoy and Shamokin branch main line. A tower designated with the telegraph code UG controlled all movements though the busy junction. On the prototype, many of the priority symbol freight trains preferred the Catawissa line, which paralleled the Shamokin line but avoided the steeper coal region grades. Both lines reconnected at West Milton and continued west to Newberry Junction near Williamsport, Pa., and the important

connections with the New York Central and Pennsylvania RR.

Stories abound of fast running engineers coming eastbound off the Catawissa Branch and exceeding the 15 mph speed limit at the junction. Some tower operators, expecting a derailment, would vacate the structure. The scene on my layout shows the operator standing outside the tower expecting the worst.

Locustdale Junction (DF) was just the opposite of UG. A small, unmanned trackside shed was located where the



Ashland Upper Route Branch diverged from the main line to head off to the un-modeled Potts mine, represented by a single hidden staging track. A nearby manual crossover was only used by the Potts mine crew, thus enabling the daily train to cross from the east main to the west main and onto the branch.

Another distinctive junction located just west of Shamokin was HV Office, which controlled movements onto the

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track plan? Find it on

our website with this link: TinyURL.com/

HOShamokinDivision

Want to see the rest of Jim Hertzog's

Herndon Branch. A small operator's office was perched on a hillside reached only by a set of stairs. Completing the scene was an outhouse and a billboard, both modeled after prototype photographs. Like Locustdale Junction, the function of HV was to control mine runs that serviced a coal loader, 8 miles away.

The Alaska Crew was called daily at service the Alaska Colliery at Mount Carmel Junction. The train's primary purpose was delivering empty hoppers to the mine, along with an occasional ing loaded cars of raw unprocessed coal to Locust Summit.

Gordon was an important servicing point for many of the steam powered mine runs and helper locomotives, although diesels are rapidly taking over more assignments. Baldwin AS-16 no. 534, a diesel known for its lugging ability, is the power for today's assignment. Our train today is much shorter than normal, with only nine empty hoppers and a boxcar of mining supplies.

After obtaining clearance, the train

passes GK Office, which protects the west end of Gordon Yard. Already on a 1.5 percent grade, the mine turn will soon be climbing the steep 6-milelong, 2.6 percent Locust Summit grade. No helper engine is needed today thanks to the short train and the Baldwin's lugging ability.

The train soon passes by the Malho Coal siding, where

coal from local mines is loaded into waiting cars. A few minutes later Locustdale Junction (DF) comes into view. The remote junction joins the main line with the steep Ashland Upper Route Branch that heads off to the Potts Mine. Waiting on the branch for our train to pass is the Potts crew, with a class T-1 Northern. The Potts crew will follow our train upgrade to Locust Summit with its overloaded hoppers full of raw coal

6 The Alaska Crew picks up raw coal at the Alaska Colliery with Baldwin AS-16 no. 534. The train will deliver the unprocessed coal to the breaker at Locust Summit for processing.

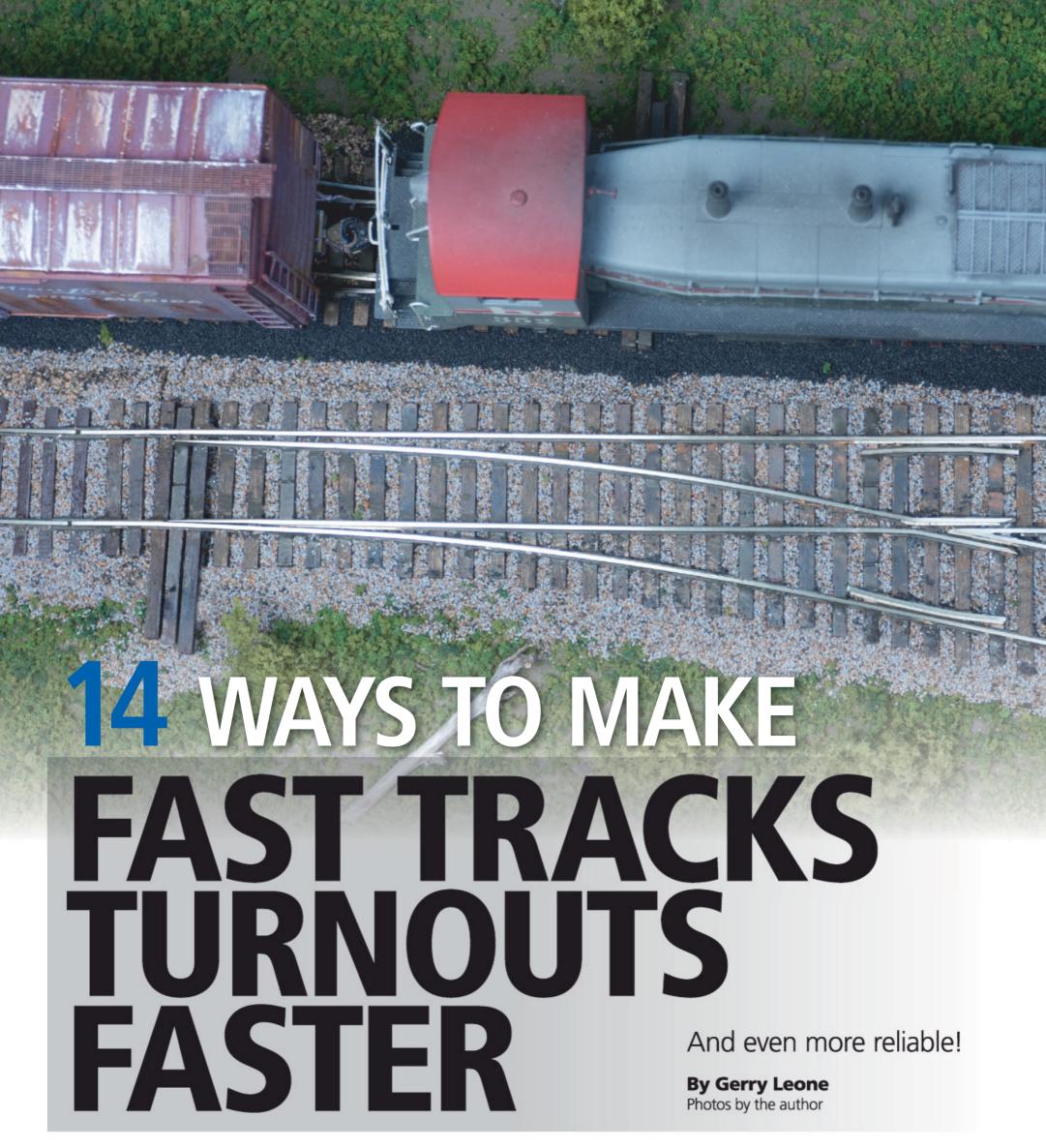
destined for the unloading dumpers at the breaker.

The Alaska Crew soon crests the grade as SU Office comes into view. The massive yard at Locust Summit is packed with dozens of loaded hoppers. The operator at SO Office at the west end of the yard gives us a friendly wave as we roll by.

Heading downgrade, the train soon arrives at Mount Carmel junction and heads onto the branch for the Alaska Colliery. By the mid-'50s, the Alaska Colliery was mining and shipping only raw (unprocessed) coal. The crew will pick up loaded hoppers of raw coal and run east to Locust Summit, home to the central breaker for most of the coal preparation in the region. After dropping the loads, the crew will pick up some cars for Gordon and head down the grade. I've included all of these elements in my version of operating the Alaska Crew. MR

The grandson of a Reading locomotive engineer, Jim Hertzog lives in Mertztown, Pa., with his wife, Gerri. His HO scale Reading Co. Shamokin Division appeared in the November 2018 MR.

Gordon and ran west 9 miles in order to boxcar of mining supplies, and then tak-



The Fast Tracks turnout system is one of the more notable innovations in the hobby in the last few decades. In just a couple of hours modelers can build a turnout that's reliable, good looking, and if you're building more than a handful, economical. I built over 60 of them for my former Bona Vista layout, and now

have almost 70 on my current BV. They're the only turnouts I use.

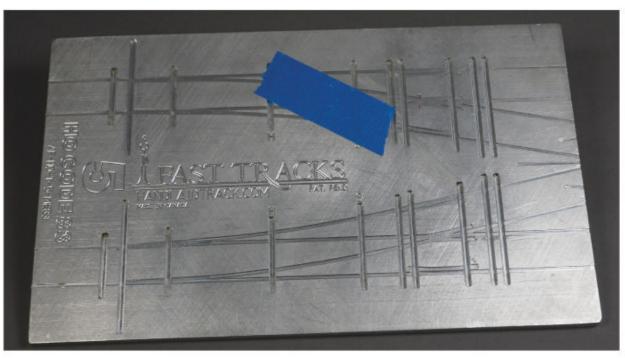
Over the years of building these turnouts, I came up with several tips that make their construction a bit faster and more trouble-free than they already are.

But no matter if you're building your first or your 100th, the best tip anyone

could give you is to watch the construction videos on the Fast Tracks Channel on YouTube. Carefully follow the steps outlined in those videos and you're almost guaranteed of making a perfect turnout every time.

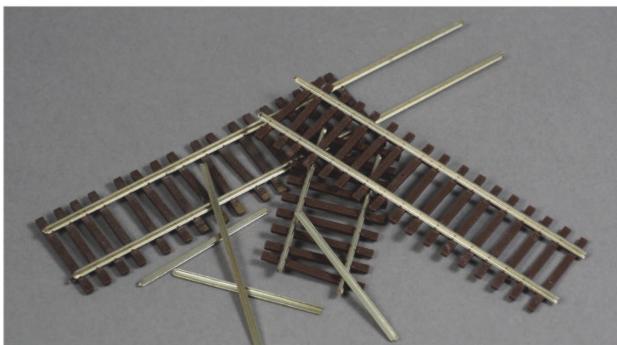
Meanwhile, here are 14 ways to make a great turnout even greater.





## **1** MARK IT

**Building a turnout** involves rotating the fixture multiple times and it's easy to lose track of which of the two turnouts you're actually building. After bending a left-hand stock rail for a right-hand turnout several times, I found it easier to simply mark the unused side of the fixture with a piece of painter's tape.



## **2** SAVE THE LITTLE STUFF

**You know all those** small pieces of track you have left over after tracklaying? Save 'em. They'll come in handy for making guard rails, frogs, or even point rails.

## **3 SHAVE OFF MINUTES**

It takes time to manually file the two frog rails, the two stock rails, and the two point rails. And when you're building a bunch of turnouts, that time adds up. I bought a benchtop Mini Disk/Belt Sander (Micro-Mark no. 86174) and this one tool has significantly reduced the amount of time I spend making turnouts. In fact, it takes about 10 seconds each to file all six of those rails, versus about 3 minutes each by hand.



Gerry Leone is a contributing editor to Trains.com and a frequent contributor to Model Railroader and its special publications, including Model Railroad Planning and Great Model Railroads. You can watch him build his new HO scale Bona Vista layout from the ground up on his Trains.com series, Back on Track.



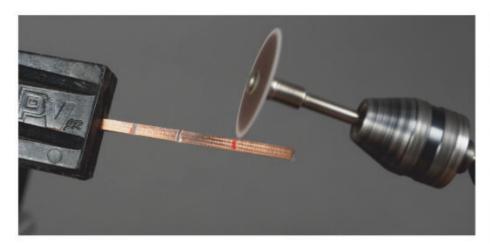
### **4 MAKE CHEAT SHEETS**

If you're building a dozen turnouts in one sitting you know the drill by heart. But if you're building onesies every now and then, it pays to make yourself a cheat sheet of the steps, plus any notes about them, and post it in front of you as you build. While the Fast Tracks videos are informative, it eats valuable modeling time if you have to watch them again and again and again.



### **6** FREE COPPER TIES

Fast Tracks' copper-clad ties come on frets. But there's no reason to cut the ties off at the top edge of the fret. With some judicious planning you can use that extra ¼" of copper fret to eke out another tie or three. Just cut it off with your rail nippers and file the side flat to match the rest of the tie.



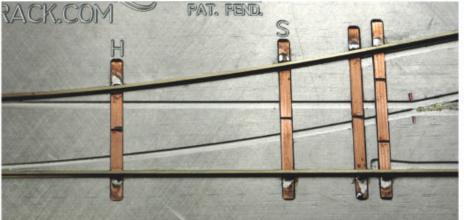
## **8 MIND THE GAPS**

Here's another way to lop a few minutes off the time it takes to build a turnout. Use a cutoff wheel in a motor tool to cut the gaps in the copper ties, rather than doing it by hand. Chuck the ties in a vise and simply touch the wheel to the copper. But don't cut too deep or you'll weaken the tie!



### **5 MAKE ROOM FOR THE POINTS**

By and large, the points on a Fast Tracks turnout – or any turnout – will move easiest if the roadbed beneath the ties is perfectly flat. That isn't always the case, and sometimes the points stick. I fix that by using a sanding drum in a motor tool to make a slight "dip" in the wooden ties next to the points. It keeps them gliding effortlessly. Once the ties are painted, the dip is barely noticeable.



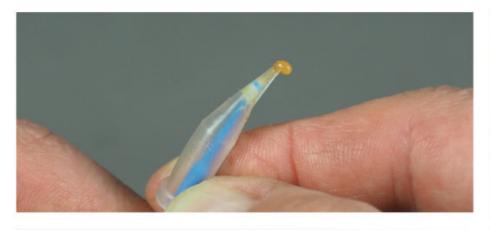
## 7 USE BOTH "S" AND "H"

Fast Tracks fixtures accommodate both solid point rails, or hinged (with a rail joiner) point rails. Fast Tracks tells you to add one copper tie to the fixture for the type you're building. I use them both. I've found the extra tie helps ensure the curved stock rail remains in-gauge all the way through the curve once the turnout is removed from the fixture. It's only one copper tie, and besides, I have a freebie (see Tip 6)!



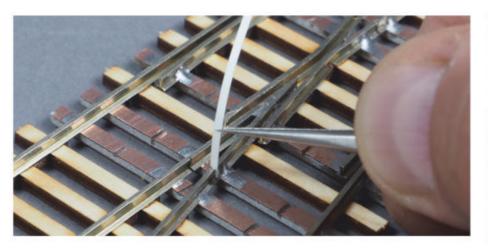
### 9 CUT-OFF WHEEL TO THE RESCUE AGAIN

The stock rails are mighty thin after you file off the base near the points, and the Pliobond holding them to the ties sometimes oozes out. When it's dried, it can interfere with the points resting snugly against the stock rails. Too, solder sometimes creeps under the stock rails and leaves blobs. To fix these problems, I use a cut-off wheel in a motor tool to lightly and gently sand away the Pliobond or solder.



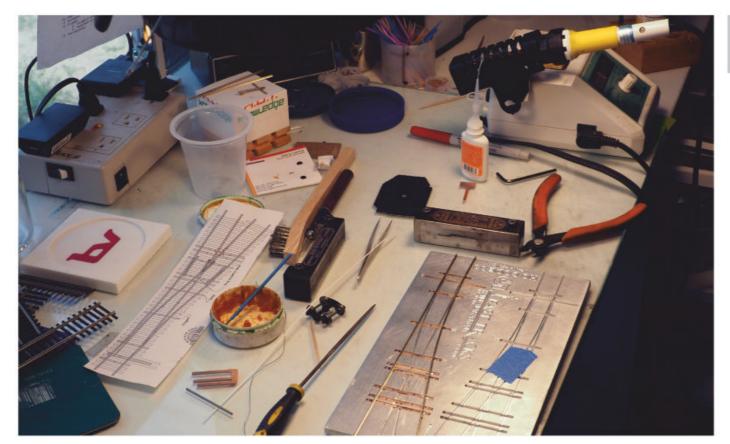
## **10** A TIP-CLEANING TIP

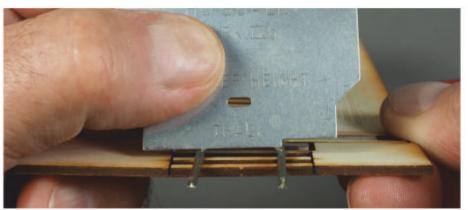
Pliobond is fairly solid when it dries, especially in the microtip. So as soon as I'm finished using it, I remove the microtip and clean it out with a cotton swab. Then I'll use a microbrush to force more of the adhesive out of the tip. Finally, I'll use a piece of wire or a very thin toothpick to get the last bit out. Next time I'm ready to use the Pliobond, I thank myself for taking this extra minute.



## **12 FILL THE GAPS**

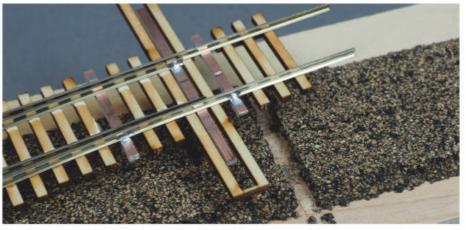
When the rails are soldered to the copper ties and glued to the wooden ties, the gaps you cut with the jeweler's saw should never, ever close and cause a short. Personally I think it's nearly impossible, but I'm the paranoid sort. I fill those gaps at my workbench using a piece of HO scale 1 x 4 strip styrene. I put a drop of cyanoacrylate adhesive (CA) into the gap, put in the styrene strip, then trim it to match the rail.





### 11 CHECK THE GAUGE

While Fast Tracks' Quick Stix are plainly marked with the rail gauge, I go one-better. I use an NMRA gauge at the very ends of the rails when the Pliobond hasn't quite set yet. It's easy to adjust the rails at this point, and a little heat from a soldering iron will set the Pliobond – and the rails – in gauge permanently.



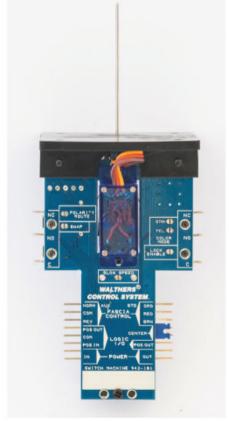
## **13 CUT THE CORK**

Fast Tracks' copper ties are just slightly thinner than the wooden ties of its Quick Stix. That means the switch rod doesn't drag on the roadbed, but little bits and pieces of ballast can get into that gap, making switch rod stick. To alleviate that, I simply slice the roadbed away directly beneath the switch rod. When I ballast the track, I make sure that the ballast and glue stay well below the switch rod.

## **14 CLEANLINESS IS NEXT TO...**

The key to making a perfect turnout is to keep your workbench neat. Someday I'll follow my own advice. MR

## Walthers servo-based switch machines





1 The Walthers Control System features a servo-based switch machine. It extends 33/8" beneath the layout. With the blue jumper (shown on right of first picture) in place, the arm moves to the center for turnout alignment and for setting the DCC address. Note the white area on the front. It's for writing an address number or other information.

The Walthers Layout Control System (LCS) servobased switch machine has a hopper full of features that can be used just about every way imaginable, whether it's controlled by DCC or traditional DC. If you have an existing layout that uses stall motor type switch machines, you can retrofit your layout with this switch machine.

### The Walthers switch

machine is unique looking
1. Keeping with the trend in model railroading electronics, all connections are industry standard slip-on connectors. Even if you like being under a layout and soldering upside down, being able to make connections in a second without dripping solder on your jeans is very appealing.

The supplied actuator wire is .041" in diameter. This wire extends 1<sup>3</sup>/<sub>4</sub>" above the switch machine. For my test setup, consisting of <sup>3</sup>/<sub>4</sub>" plywood,

1/2" Homasote, 3/16" cork roadbed, and a code 83 turnout on top of all that, there's about 1/16" sticking up over the top of the rail you would need to snip off. Perfect!

Be sure to wear safety glasses while you work. You'll need hard wire cutters, like the Xuron 2193. Whenever cutting piano or other hard wire, don't use your track cutters. You'll ruin them! I also recommend against using your small electrical diagonal cutters.

You can adjust the travel from ½" to ½" by tweaking the yoke with a screwdriver. Using a jumper, you can change the throw speed between 1 and 3 seconds. Soldering on a resistor, you can change the speed between .5 to 5 seconds.

There are several other things Walthers has done to make your life easier. Each switch machine comes with a stick-on drilling template and a centering yoke for your turnout's points. The control panel buttons come with a drilling template, as well. You can also buy a set of drill bits specifically for installing the switch machine and controls.

You might want to consider the company's drill kit. I found their button required a large drill size I didn't have. I couldn't get the exact size needed locally. I had to use my reamer to get the hole I needed. Buy its drill bit set, 942-140, and be done with it.

The switch machine includes two micro switches for providing power to a frog or position indicator light-emitting diode (LED). All Electronics (allelectronics. com) sells a connector that fits the switches (no. 8125).

The product can be powered by conventional DC or DCC in several ways. The quickest way, especially for new layout construction, is to use the other products that are part of the Walthers control system. Walthers has a power distribution board 2 that can power eight switch machines using its wall transformer for conventional DC. The distribution board has screw terminals for daisychaining a pair of these

panels to one transformer, so you can power 16 switch machines per "wall wart." Or, if you have a 12 VDC power supply, you can provide your own power to the distribution board. If using DCC, connect the screw terminals of the distribution board to your dedicated track bus and skip the wall wart; you don't need to provide DC to the switch machine if using DCC.

### Power your switch machine

with DCC by connecting the Walthers distribution block to a DCC track bus allowing switch machines to be activated by decoding accessory switch addresses. Use a dedicated booster, or if you only have one booster, use it with an electronic circuit breaker as in 3, opposite.

Walthers switch machines can be controlled by your DCC throttle or smartphone running a throttle app such as WiThrottle for iPhones (withrottle.com) or Engine Driver for Android phones (apkpure.com/engine-driver-throttle/jmri.enginedriver). Either can use your home's Wi-Fi and Java Model Railroad Interface (jmri.org) or your DCC manufacturer's dedicated Wi-Fi product.



2 The distribution block can power eight switch machines. You can provide power via the black connector (at left) or via the green terminals. The green terminals can be used to bridge to a second distribution board, providing your own DC or powering via DCC.







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Some people prefer control panels. With the Walthers LCS, you can have DCC-controlled turnouts, control panels with push buttons, and virtual control panels using computer-based products all at the same time.

Existing layouts can control the switch machine just like you would a slow-motion switch machine. This means you take a 12V power source and use a common double pole double throw (DPDT) switch to control the polarity of power going to the switch machine, as shown in 4, and connect it to the power-in pins. You don't need to supply any other power to the switch machine. If you have an existing layout that's already controlled this way, you can make use of the Walthers switch machines. You'll need to remove any series LEDs or resistors in your existing wiring. If you want indicators, put the resistors and LEDs across the output of the DPDT switch, as in 4.

Sometimes it's desirable to control a turnout from multiple places on your layout, such as turnouts in a wye that's operated from both sides of a peninsula. Push buttons make that easy. Sometimes you just want a minimum of switches and wires on your control panel. Push buttons configured to

toggle a switch machine make that easy, too. The Walthers switches and indicators (5) can be wired up without soldering for just about any track configuration, including crossings, threeways, or doubleslips. If you want to use your own switches on your control panel, you'll have to do a little soldering.

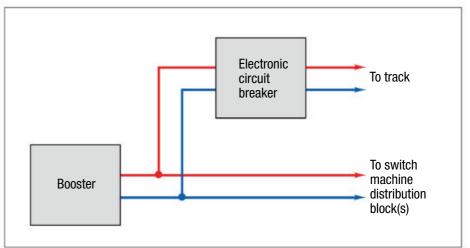
It's possible to lock a turnout. This can be done with a toggle or slide switch that maintains the position you flip it to. Also, you can use your computer to lock a turnout. This is good if you want your dispatcher to have overall control of a turnout or just want to keep little hands from derailing a train during an open house. Some additional wiring will be required, as well as using digital outputs of devices like Arduinos. See part 11 of the Walthers Switch *Machine Reference Guide.* 

The switch machine can be configured to respond to a DCC accessory (turnout) address. See part 12 of the reference guide. This is as easy as putting the centering/learn jumper on the switch machine and sending a turnout address. You can also enter this mode by holding the corresponding push button on your control panel and turning on the power.

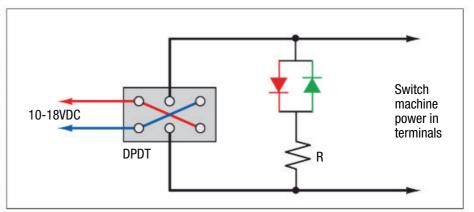
The Walthers guide says that a 1/On/Thrown sets the turnout address. A 2/OFF/CLOSED clears (deletes) it. The switch machine will jog one direction to show that it has accepted an address and jogs the other direction should you clear it.

When I used my Digitrax Zephyr Express to set an address, I saw the switch

> machine jog, but it didn't respond to subsequent commands. When I tried my NCE PowerCab. I found it worked fine. I discovered that the Digitrax system was clearing the address rather than setting it. But a CLOSED command on the Digitrax system set the turnout address instead.



3 If you only have one booster, connect your Walthers distribution blocks and your track as shown in this figure. If a train shorts out on a turnout that is mid-stroke, the booster won't shut down and will allow your switch machine to complete movement of the points and maybe clear the short.



4 If using DC instead of DCC to control your switch machine, hook up a DPDT switch wired as above. Minimum resistor values:  $390\Omega$ , ½W for 10V;  $470\Omega$ , ½W for 12V;  $560\Omega$ , ½W for 14V;  $810\Omega$ , ½W for 18V. Don't put resistors and LED in series with the switch output; this would prevent the Walthers switch machine from working. Illustrations by Kellie Jaeger



5 The Walthers product line includes indicators (not pictured), single indicators with push buttons (center), and dual indicators with push buttons (left). A drill guide comes with the push button/indicators (right).

The lesson is that no matter what system you have, if it doesn't seem to set the address when you send your accessory command, just try sending the opposite command before concluding that things aren't working.

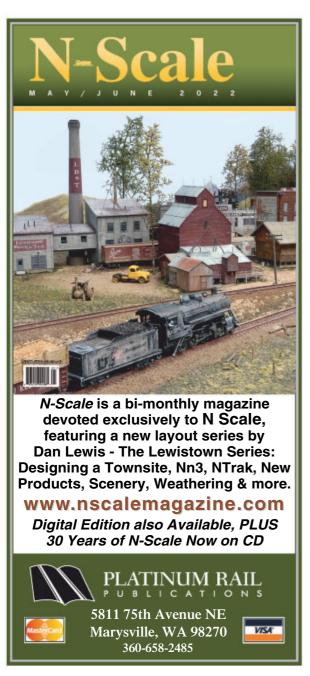
To see all the switch machine products and detailed instructions, go to: walthers.com/walthers-control-system-switch-machine. Click on SEE

Entire System to see all the products. Click on Full Instructions to see all the instructions in the reference guide. There are a lot of useful illustrations. It will take a bit of time to read everything, but it's worth seeing all the ways it can be used.

You now have some nice, solderless switch machine options. For the links in this column and others, visit my website at WiringForDCC. com/dcc\_currents.htm. MR



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MACHINES CAN
BE CONTROLLED
BY YOUR DCC
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## **Bachmann HO scale ALC-42 Charger**

In 2021, Amtrak celebrated 50 years of passenger train service in the United States, and part of the commemoration was the introduction of new long-distance diesel-electric locomotives, the Siemens ALC-42 Charger. Bachmann is now offering this locomotive in HO scale with a dual-mode Train Control Systems (TCS) decoder, and for a lucky few, in the "Day One" black paint scheme.

The ALC-42 is similar to the SC-44 Charger, which has been hauling passengers on state-supported regional Amtrak routes since 2017. The locomotives share much of the carbody, with minor variations in the nose being among the obvious physical differences.

The ALC-42 is designed for longer distances, with greater fuel capacity. The locomotives are powered by Cummins QSK95 16-cylinder diesel engines, producing 4,200hp in the ALC-42. These engines are Tier 4 compliant, producing fewer emissions than those produced by the General Electric P40 and P42 locomotives they'll eventually replace.

An upgraded Head-End Power (HEP) unit makes these locomotives more capable with the longer cross-country trains they pull compared to the regional SC-44s. Like other Chargers, the ALC-42 has dynamic brakes that can direct power to the HEP system, onboard locomotive electrical needs, or to the dynamic brake resistor grids.

The ALC-42 is capable of 125 mph top speeds, and is equipped with Positive Train Control (PTC).

To meet U.S. content mandates, the locomotives are built in Sacramento, Calif., with the Cummins diesel engines coming from Seymour, Ind. Construction started in 2020, with the first delivery in July 2021. The full order of 75 locomotives is expected to be delivered by 2024. Amtrak has an option to purchase another 100 locomotives, and in February exercised that option for 50 of the 100.

On the same day as the purchase option announcement, Amtrak attempted the first revenue run with the "Day One" Charger leading the Seattlebound *Empire Builder* out of Chicago.

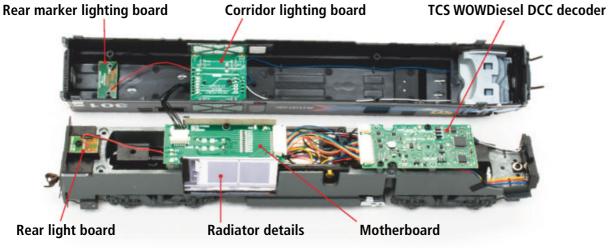
Teething problems plagued the trip. Not all were the fault of the locomotives. A second trip went a little better, but encountered weather delays.

Bachmann's model shares much with the SC-44 I reviewed in the April 2021 issue of *Model Railroader*. In fact, from behind the cab doors, everything appears to be the same, which is a good thing.

Bachmann has been doing an excellent job with its modern passenger power. Our sample was a special edition, one-time production run, pre-order item depicting Amtrak's "Day One" anniversary locomotive. While these models are sold out at Bachmann, some dealers may still have them for sale. Also available, but not reviewed, is Amtrak's standard ALC-42 paint scheme in two road numbers.

Our model was neatly painted black with a large 301 road number at the tail end of the locomotive, and Amtrak's original arrow service mark wrapping around the front of the locomotive. The white printing and red and blue Amtrak arrow are sharp and opaque, and many of the safety placards on the locomotive are legible under magnification. Their locations closely matched those in prototype photographs. The paint job commemorates an Electro-Motive Division E8 that was quickly prepared for Amtrak's introduction in 1971 with the railroad's red and blue arrow applied to an all-black ex-Penn Central unit.

Detail painting includes the covers of the m.u. receptacles on both ends of the locomotive, the fuel tank receptacles on both sides, the bright metal bezels on the marker lights and rear headlight, and several silver-painted appliances on the roof, including the horns and blade antennas.



Bachmann's Siemens ALC-42 has a die-cast metal frame with the motor and flywheels mounted above the fuel tank. Printed-circuit boards handle the power, sound, and lighting effects on the locomotive.

PERFORMANCE CHARTS				
DRAWBAR PULL	2.88 ounces			
	20 passenger cars			
SCALE SPEED (DC)				
VOLTS		SCALE MPH		
8.5 (start)		38		
9		48		
10		64		
11		88		
12		110		
SCALE SPEED (D	CC)			
SPEED STEP		SCALE MPH		
1		1.9		
7		29		
14		61		
21		95		
28		111		

The ALC-42 has a lighted corridor feature. The screen covering the radiator intake is simulated with black-painted mesh molded onto clear plastic. The radiator parts are visible inside.

Handrails and grab irons are all separately applied stainless steel parts. Other separately applied parts include the horns and antennas on the roof, windshield wipers and glazing, and m.u. hoses on both ends, and rearview mirrors on the cab sides. The large cab windows allow easy viewing of the complete interior. The windshield and nose are different pieces than the parts on the SC-44.

Inside the body shell is a die-cast metal frame and several printed-circuit (PC) boards. The TCS dual-mode sound decoder is mounted behind the cab on the top of the frame. It's plugged into a motherboard mounted just aft and above the can motor.

The motor has flywheels on both ends, and drives all eight wheels. All wheels also pick up current. The drive is smooth and quiet.

Smaller lighting PC boards are mounted in the shell and at the back of



Just like the prototype, the corridor lighting can be switched on in Bachmann's model. Online photos show the lights can be on or off while out on the road.

the frame. The Bachmann ACL-42 Charger also has directional headlights and marker lights, plus ditch lights that blink when the horn is sounded or the bell is rung. The number boxes and visible interior corridor are also lighted, and can be controlled with a Digital Command Control (DCC) throttle.

#### I tested the Bachmann ALC-42

Charger with our workshop's NCE PowerCab. The locomotive crawled along at just under 2 scale mph in speed step 1, and charged to 111 scale mph in speed step 28, just under the prototype's 125 mph top speed, but probably fast enough for most layouts.

As with other TCS WOWSound decoders, this one allows you to make changes using Audio Assist, which gives you a menu similar to a voice mail setup so you don't have to refer to the manual for many settings. You can even remap function keys using Audio Assist.

One change I wanted to make did require accessing the manual. There's a whoosh run-by sound effect that can be set to randomly play. That's fine as long as the locomotive is moving, but at a stand still, it didn't make sense. I found function 19 allowed me to turn off the random whoosh.

A difference from many decoders is that function 8 allows you to toggle between light and sound functions, mute all sounds, or access Audio Assist. One press mutes sound. Two clicks toggles between sound and light functions, four clicks activates Audio Assist.

By having separate sound and light menus, users don't need to have a throttle with more than 10 function buttons to trigger multiple functions. For example, function 3 sounds a short blast of the horn when the locomotive is in sound mode, but switches the ditch lights on and off in light mode. Some functions work the same in either light or sound mode, such as the bell (F1), long horn (F2) and headlight dimmer (F7).

Bench testing showed the Bachmann ALC-42 to be capable of pulling 20 passenger cars on straight and level track. I searched our fleet and found 11 serviceable Superliners, eight from Walthers and three from Kato. The Charger had no trouble pulling that train all the way around the staff's Milwaukee, Racine & Troy layout with its 1.5 percent ruling grade westbound. A sterner test is the

## **Facts & features**

Price: \$475 (DCC and sound)

#### Manufacturer

Bachmann Industries Inc. 1400 E. Erie Ave. Philadelphia, PA 19124 bachmanntrains.com

Era: July 2021 to present

Road name: Amtrak ("Day 1" scheme in one road number and phase 6 scheme in two numbers)

#### **Features**

- Blackened turned metal wheels, in gauge
- Directional headlights and marker lights
- Die-cast metal frame
- Dual-mode Train Control Systems DCC sound-equipped with Keep-Alive capacitor device
- Interior corridor work lights
- Minimum radius 22"
- Operating ditch lights
- Plastic knuckle couplers, at correct height
- Separately applied windshield wipers, grab irons, and detail parts
- Weight: 1 pound, 1.4 ounces

eastbound 3 percent grade, up which the locomotive pulled nine cars, including one of the Kato cars with its rotating wheel bearing caps, which create a bit more drag.

On direct current (DC), it's important to have filtered DC, otherwise the sensitive TCS decoder can get tricked into triggering DCC functions. I used a Bachmann power pack that was able to supply a smooth current.

Sounds began at 7.5V, and the model started moving at 8.5V at 38 scale mph. From that point, I could throttle back to about 6.5V and 14 scale mph. Top speed at 12.25V was 115 scale mph.

Automatic sound features include two horn blasts before moving forward and three before moving in reverse. The bell sounded to about 9.25V, which was about 57 scale mph.

Bachmann's ALC-42 is another modern passenger masterpiece. Like its siblings, the SC-44 diesel and ACS-64 electric, this is a well detailed, accurately decorated, smooth-running and great sounding locomotive. – *Eric White, senior editor* 

## ScaleTrains.com N scale Multi-Max auto rack



A Gunderson Multi-Max auto rack is the latest addition to the ScaleTrains. com Rivet Counter line. The N scale model features body-mounted semi-scale Type E lower knuckle couplers, 28" metal wheelsets, and newly tooled screwmounted American Steel Foundries low deck swing-motion trucks.

Our sample is decorated as TTGX no. 697498, part of the railcar leasing company's 697378 through 697561 series built between September and November 2018. The model we received features Union Pacific rack no. 697497.

Multi-Max cars with TTGX reporting marks are designed for bi-level loading. A third deck can be added later on if the owner decides they'd like to use the car in tri-level service.

Multi-Max cars with CTTX marks are equipped with a third deck. The deck can be set in the stored position if the car is used in bi-level service. The configuration of the car is indicated with a "BI" (bi-level) or "TRI" (tri-level) stencil above the right-hand side ladders.

The ScaleTrains.com N scale Multi-Max has a one-piece injection-molded plastic body. Separate, factory-applied parts include plastic ladders and uncoupling levers, wire grab irons, and sill-mounted brake rod support brackets.

The molded side panels are painted to look like corrugated metal. There are three outside mounting tabs at the top of each panel, and four lower recessed tabs with a 3/4" wide strip at the bottom.

Our UP car has late end doors with "zig-zag" angle panels. Raised details

like the handles, lock rods, and hinges are picked out in silver paint.

The body has six tabs (three per side) that lock into slots on the one-piece underbody. A metal weight measuring  $^{1}/_{2}$ " x  $4^{1}/_{4}$ " is attached to the top of underbody with two Phillips-head screws.

The underbody features a mix of molded and freestanding parts. Molded details include the center sills, crossmembers, and bolsters. Among the separate parts are a plastic air reservoir, brake cylinder, and control and retainer valves; wire air line plumbing and brake rods; and etched-metal air line plumbing and brake rod support brackets.

Washer-head screws hold the newly tooled American Steel Foundries low-deck swing-motion trucks to the bolsters. The plastic semi-scale Type E couplers are body mounted. The draft-gear box covers are attached with screws.

The yellow paint on our Union Pacific sample is smooth and evenly applied. The separation lines between colors are sharp throughout the model. The majority of the lettering is legible. A few of the small stencils were hard to read even under magnification.

Stencil placement matches prototype photos of other cars from the class that I found online. The No More Than 4 decals between the second and third ladder rungs and the builder's decals were omitted.

I was able to find some prototype dimensional data in a technical bulletin from The Greenbrier Companies website. The model's dimensions closely follow the data.

## **Facts & features**

Price: \$44.99 Manufacturer

ScaleTrains.com 7598 Highway 411 Benton, TN 37307 scaletrains.com

**Era:** late 2018 to present (as decorated) **Road names:** TTGX reporting marks: Union Pacific ("Building America" slogan), BNSF Ry. (orange), Canadian National (red "wet noodle" herald and website), Canadian Pacific (beaver herald), CSX ("boxcar" herald), Kansas City Southern (yellow), and Norfolk Southern (Thoroughbred herald). CTTX marks: BNSF Ry. (orange), CN (white "wet noodle" herald and website), CSX ("boxcar" herald), and KCS (white and yellow schemes, two road numbers each). Also available decorated for BNSF Ry. (white) and Canadian Pacific/ Soo Line (white with red "CP" herald). All cars painted yellow and offered in four numbers per scheme unless noted.

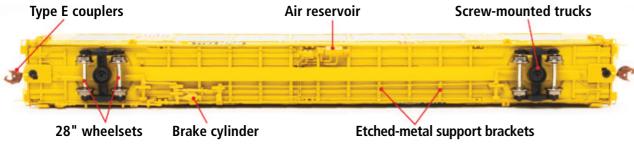
#### **Features**

- •28" machined metal wheels, in gauge
- Body-mounted semi-scale Type E couplers, at correct height
- Weight: 1.6 ounces, .1 ounce too heavy per National Model Railroad Association Recommended Practice 20.1

For real world testing, I ran the Multi-Max in a train on our Milwaukee, Racine & Troy State Line Route. The auto rack performed without incident while being pushed and pulled around the layout's 18" radius curves and through the no. 6 turnouts.

### The ScaleTrains.com N scale Multi-

Max is sold out at the manufacturer.
However, the cars are available at brickand-mortar and online hobby retailers.
If you model mainline trains on today's
Class 1 railroads, these auto haulers are a
must-have for your freight car fleet. –
Cody Grivno, group technical editor



The ScaleTrains.com N scale Gunderson Multi-Max auto rack has a well-detailed underbody. The car rides on American Steel Foundries low-deck swing-motion trucks with correctly gauged 28" machined metal wheelsets.









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## Walthers HO modern single-track enginehouse

A single-track enginehouse joins the popular Cornerstone Series from Wm. K. Walthers Inc. The HO scale injection-molded plastic kit contains parts allowing it to be built in one of three ways.

The Walthers enginehouse is similar to those used by regional, shortline, and industrial railroads throughout the country. Pole buildings, which feature all-metal construction, began appearing in the 1970s and are still used today.

Some popular color combinations used on this style of enginehouse include blue and white, tan and brown, and medium gray and dark gray. I've seen some operations attach a sign with the railroad's herald above the roll-up doors and safety slogans near the employee entrances. Look at prototype photos in books and online for ideas.

The kit includes side walls, two front wall options, and three rear wall options. The parts allow you to model the engine-house as a run-through building with the roll-up door to the left or right of center or as a pull-in structure.

Variety continues with the detail parts. The entry and roll-up doors are offered in plain and window-style versions. A sheet of clear acetate is included



if you elect to use the latter. The enginehouse also includes two styles of nonworking security lights. Drill-starter points are molded inside the walls if you decide to add them. Gas and electric meters round out the details.

The two-piece roof includes a pair of connector plates for attaching the halves at the proper angle. Four vents add visual interest to the roof. I opted to add three.

The one-piece baseplate has molded troughs for adding code 83 or 100 rail, not included with the kit. The baseplate also has raised ridges along the top edge for aligning the walls.

I was able to assemble the kit during the first half of a football game. Plastruct Bondene plastic solvent cement worked well for attaching the parts. The walls and roof panels were straight, and the parts had little to no flash. Some filing and sanding was necessary to smooth out a few rough spots where the parts were attached the sprue. There are ejector-pin marks on the top of the base-

## **Facts & features**

Price: \$39.98 Manufacturer

Wm. K. Walthers Inc. 5601 W. Florist Ave. Milwaukee, WI 53218 walthers.com

Era: 1970s to present

**Features** 

- Measures 11" x 4¹/₄" x 4¹/₄"
- Overhead door, 18"
- Various wall, door, and detail options

plate. A few are visible if the door is modeled in the open position. Weathering or strategically placed details will conceal most of them.

To make painting easier, I constructed the kit in subassemblies: walls, roof, baseplate, and detail parts. I used Tamiya aerosol can primer, paints, and clear flat on the enginehouse.

I tested the track capacity with various diesels, including an Electro-Motive Division SW1, assorted four-axle road units, and an EMD SD70ACe. The enginehouse can house one unit at a time. Only the smallest of units (think EMD Model 40, General Electric 44-tonner, and similar) could be stored inside in multiples.

Though marketed as an enginehouse, the Walthers kit could be used as a rail-

car repair shop or, with the addition of a few more vents, a railroad paint shop. And if a single-track setup isn't large enough, check out the double-track enginehouse kit (no. 933-2986). It has many of the same features as the single-track kit. – *Cody Grivno* 



The Walthers enginehouse comes with multiple front and rear wall options. This version has the roll-up door to the left of center.



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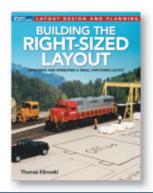
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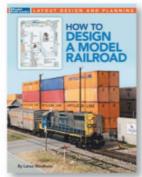


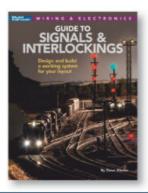
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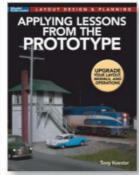


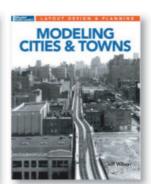
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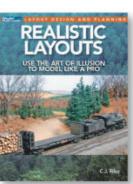












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## Headscratcher, or brief and clear?

A rulebook doesn't deserve the name without a version of "Safety is of the first importance and obedience to the rules is essential to safety." Rule 201 requires that train orders be brief and clear, and in the prescribed form if applicable. Rules officials took great care to develop explicit forms to be used. For example, Form S-A reads No 1 MEET NO 2 AT B and Form J needs only three words to make its meaning clear: HOLD NO 2. Was it always so?

Some railroad retirees, including long-service dispatchers, include me in their round-robin e-mail discussions. Recently, they pondered this Lake Superior & Ishpeming order of May 10, 1967, found on Jon Roma's website (jonroma.net), addressed to "C&E Engs Unknown": On May 11 AFTER TWO TEN 210 AM AND AFTER EXTRA 1503 AND 2501 EAST BEAUCHAMP HAS ARRIVED AT MARQUETTE ON SECOND TRIP ENGS UNKNOWN McCullough RUN EXTRA MARQUETTE TO EAGLE MILLS AND RETURN TO MARQUETTE THEN RUN EXTRA MARQUETTE TO EAGLE MILLS AND AFTER EXTRA WEST ENGS UNKNOWN JACOBSON HAS ARRIVED AT EAGLE MILLS

**ENGS UNKNOWN McCullough** RUN EXTRA EAGLE MILLS TO MAROUETTE.

Brief and clear? I'll eat my hat.

Dan Biernacki. one of these retirees, decoded it. He figured that Beauchamp, McCullough, and Jacobson were conductors and Marquette and

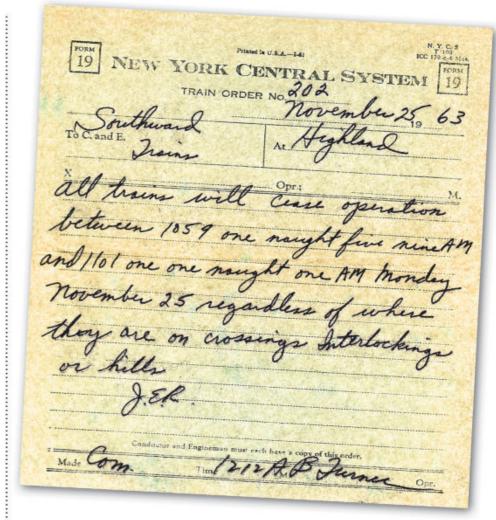
Eagle Mills were register stations. Neither McCullough's nor Jacobson's trains had been assigned power at the time the order was written, thus Engs Unknown. Instead, the trains were identified by their conductors, making it possible for other trains to check register entries against these names.

Dan said all concerned must have been familiar with this practice and knew it governed their movements safely. Later, I learned that Peter Josserand would agree when I stumbled across his eighth principle of train orders in Rights of Trains, 5th Ed.: "Trains must be identified by the men in charge, in the absence of other positive evidence of identity."

Jeff Kovacs, another retiree, turned up a Conrail order dated April 20, 1976. It reads, in part, MAXIMUM **AUTHORIZED SPEED UNLESS** OTHERWISE SPECIFIED CHANGED AS FOLLOWS: SINGLE TRACK MILE POST 52.5 WEST OF FLEMINGTON JCT TO MILE POST 62 TO 40 M.P.H. AND NO. 2 TRACK BETWEEN PACKERTON JCT AND EASTERLY LIMITS OF LEHIGHTON INTERLOCKING 20 M.P.H. EAST AND WEST OF Musconetcong Tunnel

> AND 40 M.P.H. West Portal AND MILE POST 68 EAST OF BLOOMSBURY. And this, only half the order, the rest equally astonishing... whew!

Brevity makes SINGLE TRACK, WEST OF FLEMINGTON JCT, and EAST OF **BLOOMSBURY** unnecessary



New York Central was one of the railroads that marked the moment of silence during John F. Kennedy's funeral with solemn reverence. This order unconditionally halted all trains for two minutes. Jon Roma collection

are sufficient. So I'd make my speed no more than 40 between 52.5 and 62. I'd adhere to 20 on No. 2 track between Packerton Jct. and Lehighton because the conjunction "AND" has me connect that phrase with maximum authorized speed. Similarly, I'd heed 40 between West Portal (a place identified by name on the timetable) and 68, though omitting "BETWEEN" from the order is

But I'm completely perplexed by East and West of Musconetcong Tunnel, because that describes the full length of the railroad. If any dispatchers reading this column are clucking at me and not the order, I'd stand on Josserand's 10th principle: "Any order not in proper form, or not understood, should be returned for corbecause mile posts | rection or annulment. Trains

should never move on such orders."

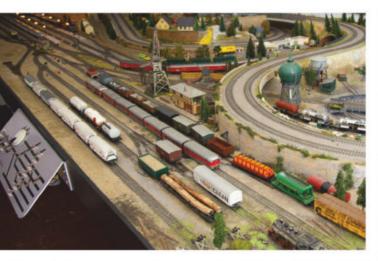
Jon suggested the New **York Central** order shown in the photo. Copied at Highland, Ind., and dated Nov. 25, 1963, brief and clear, its words were carefully chosen because there was no applicable form. It ran a shiver through me. The order halted operation to honor John F. Kennedy, whose funeral that day in Washington, D.C., seared the memories of so many.

Operating sessions don't often see opportunities to use the examples given by these LS&I and CR orders. However, we can follow the tradition of honoring lost ones by ceasing operation as the NYC order did. I have done so before. As somber as it was, writing about this now renews warm memories and brings me a wistful smile.



ANY ORDER NOT IN PROPER FORM, OR NOT UNDERSTOOD, SHOULD BE **RETURNED FOR** CORRECTION OR ANNUL-MENT. – JERRY











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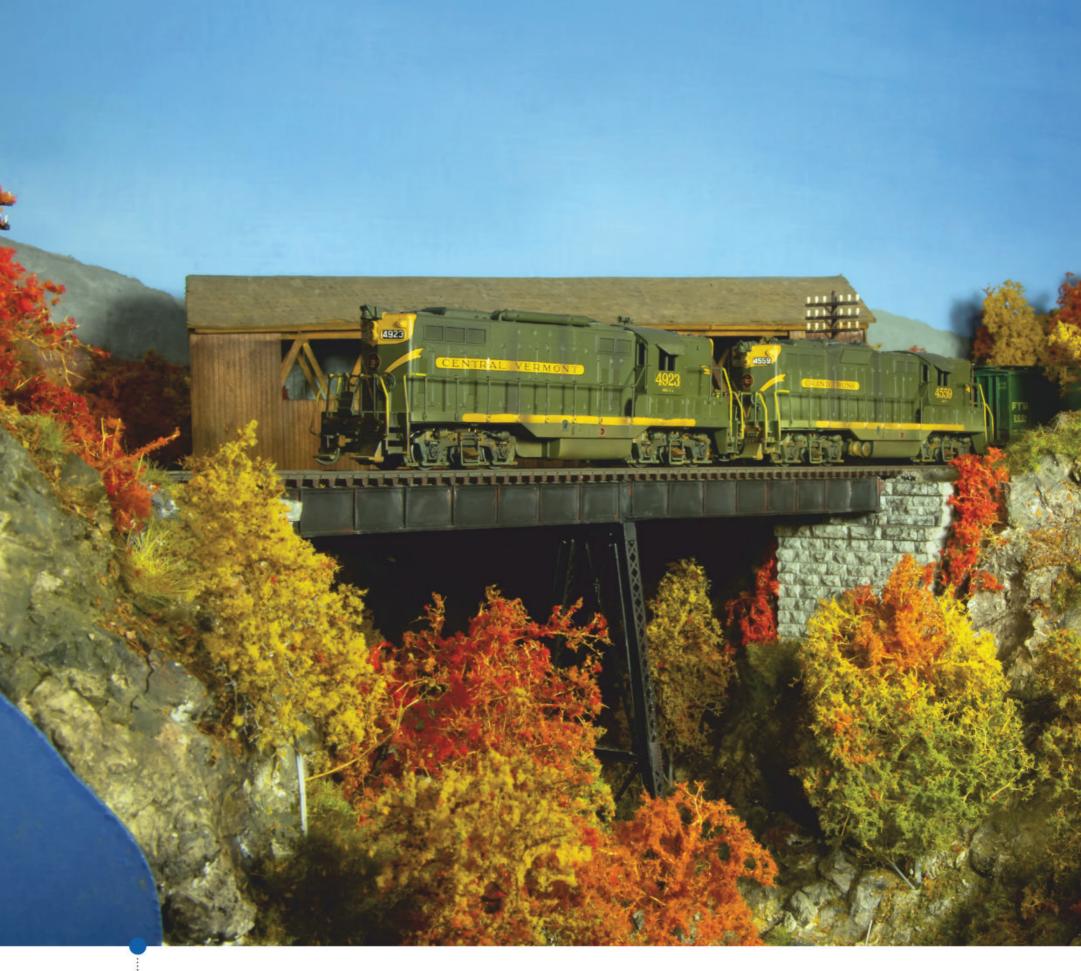












As the calendar extends into autumn, the brief moment of sunset's "sweet light" comes earlier each afternoon. Today, it happens to catch a pair of Central Vermont and Grand Trunk Geeps stepping out onto the trestle at Chatham Gorge. John Ciesla of Mineola, N.Y., didn't have to wait for perfect lighting conditions to shoot this photo on his HO scale Eastport Branch layout, which was featured in the November 2021 Model Railroader. The locomotives were undecorated Athearn "blue box" models that John fine-tuned, painted, and weathered.

## Send us your photos

**Trackside Photos** is a showcase for the work of *Model Railroader* readers. Send your photos (digital images 5 megapixels or larger) to: Model Railroader, Trackside Photos, P.O. Box 1612, Waukesha, WI 53187-1612; or upload them to fileupload.kalmbach.com/contribute. For our photo submission guidelines, contact senior associate editor Steven Otte at sotte@kalmbach.com.



The Rio Grande Zephyr crosses Faith Canyon Bridge in Colorado on its way to Caribou Pass. Tim Schreiner's HO scale D&RGW Faith Canyon Route was inspired by the prototype's Colorado routes in the mid to late 20th century. Tim made the aspen trees from Scenic Express SuperTrees and created the plaster rocks using both molds and hand-carving. The locomotives are Athearn Genesis models and the bridge is from Micro Engineering parts. Tim, from Roland, Okla., also took the photo.



lowa Interstate no. 708 leads Train ICSW-25 across U.S. Highway 6 in Iowa City. James McNab of Des Moines, Iowa, shot the action on The Hills Line, his HO scale version of the Iowa Interstate's Hills Industrial Spur. He used Helicon Focus software to increase the depth of field and Adobe Photoshop to replace the background and light the gradecrossing flashers. James documented his layout construction in the video series "The Hills Line with James McNab" for Trains.com.



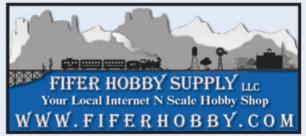
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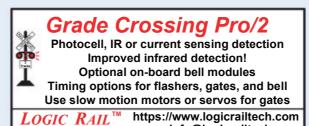




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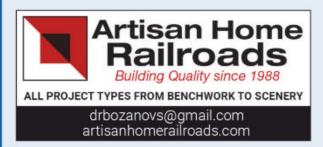
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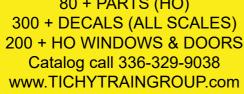
























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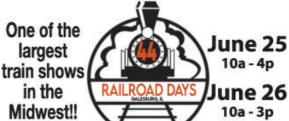
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Schedule of Events Rate: \$45 per issue (55 word maximum). Ads will contain the following information about the event: state, city, sponsoring organization and name of event, meet, auction or show, dates, location, times, admission fee, name and/or telephone number and/or email of person to contact for information. Name, daytime telephone number and street address of the person providing the information is also required but need not be included in the ad. Unless otherwise requested, ads will be published in the issue month that the event occurs in. Please specify issue date(s). Word Ad Rates; per issue: 1 insertion — \$2.03 per word, 6 insertions — \$1.89 per word, 12 insertions — \$1.77 per word. \$40.00 MINIMUM per ad. To receive the discount you must order and prepay for all ads at one time. Count all initials, single numbers, groups of numbers (i.e. 4-6-0 or K-27), names, address number, street number, street name, city, state, zip, phone numbers each as one word. Example: John A. Jones, 2102 South Post St., Waukesha, WI 53187 would count as 10 words. For MR's private records, please furnish: a telephone number and, when using a P.O. Box in your ad, a street address. Model Railroader reserves the right to refuse listing. All Copy: Set in standard 6 point type. First several words only set in bold face. If possible, ads should be sent typewritten and categorized to ensure accuracy.

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All ads must be prepaid and pertain to the subject of model railroading.

## **Schedule of Events**

AZ, GLENDALE: ARHS Model Train Swap Meet. Glendale Christian Church, 9661 North 59th Ave., Glendale, AZ 85302. Saturday, May 14, 2022, 9:00am-1:00pm. Everything Trains – Food – Fun. Admission \$5.00. Tables \$25.00 - to sign up send stamped envelope, check or money order to ARHS, PO Box 5816, Glendale, AZ 85312-5816. Contact: Craig Faris 623-340-3529

CA, SACRAMENTO: Sac-Sierra TCA. Scottish Rite Masonic Center, 6151 H Street, Sacramento, CA 95819. Saturday, May 28, 2022, 10:00am-3:00pm. Admission \$5.00, children 12 and under free. 160+ tables of trains for sale, free parking, operating layouts, food. Free train set drawing for 17 and under. Contact: Bryan Stanton at brsta@comcast.net

CA, SIMI VALLEY: Swap Meet, Santa Susana Railroad Historical Society, Santa Susana Park, 6503 Katherine Rd., Simi Valley, CA 93063. May 21, 2022, 8:00am-11:00am. \$2.00 donation, kids under 12 free. All scales, equipment, scenery, books and photos. For vendor table availability contact Chris, 805-494-1044. Website: www.santasusanapacific.org

**DE, ROXANA:** Spring Fling Train & Toy Show. Roxana Fire House, Route 20, between Millsboro & Fenwick Island. Saturday, May 7, 2022, 9:00am-2:00pm. Admission: \$6.00 adults, children 10 and under free. Operating layouts, refreshments, door prize. For information contact Bill Ziegler, 302-537-0964 or www.delawareseasiderailroadclub.com

FL, BROOKSVILLE: Regal Railways presents Toy Trains & Hobby Show. Hernando Fairgrounds, 6436 Broad St., Brooksville, FL 34601. Saturday, May 21, 2022. 9:00am-2:00pm. Admission: \$5.00 adults, children under 12 free. Vendors and operating layouts. Contact: Joe at 727-244-1341 or visit: www.regalrailways.com for more information.

**GA, ATLANTA:** Scott Antique Markets (featuring Anton's Antique Toy & Train Show), April 7 – 10, 2022. Atlanta Exposition Center, 3650 & 3850 Jonesboro Rd., Atlanta, GA 30354. Thursday: 10:45am-6pm, Friday & Saturday: 9am-6pm, Sunday: 10am-4pm. Admission \$5, good all weekend. Contact: Anton 937-397-3499, or email: tweissmann6@gmail.com

GA, SAVANNAH: Coastal Rail Buffs 33rd Annual Model Railroad and Train Show at the Savannah Mall, 14045 Abercorn St., Savannah, GA 31419, between Target and Bass Pro Shop. April 9-10, 2022, Saturday 10:00am-5:00pm, Sunday 10:00am-4:00pm. Adults 2-day admission \$7.00; Students/Seniors \$5.00, Active-Duty Military/under 12 FREE. Dealer tables, operating layouts in O, HO, N. See www.coastalrailbuffs.com

IL, GREENVILLE: American Heritage Railroad Train Show @ American Farm Heritage Museum, 1395 Museum Ave., Greenville, IL 62246. I-70 @ IL Rt. 127 (Exit #45). Saturday, June 11, 2022, 10:00am-4:00pm. Admission: \$5.00, under 12 FREE. Train ride with paid admission. Operating layouts. Dealers welcome, \$15.00 per table. Contact Jim @ 217-825-6230.

IN, INDIANAPOLIS: Indy Junction 2022, May 18-22, 2022, NMRA Region Convention. Four Full Days, Three Regions (MWR, NCR, and MCR plus the RPM Conference). Three-Day Train Show, Clinics, Displays, Contest, Tours, Railyard Sale. \$95 primary registration; \$110 after April 27; \$25 family. Info@IndyJunction2022.org or IndyJunction2022.org

IN, PERU: Miami County Model Train Show and Swap Meet. Saturday, April 16, 2022, 10:00am-4:00pm EST. Miami County Fairgrounds, 4-H Project Building, 1029 W 200 N, Zip: 46970. All scale trains, books and memorabilia. \$3.00/person. 5 and under free. Free parking! Vendor tables \$20. Covid restrictions may apply. Questions, contact Paul Forman at 765-432-1052.

KS, HERINGTON: 2nd Annual Herington Railroad Days. April 30 & May 1, 2022. 9am-4pm both days. Herington Community Building, 810 S. Broadway, Herington, KS 67449. Admission by donation. Buy/Sell/Trade model railroad equipment and railroad memorabilia, clinics, workshops, operating layouts. Special A&SVRR excursions onsite! Concessions and free parking. Visit the Historical Museum and Railroad Annex. heringtonrailroaddays.com

KS, KANSAS CITY AREA: Turkey Creek Division train show/swap meet. Saturday, August 6, 2022, Lenexa Community Center, 13420 Oak Street, Lenexa, Kansas 66215. 8:00am-3:00pm; Layout tours 3:30pm-8:30pm. Admission: \$10.00, NMRA members \$9.00 at the door. 12 and under free with paid adult. Pre-register to receive \$2.00 off admission. Vendors/registrants contact Jack Ferris, fhs1955@gmail.com, 816-804-0152. www.tc-nmra.org

MN, ST. CLOUD: Granite City Train Show and Sale. River's Edge Convention Center, 10 4th Avenue South. Saturday, May 14, 2022, 9:00am-3:00pm. \$6.00, 10/under free. Buy/sell model/toy trains, books, videos, railroad collectibles. Operating model & toy train display. Win a LIONEL train set or FSM structure kit. 320-255-0033; edwardolson@cloudnet.com or www.GraniteCityTrainShow.com

NE, OMAHA: NE-IA Railroaders 2022 Train and Toy Show. May 21-22, 2022. Saturday 9am-4pm, Sunday 9am-3pm. Admission: \$8.00, 12 and under FREE. Omaha Sports Complex, 14706 Giles Rd., Omaha, NE 68138. 72,000 sq.ft. of train and toy items for sale, plus parts/repair vendors. Free parking. Information: Mark Nelson 402-731-1349; Bob Schaffer 402-990-0085; Jeff Carper 402-960-7824 www.NebraskalowaRailroaders.com

NJ, BRICK: ECTP and Collectibles LLC presents The Brick Train Show. Elks Lodge, 2491 Hooper Avenue, Brick, NJ 08723. Sunday, May 22, 2022, 9:00am-2:00pm. Admission: \$7.00; under 12 free with adult. John LaLima 732-845-5966. Go to www.eastcoasttrainparts.com and click on The Brick Show.

NJ, WAYNE: ECTP and Collectibles LLC presents The Wayne Train Show. P.A.L. Hall, 1 Pal Drive, Wayne, NJ 07470. Sunday, May 15, 2022, 9:00am-2:00pm. Admission: \$7.00; under 12 free with adult. John LaLima 732-845-5966. Go to www.eascoasttrainparts.com and click on The Wayne Show.

NY, HAMBURG: TCA Upstate NY Chapter Train Show. St Mary of the Lake School Hall, 4737 Lakeshore Rd, Hamburg, NY 14075. Saturday, May 7th, 2022, TCA Members: 9:00am. General Public: 9:30am-2:30pm. Admission: Adults \$5.00, under 12 free with paid adult. Contact: Bob 716-440-3156, Email: tca.upstatenychapter.events@gmail.com

All listed events were confirmed as active at the time of press. Please contact event sponsor for current status of the event.

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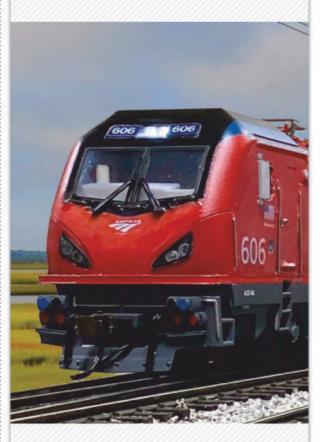
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# **Coming Up**

# Decorate a locomotive for a unique prototype

Contributor Will Leavitt explains how he used prototype photos and custom decals to model a unique Amtrak electric locomotive.

# Visit Rapido founder's VIA Rail home layout

It's not much of an exaggeration to say Jason Shron founded Rapido Trains to make passenger cars for his HO scale Kingston Subdivision.

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## Remaining flexible as we "grow"



Modeling a junction where a branch line meets staged mainline trains would allow depicting a favorite prototype in a more modest setting. Here, Boston & Maine's Mogul-powered Train 3808 stands ready to depart Claremont Junction, N.H., as F7-powered No. 77 leaves town on the main line on September 21, 1952. Stanwood K. Bolton photo, George Corey collection

During an online discussion, Clark Propst mentioned that an aging modeler's children tried to talk him into moving into assisted living. They convinced him to tear down his layout because they didn't want to deal with it. I can understand their concerns. A couple of friends tore it down and hauled it away. He said he was going to build a switching layout, but his heart wasn't in it.

Gerald Henriksen saw this tale in a different light, and I think we need to think long and hard about what he had to say: "To me, the moral of the story is to remain flexible if we want to remain in and continue to enjoy this hobby as age (or other external factors) step in to take away our dream. Regardless of whether his kids were right or wrong, he could have continued in the hobby with the potential shelf layout or by participating on other layouts if he had been willing to be flexible and simply enjoyed what the hobby could offer."

#### This is one of those

lemonade-from-lemons lessons. It can go either way; I've seen many layouts derailed when the budding modeler bit off more than he or she could chew. That typically happens when they're confronted with an ample but unfinished basement, attic, or garage that is at best unwelcoming, and the motivation to trudge down there after a day at work never comes.

In this case, the shock of losing a large home layout was more than its owner could overcome. I'm no psychologist, but I suspect having a Plan B in hand would have helped. We all know that we're growing older. We therefore need to sit down and have a heart-to-heart talk with ourselves about what that entails in terms of our aspirations and capabilities.

I'm old enough to have cast a wary eye on the Nickel Plate now residing in my basement. I haven't stenciled a "Best if Used By" date on it yet, and in fact I made several

major investments in it to ensure that I didn't lapse into a downhill-slope mindset any time soon. But I do think about a Plan B now and then, much like Chuck Hitchcock documented in *Model Railroad Planning 2021* (he actually settled on Plan C).

## One early manifestation of

a Plan B was my Wingate Project, an O scale sectional "layout" that I documented in January through April 2020 MR. My thinking was that I could dismantle the NKP, restore the basement to a

family room plus storage area, and erect a series of folding-leg tables that would support a series of Wingate-type sections.

But that day was a long way off at best, so I sold the Wingate sections to a fellow NKP modeler. He has been carting where we hope they'll inspire others to try this approach to layout construction and operation. I can build more such sections later on.

Having a Plan B remains a personal goal nonetheless.

them to O scale conventions

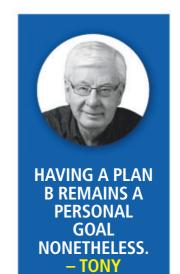
personal goal nonetheless. Like Doug Tagsold, who has stated he has a list of several more railroads he'd really like to build once his current unique 1:72 Colorado & Southern railroad is finished (see MRP 2018), I have my own bucket list. I've always admired the Boston & Maine's Mogul-powered branch lines in New Hampshire, for example, a fondness that was reinforced when son John attended Keene State at the heart of the system (see photo). And those Midwestern interurbans keep playing their siren songs; perhaps a short segment of one of those would be a good retirement project.

Which brings us back to the gentleman who lost his large home layout. Had he planned ahead, perhaps some offshoot of what he had before could have been sufficiently inspirational to sustain his interest for another decade or two, even if he did relocate to a retirement community.

Model railroading is, after all, so much more than model building. He would have had

to do a lot of homework about what this new line did for a living. If he had been modeling a prototype, he could have uncovered an interesting branch, for example.

As Gerald said, we need to be willing to be flexible.





## Modern Electric Magnificence

2021 marked Amtrak's 50th anniversary as America's Railroad - with new equipment being added to the company fleet in the form of new locomotives and cars, the face of Amtrak is changing to a sleeker, more modern look. Nowhere is this better seen than with the Siemens ACS-64 "Cities Sprinter" electric locomotive, found throughout electrified lines in the east of the United States and built just outside of Sacramento, California.

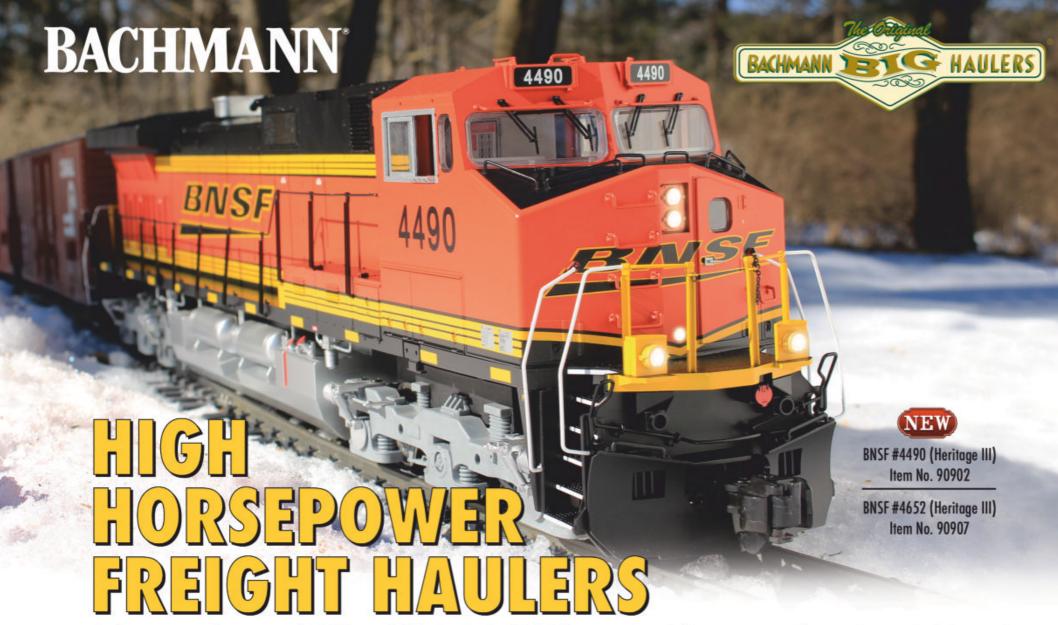
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