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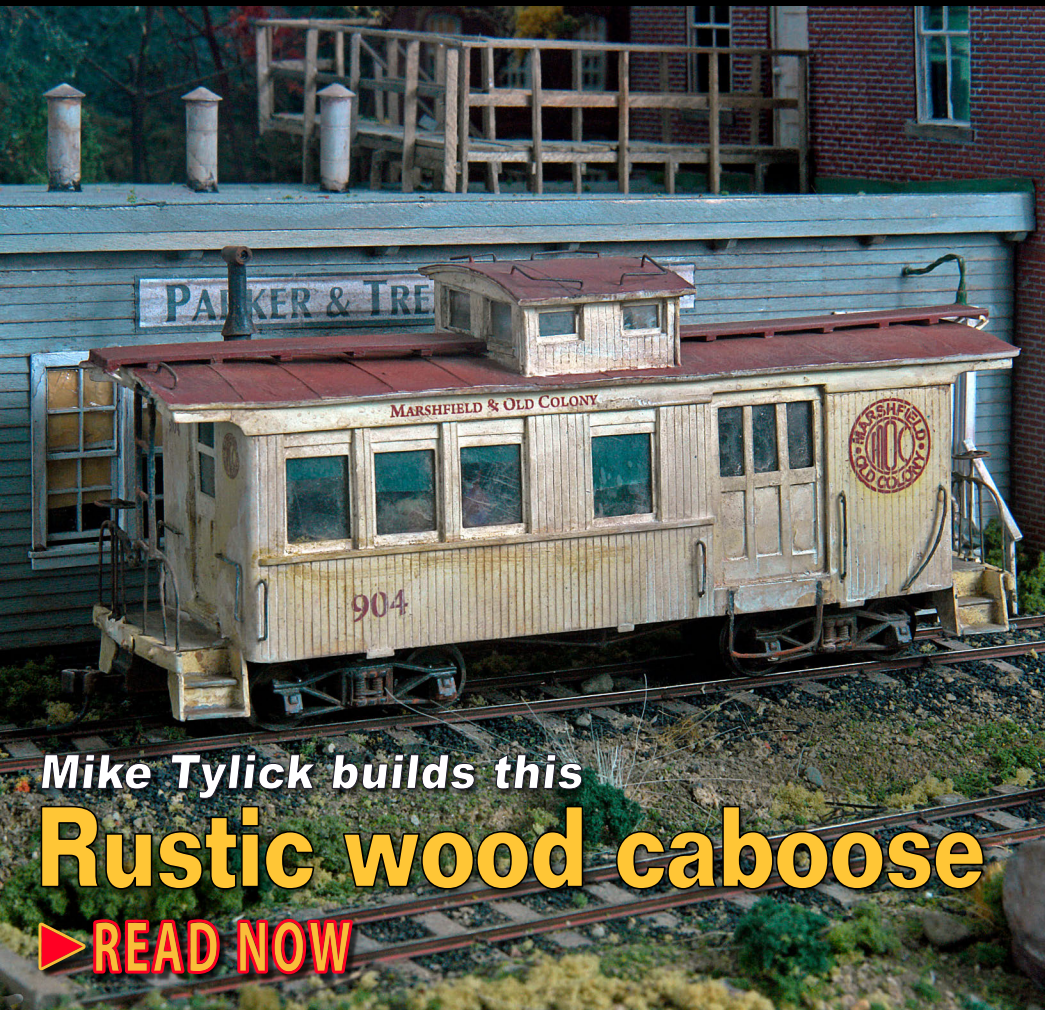
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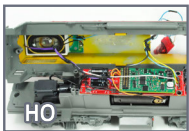
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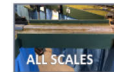
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Model Railroad Hobbyist | August 2021

JOE FUGATE REVISITS TOMA, THE "ONE
MODULE" APPROACH ...



ORIGINALLY, THE "ONE MODULE" APPROACH (OR TOMA) STARTED AS A COMMENTARY TO GET ARMCHAIR GUYS BUILDING SOMETHING. You can read my original commentary in the May 2013 *MRH* as the *Reverse Running* column in that issue.

My original TOMA concept has evolved since that original column to become an all-encompassing approach to building a home layout using modules or sections.

What makes TOMA different from just building a sectional or modular layout comes from its unique approach to the construction process: build each section to completion as you go. In other words, use a deliberate phased modular approach.

With TOMA,
you build each
module section
to completion
and hang some



1. Classic TOMA module section with temporary staging.

staging off one or both ends so you can run trains [1]. This gets you up and running with a finished-looking layout in fairly short order and it doesn't take a huge space, either.

Want more layout? Easy, just build more module sections.



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How is TOMA is different?

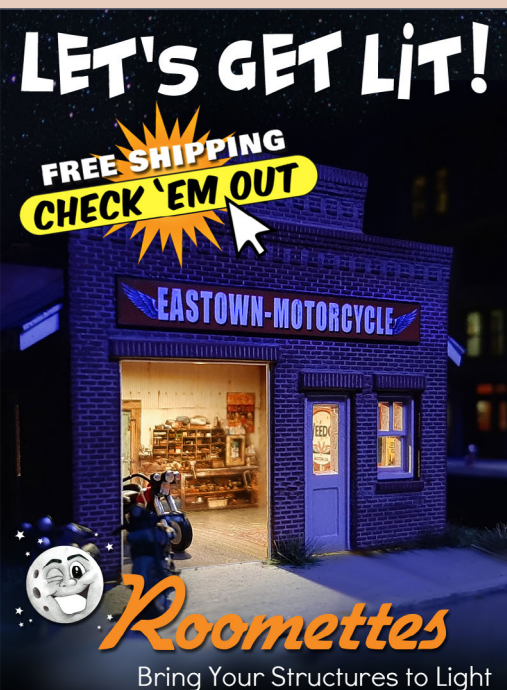
Modular and sectional layout methods have been around for decades now. Isn't TOMA just "marketing hype" for the same old modular/sectional layout methods we've had for a long time now?

Modular layout methods have been used for decades now, that's true. But these methods have almost exclusively been used for show layouts taken on the road. Modular methods haven't been used much for home layouts.

Building a home layout using modular methods can lead to considerations that almost never apply to show modular layouts. I'll cover some examples of those in the next section.

What about sectional layout design? Some layout plans include "sectional boundaries" that theoretically allow the layout to be cut apart and moved later if needed. Few layouts actually get

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built as sections from the get-go. Does that mean the layout design is a form of TOMA?

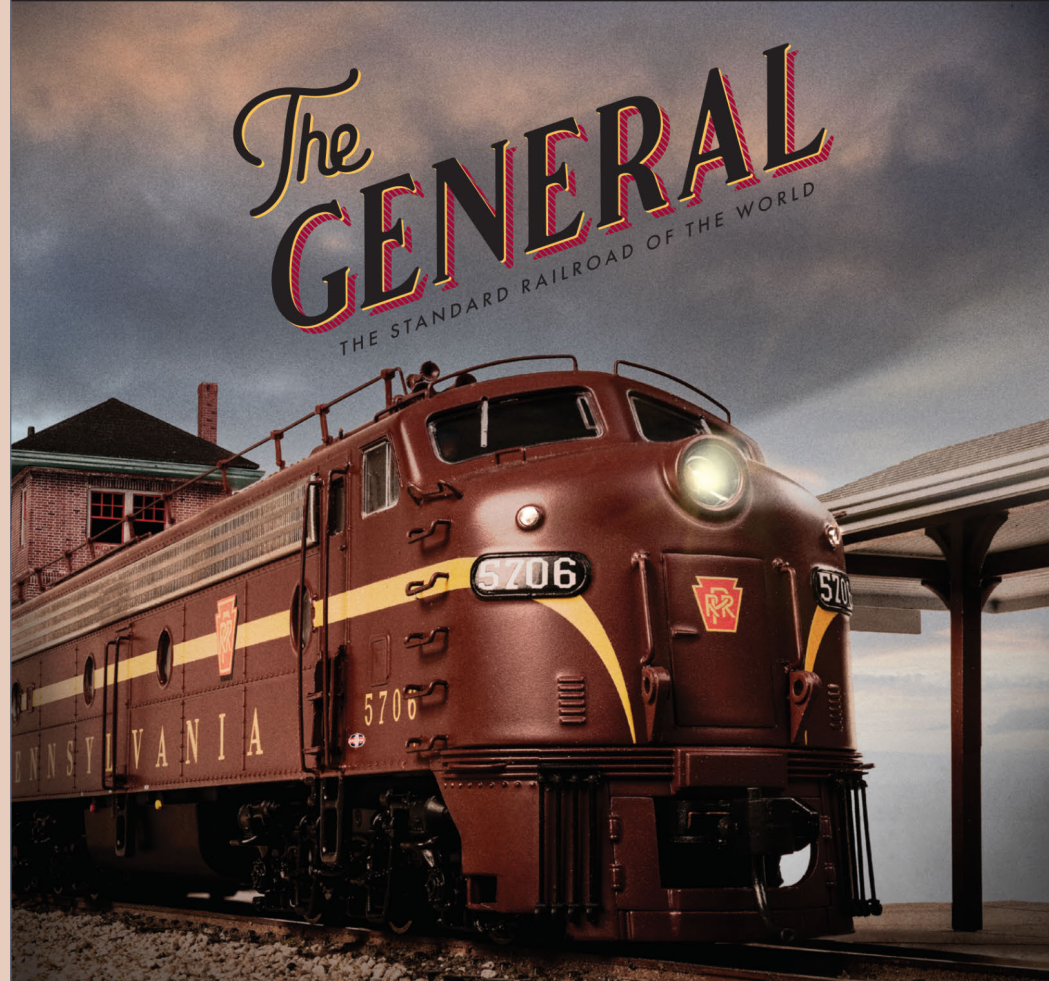
I know of cases where such potentially sectional layouts, when actually cut apart and moved, encountered unexpected complications. So the “not field tested” aspect of those potential sections can be a real issue.

With TOMA, you actually build the layout in module sections as you go, connecting and disconnecting the module sections during the construction process. You know the module sections work as expected and can be transported without issue with a TOMA layout design.

So, what kind of modular layout issues make a TOMA home layout design different from a show modular layout you take on the road with you?

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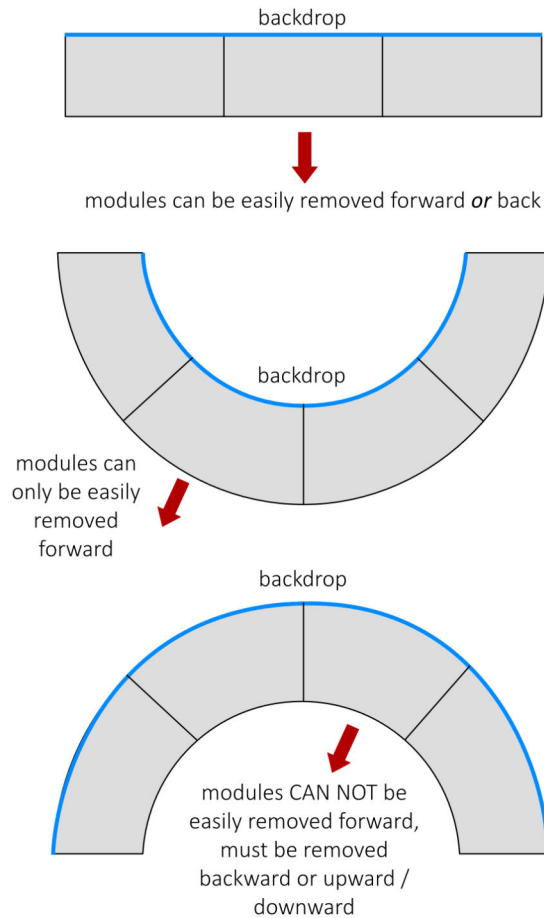
TOMA's unique spin on modular/sectional layout design

Show modular layouts you take on the road almost always get set up in a large open space, so maneuvering module sections around is seldom a problem.

But with a home layout, the layout module sections need to fit into a more constrained room with walls and a typically 7-8 foot ceiling.

Inserting or removing module sections on a home layout must deal with a lot more space constraints than a show layout taken on the road [2]. That's one very practical example of how home modular layout design differs from show layouts.

Because TOMA by design gives you a home layout you can take with you if you relocate to a new home, that brings up this additional consideration: will the TOMA sections fit into the new space? Probably not.



Also, walls may prevent using backward removal option.

2. Connecting / disconnecting module sections with TOMA.



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Again, home layout space constraints make TOMA different from show or exhibit modular layouts.

TOMA sacrificial modules

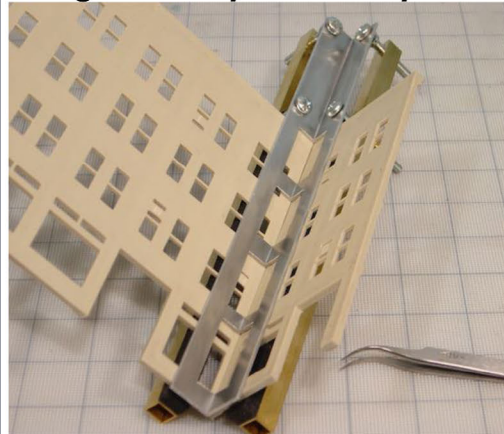
As I have been designing my Siskiyou Line 2 layout using TOMA thinking, I have come up with the concept of what I call a "sacrificial" module.

Basically, the idea is the current TOMA sections probably will not fit the same into any new layout space, so why not deliberately design certain simple module sections to be throw-away sections that can be replaced in the new space?

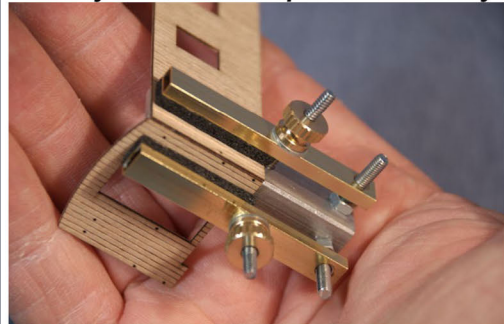
Take my Siskiyou Line 2 Roseburg yard as an example. The prototype yard is laid out on a curve, so I'm making my Roseburg yard design likewise fit on a curve.

However, what I'm doing different involves the sacrificial TOMA module. I have designed the two ends of the yard with all the turnouts as straight sections. In the middle I have inserted a simple curved

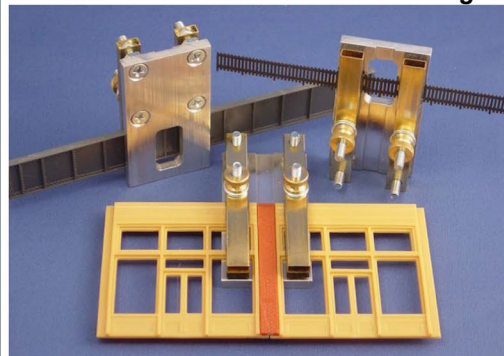
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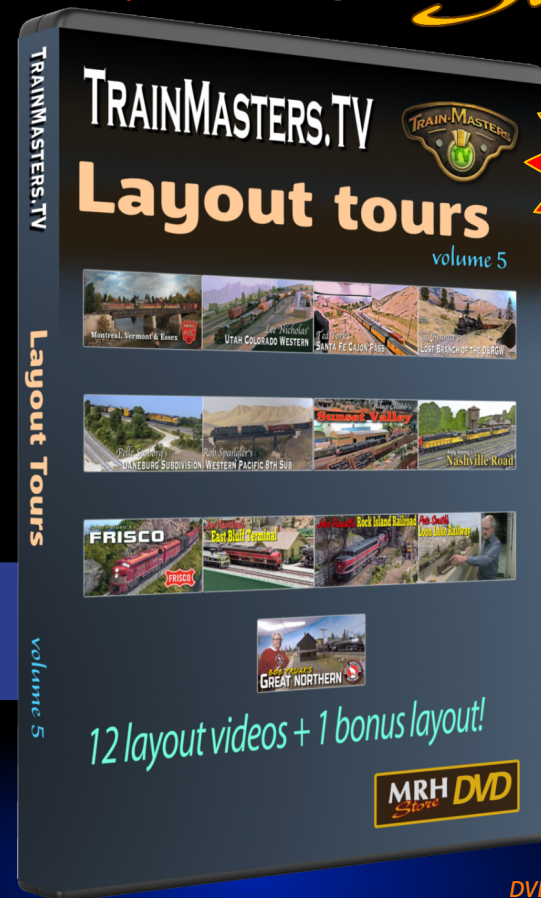
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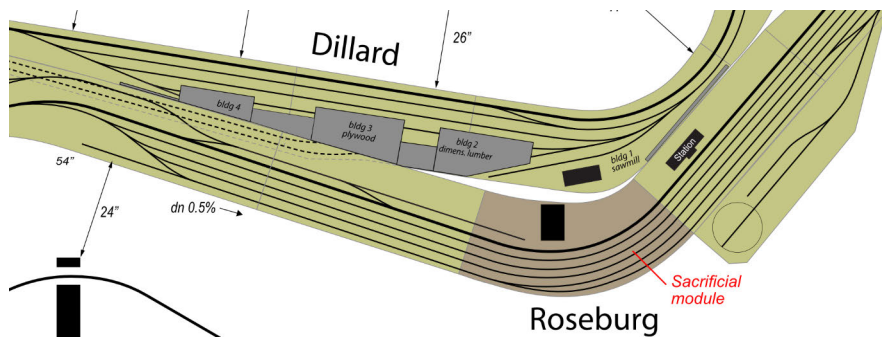
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3. Part of my Siskiyou Line 2 TOMA layout plan showing the sacrificial module in Roseburg yard.

TOMA module section that has few if any turnouts [3]. I'm thinking in any new space, I will have to curve the yard differently to fit the space, so this simple module can be discarded.

Then in the new space, I replace the sacrificial module section with a new section that curves differently to allow the yard straight sections to fit into the new space as needed.

Sacrificial modules is a new TOMA concept that's specific to the space constraints of a home layout. It's another example of how TOMA modular / sectional layout design differs from show layouts destined to go on the road.

As TOMA evolves, I'm expecting still more differences to emerge between TOMA home layout design and more traditional modular layout design for modules for show or exhibit layouts.

Given show layouts typically have lots of open space to work with, maneuvering modules in tight quarters or dealing with limited layout space such as you get in a home setting isn't a concern.

I'm also expecting differences between layouts designed to come apart if needed into sections and TOMA designs to

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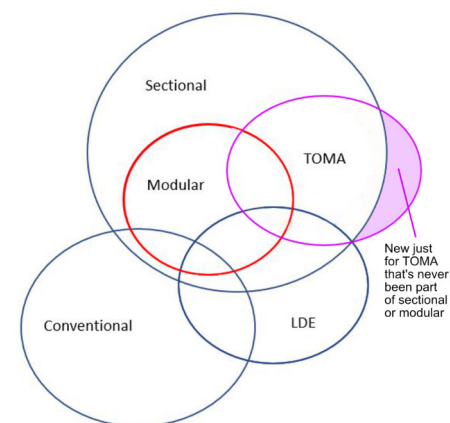
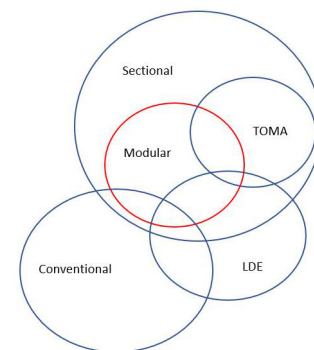
emerge. One example I can think of right off the top of my head is how I'm designing my TOMA module sections to be easily movable. That means for one thing, they need to fit through a door without smashing my fingers.

That also means my TOMA modules need to be light weight enough one person can carry the module. I've set a goal of 40 pounds, max. How many home layout designs that allow cutting the layout up into sections consider weight or fitting through a door? Few if any.

In summary

This Venn diagram [4, top] got posted on the *MRH* forum recently as an attempt to show how TOMA fits into the different approaches in the hobby to layout design.

I prefer the bottom one [5], since I see TOMA bringing new concepts to the table for home modular / sectional layout design. ☑



4, 5. Venn diagrams attempting to characterize TOMA's place in the mix of layout design approaches. I prefer the bottom one [5].



Every little bit helps!

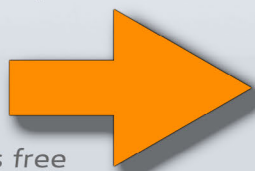


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Top rated articles in the [July 2020 issue](#) of MRH are:

- 4.9 July 2021 news
- 4.6 Build a small N scale layout, part 4
- 4.6 Weathering Tangent NP Boxcars

Issue overall: **4.7**

Top rated articles in the [Jun/Jul 2020 issue](#) of *Running Extra* ...

- 4.7 Pin wash weathering
- 4.6 Secret to a more satisfying layout
- 4.6 Limited Modeler:Pennsy N-class 2-10-2s

Issue overall: **4.6**

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CP Rail's Newport & Lyndonville Subdivision

MRH forum member **CP Rail Vermont** (Neil Schofield) has a great on-going blog about his new layout.

"I've finally had an opportunity to recreate my teenage memories on a layout of my own. I've narrowed my operations down to the CP Rail's Newport and Lyndonville Subdivision in Vermont's Northeast."

Follow along as Neil develops his layout!



View the full thread on the MRH website

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1. John Bruce asked for examples of modern logging railroad operation and started off with an example of his own efforts to that end.

Modern Logging

MRH forum member **JohnB** (John Bruce) kicked off a discussion on modeling modern logging railroad operations way back in 2011. Recently this thread has been revived with fresh posts.

John originally started off with his own modeling efforts:

"I've slowly been adding a modern logging operation to my layout, based more or less on the Camas Prairie and the Oregon California & Eastern. Here's a Camas Prairie type BN log car [1], using an Athearn Blue Box 40 foot log car kit and the Details West log bunks."

From there, many others chimed in with their own examples of more modern logging railroading. Follow the fascinating discussion on this timeless "blast from the past" thread.

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

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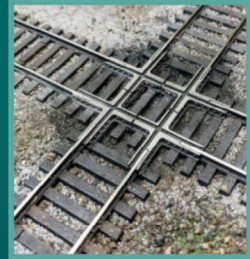
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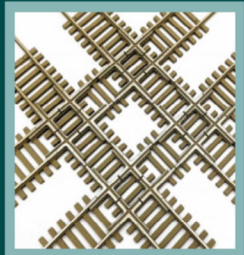
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2. MRH forum member **Mark Stafford** is prototyping a handheld steam throttle that mimics real steam loco operation. See more below!

Steam modelers ProtoThrottle?

You may be familiar with the diesel control station handheld ProtoThrottle from Iowa Scale Engineering. Back in 2018 after the release of the ISE ProtoThrottle, Joe Fugate asked if a steam version of a ProtoThrottle was possible.

Forum member **Mark Stafford** jumped into the discussion a few pages in and decided to actually prototype a working modelers' steam loco throttle. And he's actually making it happen!

Mark has made superb progress since 2018 and he's been documenting his successes and failures on this thread ever since. Mark now has a alpha prototype he's been experimenting with and we have to say, it looks pretty awesome.

But Mark still has a long way to go and could use some assistance. Jump on this thread and maybe give Mark a hand!

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



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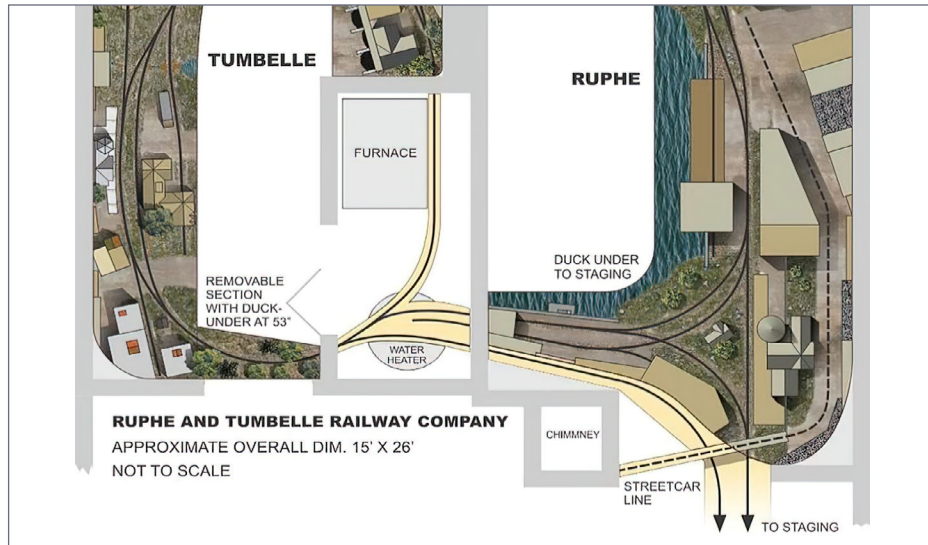


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3. MRH forum member **On30guy** (Rick Reimer) posted his superbly rendered trackplan on the On30 trackplan thread by **seustis13**.

On30 track plans

MRH forum member **seustis13** ("Sandy") in another blast from the past thread asked for well-done On30 track plans.

*"Despite what some folks say, track planning in On30 is **not** just about taking an HO plan and increasing the track separation on parallel tracks a smidge. What works in On30 is **not** primarily driven by the width of the track (same as HO), but mostly by the footprints of O scale structures and scenic elements – at least it is for reasonable-looking layouts."*

Since this thread started in 2013, many interesting On30 track plans have been posted to the thread, including Rick Reimer's plan [3] for his Ruphe and Tumbelle Railway Co.

View these track plans using the button below.

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

Some great prototype photos posted in 2021

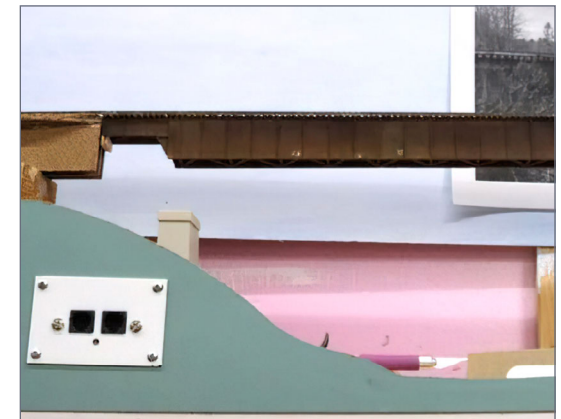
Besides weekly photo fun, we also have an annual prototype photos thread. Here's a sample from the 2021 thread.

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



4, 5. MRH forum member **amsnick** wondered how he should model the ties at the end of his bridge, so he went on a field trip to look at the prototype and get some photos. On the right you can see his model bridge [5] and above, the prototype [4].

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WHAT'S NEAT

column



Model Railroad Hobbyist | August 2021

**KEN PATTERSON: TRICK
OUT CIVIL WAR ERA LOCOS ...**



THIS MONTH GEORGE BOGATIUK SHOWS US HOW HE MODELED THE famous Civil War General locomotive using Bachmann's DCC-ready 4-4-0 "Texas". George modifies or adds nearly all new details on the locomotive – *plus* installs a SoundTraxx TSU-1100 sound decoder, mini-cube speakers, and a CurrentKeeper in the tender!



click to play video

PHOTOS AND VIDEO OF SUPERB MODELS



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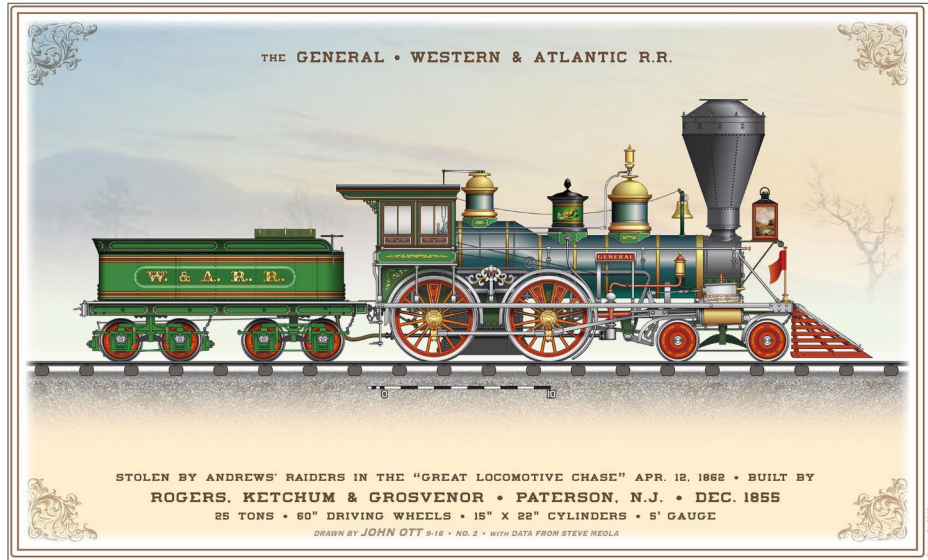
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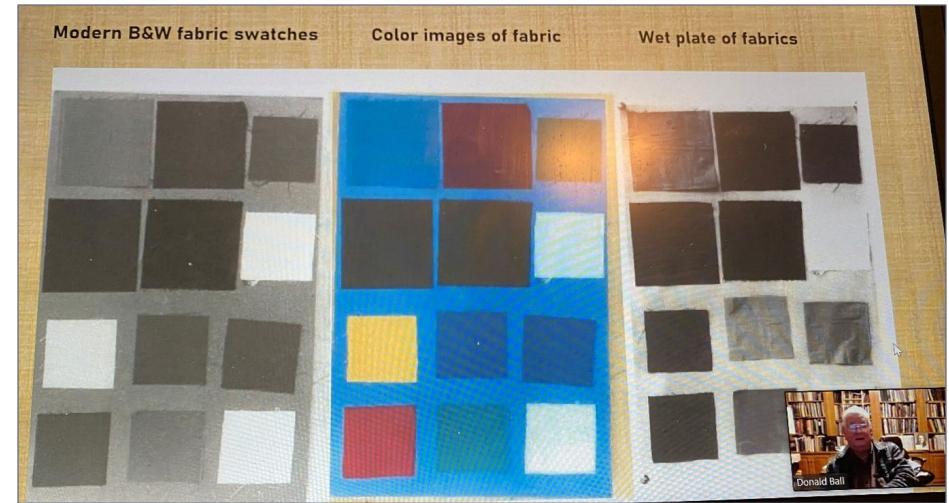
[TABLE OF CONTENTS](#)

The General



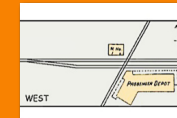
1. The *General* was the locomotive stolen by James Andrew's raiders in April of 1862, beginning the Great Locomotive Chase. Only quick and determined action by its conductor, William Fuller, prevented the raiders from making it back to Union lines.

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(Just in case your spam filters eat our email response ...)



2. Modeling Civil War era locomotives can involve a lot of research, some of which might be unexpected. This photo shows how the change from Civil War era wet plate photography to modern chemical processes has changed how colors are represented as shades of black and white. See how the yellow and blue swatches are nearly reversed in shade between the two processes.

Did you see this article?



Layout design using LDEs
(layout design elements)

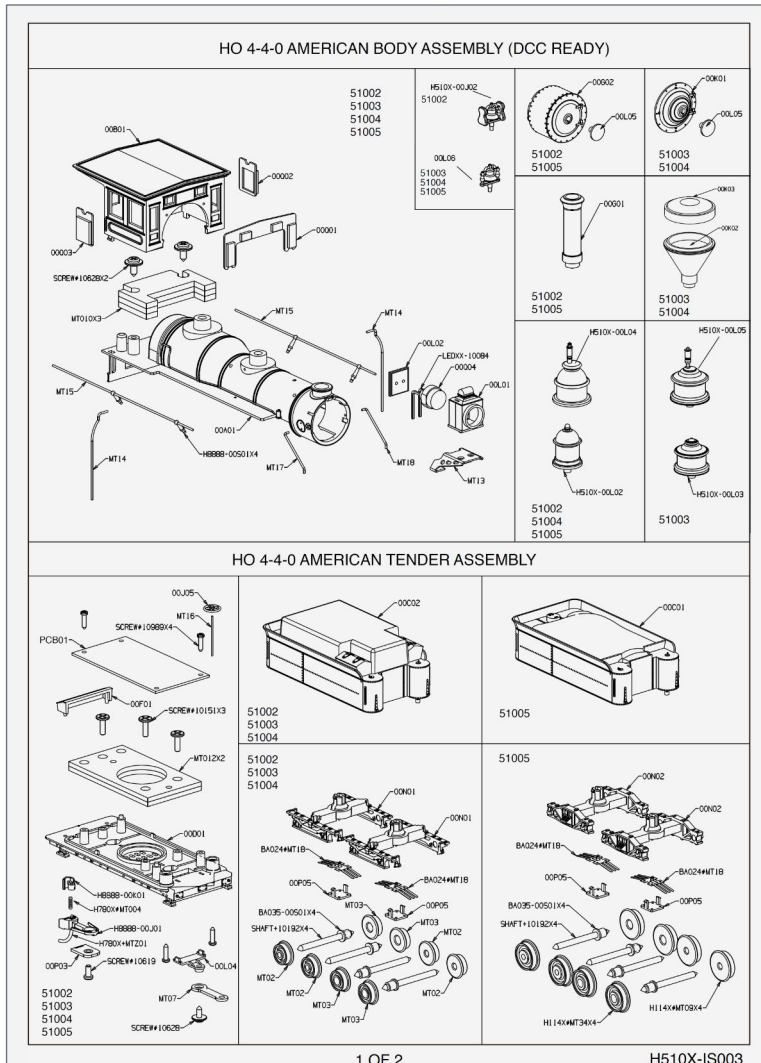
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In **MRH** **RUNNING** **EXTRA**

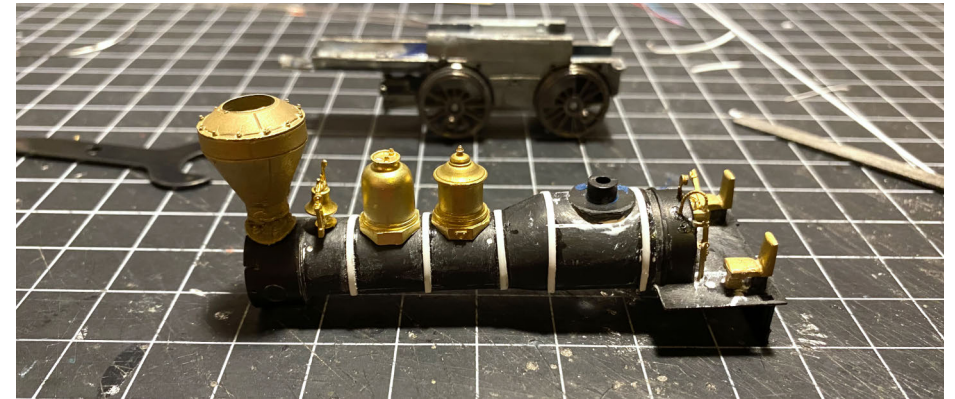


Also see the "What's neat this week" weekly video podcast!

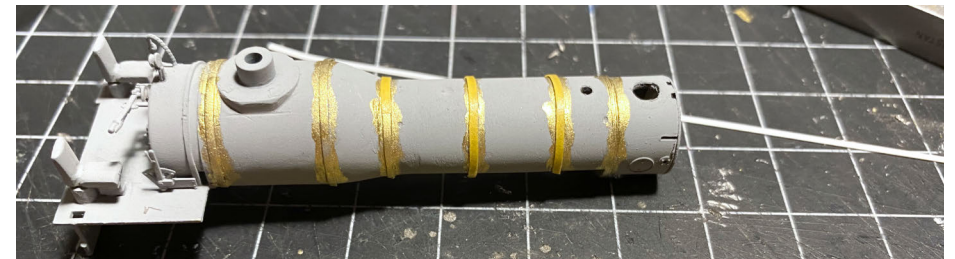
WATCH NOW >>



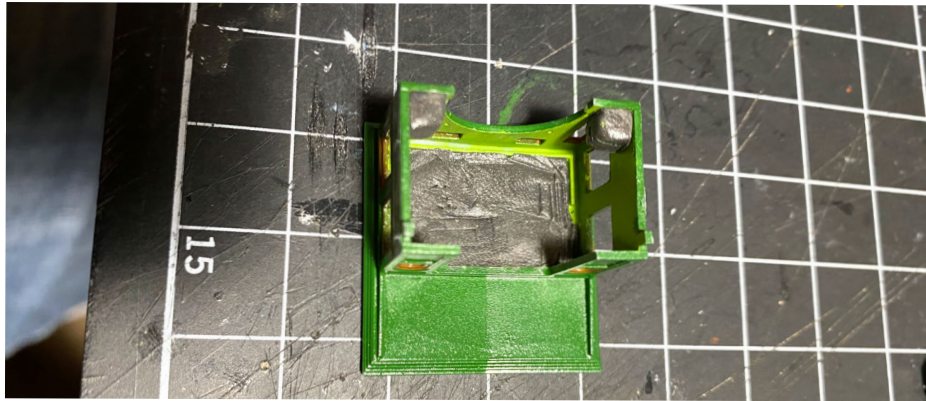
3. Studying the locomotive and understanding how to disassemble it, and how far you need to disassemble it, can take time, but the planning is worth it when it comes to take it apart. Exploded view diagrams like this one can be found at Bachmann's website. (Diagram Source: www.bachmanntrains.com/home-usa/references.php)



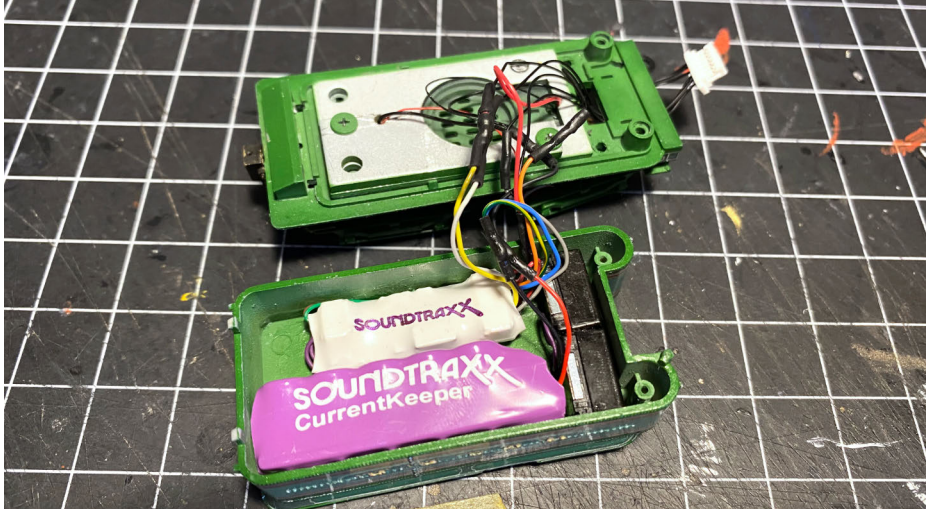
4. An important part of the process also involves deciding what parts need to be painted, and in what order they will be painted. Because the sand and steam domes may be multiple colors, as well as different colors from the boiler, it may be easier to paint them separately before attaching them.



5. Rogers' locomotives like the General had two steam domes as well as the sand dome, all with hexagonal bases. The Bachmann 4-4-0 has a single steam dome and sand dome with round bases. The boiler straps are also in different locations. Because of this, the boiler needs to be sanded smooth, with the new boiler straps made of .010"x .040" styrene strips. Paint the straps with a brass color first, then mask them and spray the entire model with clear coat to seal the masking tape so the primary boiler color will not bleed under the masking.



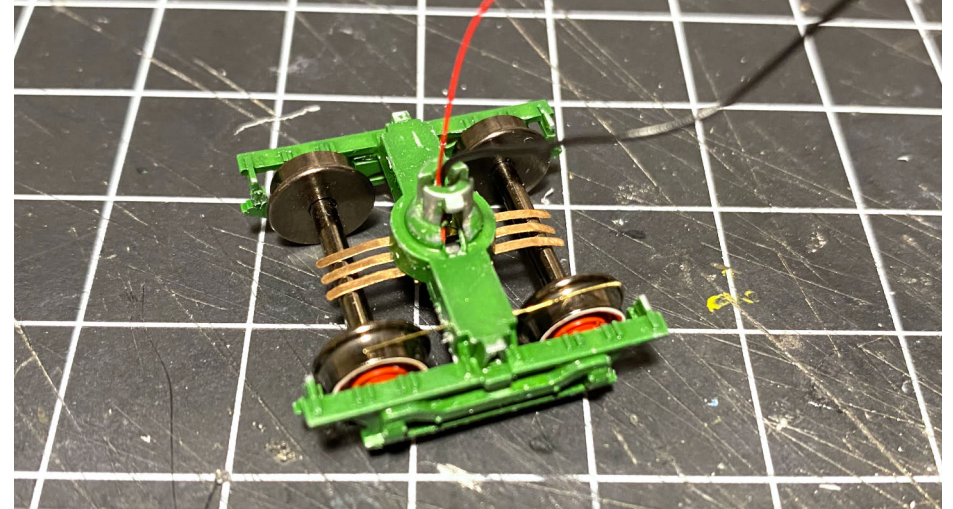
6. Some of the changes that George made to the locomotive moved its balance point too far forward, so he added lead putty to the cab ceiling and the front corners. The changes and this weight increased the locomotive's weight from 3.3 oz. to 4.2 oz.



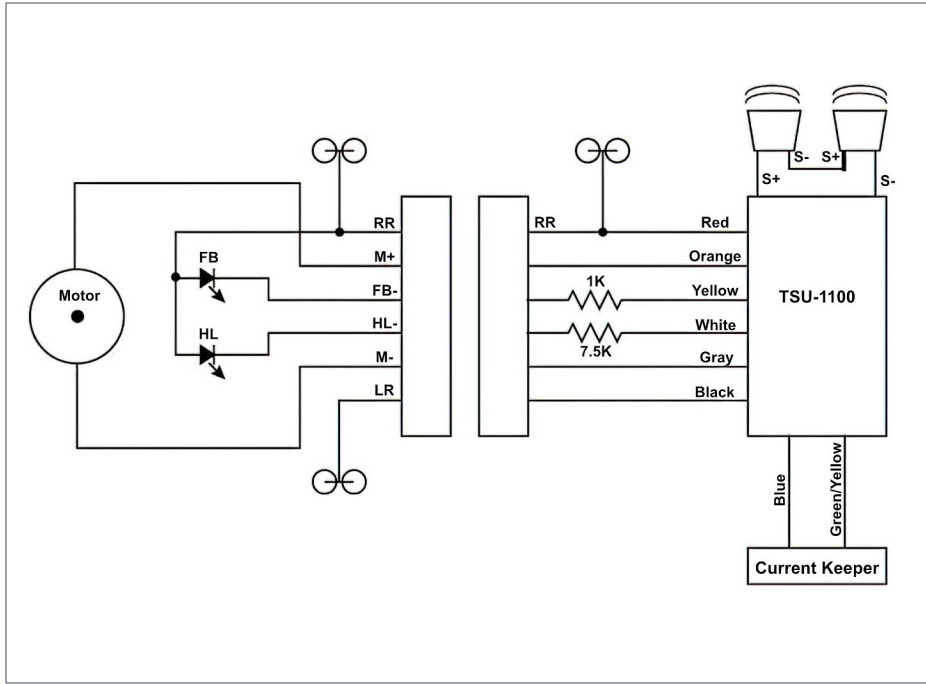
7. By removing the top plate of the weights in the tender, a SoundTraxx TSU-1100, CurrentKeeper, and two mini-cube speakers wired in series can fit into the tender.



8. George cut out the cast wood load in the tender, built a new base out of styrene, and then used real wood for the firewood.



9. George also added wipers to each of the tender trucks, converting them from picking up electricity from only one side to picking it up from both rails.



10. Having only six connections between the tender and the locomotive called for some creative electrical connections, since the rails, motor, headlight, and firebox light would normally call for two each, although the headlight and firebox could share one side of their connection. George used a method called “half-wave” wiring where he connected the “common” or + side of the firebox and headlight LEDs to the right rail wire in the locomotive, using the track as a return.



Also see the “What’s neat this week” weekly video podcast!

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11. One of the most distinctive features of the General is its “ankle rail” walkway. This meant that the handrails along the boiler needed to be remounted at a lower level and a handrail added to the side of the cab.

Check out the video for all the modifications George made to create the General, the settings he determined were most appropriate for the Tsunami2 decoder, and tips and techniques that apply to other scratchbuilding and kitbashing projects. ☒

Parts list is on the next page ...

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Also see the “What’s neat this week” weekly video podcast!

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PAINT LIST FOR THE GENERAL

Vallejo Acrylic

- 70-968 Green
- 70-800 Gunmetal Blue
- 70-950 Black
- 70-951 White

Testors Model Masters

- 1782 Brass

Badgerflex

- 16-37 SP Scarlett Red

True Color Paint

- TCP-013 Aluminum

Floquil

- F40119 Graphite
- F11009 Primer

Apple Barrel

- 20521 Nutmeg Brown

Krylon Spray Cans

- 1303 Acrylic Crystal Clear Coating (for Decals)
- 0500 Gloss Clear
- 1311 Matte Finish

Sunnyscopa

- 8.5x11" White Laser Decal Paper

PARTS LIST FOR THE GENERAL

PSC

- 3040 Johnson Bar
- 3062- Throttle
- 3069- Firebox Door
- 3227 Pressure gauge
- 3516 Radley hunter 6' Stack
- 31068 Bell
- 31378 PRR pilot
- 32299 Cab Seats (pr)
- 32401 Link and pin pocket (pr)
- 31937 Flush end spoked 26" wheels
- 48133 Clevis

SoundTraxx

- 884006 TSU-1100 for Steam2
- 810140 Current Keeper
- 2x 810162 Mini-Cube3 Speaker

Lighthouse LEDs

- 0402 golden white wired LEDs
- 0402 Orange wired LEDs

Atlas

- HO engineer and fireman full figure

Details Associates

- 11011 Brass Lift Rings

Bachmann

- 4-4-0 W&A Texas (Any 'New Tooling' 4-4-0)

PARTS LIST FOR THE GENERAL *CONTINUED...*

Cal scale

- 190-339 Whistles
- 190-338 Domes

ShapeWays

- Eight-Wheeler Models
- HO Baldwin Injectors
- HO scale old-time locomotive variety pack 1

Brass Wire

- .028" wire
- .022" wire
- .019" wire
- .015" Wire
- .008" Wire

Brass Shapes

- Special Shapes L-Strip, A-2

Brass Strips

- .010 x .040"
- .020 x .040"
- .020 x .030"
- .030 x .060"

Styrene Strips

- .010 x .040" Strip
- .020 x .030" Strip ■

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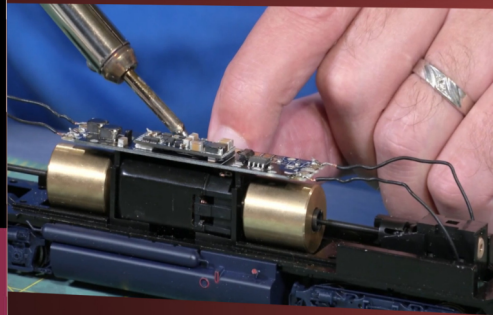
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TCS - WOW 101

**Electrical
Impulses**

1. This switcher looked good, and I needed a decoder with sound to match.

Model Railroad Hobbyist | August 2021



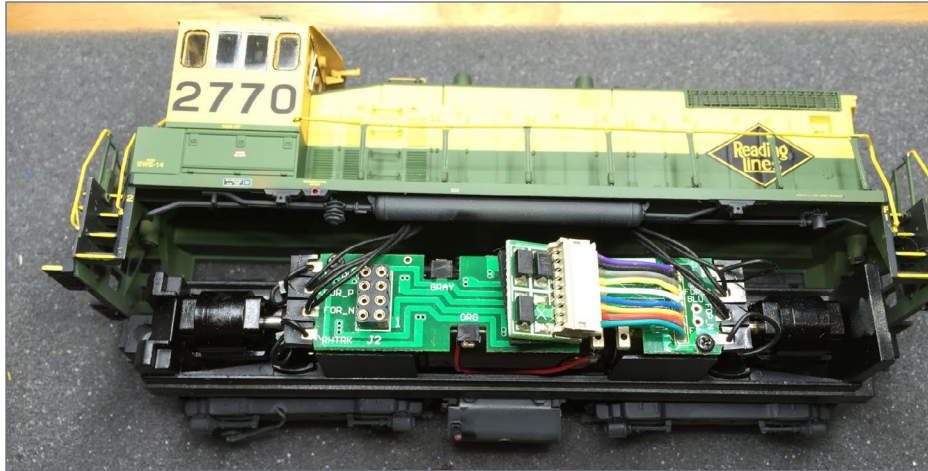
JASON MILLER INSTALLS WOWSOUND IN AN ATHEARN SW1500 ...

**NOW I KNOW WHY TCS PUT THE WOW AT THE
start of their new diesel decoders ...**

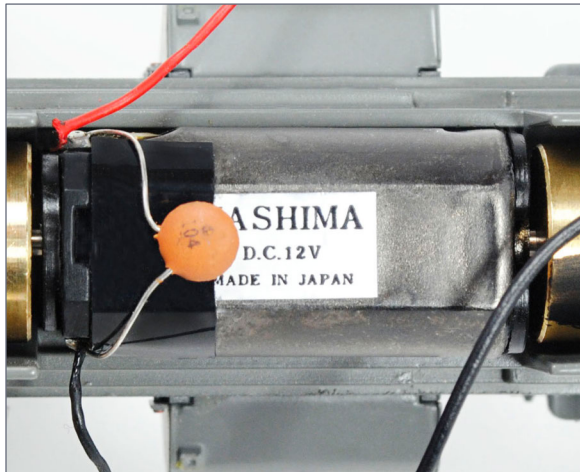
They are that good, that's all you can say... WOW!

I have been installing a WOWDiesel decoder into an Athearn SW1500 switcher I bought from Matt Fisher. Tom Adair detailed and weathered it.

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2. Pulling off the SW1500's shell reveals its DCC-ready motherboard, which has accommodations either for an 8-pin decoder plug or a 9-pin decoder harness. These early Ready-To-Run models were generally great slow-speed runners. Soldering the wires to the board and truck pads will make for reliable DCC running.



motor will interfere with the motor's smooth running. TCS
Photo (tcsdcc.com/installation/ho-scale/613).

3. In their installation demo for an Athearn MP15AC, which shares a common chassis and drive, TCS recommends removing and discarding the capacitor from the top of the motor. Because the decoders have built-in capacitors, the capacitor on the

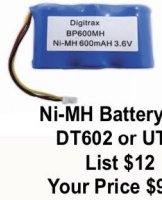


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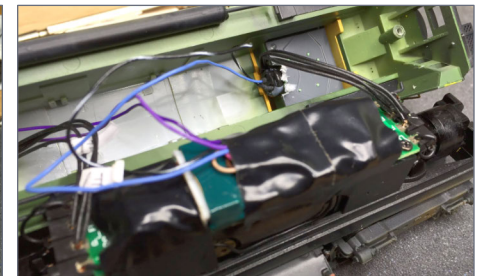
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TCS WOW 101 | 3



4. I used a TCS WOW101-Diesel decoder for this installation. The decoder has a 9-pin JST connection that plugs directly to the Athearn board. The shell has enough space to accommodate the decoder and the wiring, but I had to place the capacitor in the cab between the electrical cabinets.



5, 6. I had to trim some plastic from the bottom of the cab and the LHS electrical cabinet to fit the capacitor. I took the opportunity to add an HO scale engineer from Kato.



J. Regier

THE PITFALLS OF ELECTRICAL TAPE

Several factors make electrical tape less than ideal for a DCC installation:

- It tends to retain heat. Good heat dissipation is important for decoder function.
- It is thick and bulky, less than ideal for the tight clearances inside a locomotive shell.
- It leaves a sticky residue.

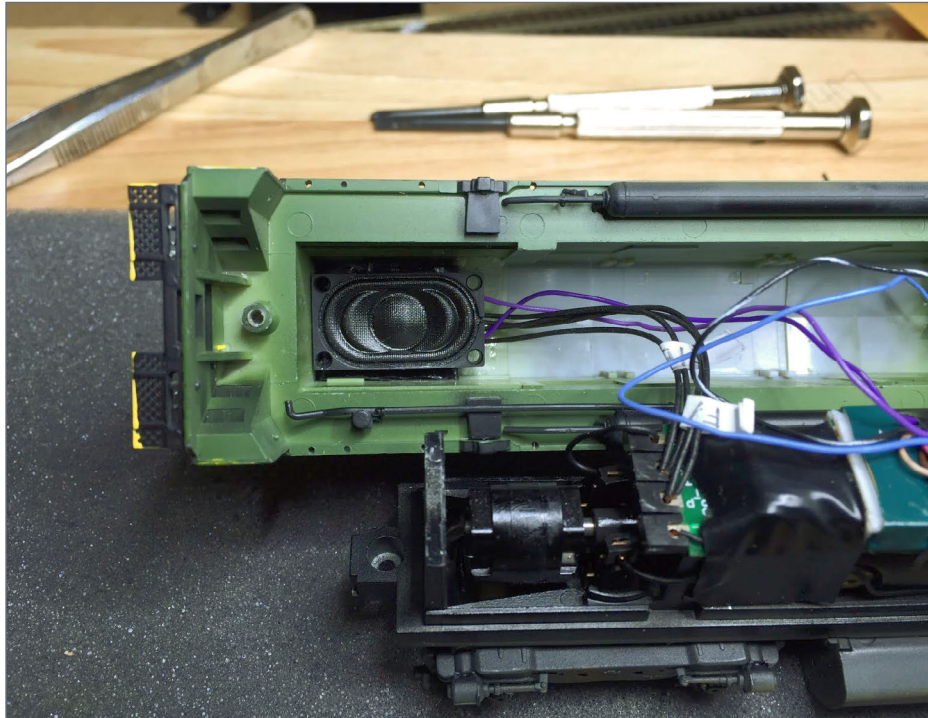
Instead of electrical tape, we recommend using Kapton tape. It is thin and does not interfere with heat dissipation or leave a sticky residue.

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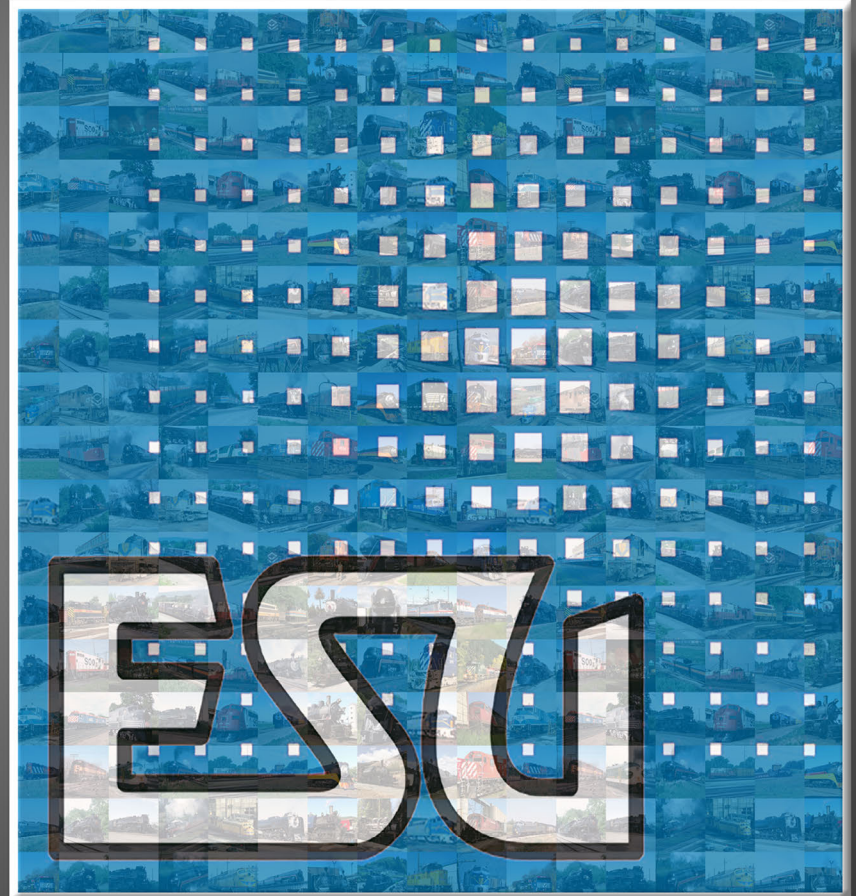
Later I will upgrade the wiring from the truck tabs to the board tabs and solder them all in place. I'll also add Soundtraxx connectors to the shell wiring too, which will allow me to remove the shell and disconnect the wiring easily for service. I was just keen to test the prototype throttle mode, which notches the throttle sounds automatically, based on back electromagnetic feedback.



7. I used a Soundtraxx Small Oval Speaker (no. 810112) that fits perfectly inside the shell above the front truck with plenty of space to spare. I would normally put the speaker in a baffle, but since the interior of the shell has no see-through grilles, the shell can serve as a reverberation chamber. I could add a larger speaker, but the sound is perfect from these.

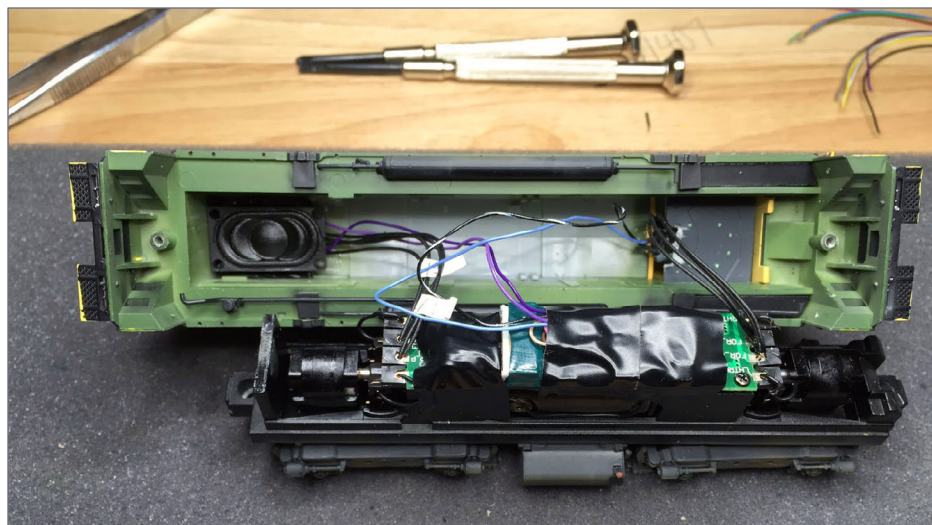
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8. Everything is in its place. The installation for such a small switcher went well. I may later replace the Athearn 1.5v micro bulbs with LEDs, but they are all working, so not now.

The rest of the RDG SW1500s will be getting this treatment as soon as the funds become available. Straight out of the packet, TCS WOW decoders are virtually plug-and-play. I only needed to solder the speaker and the wires (see the sidebar on the following pages).

The TCS WOW decoder's features are outstanding, with many lighting and sound features to choose from. You simply must hear the sound from these decoders to appreciate their CD quality.

See the short video on the last page demonstrating the TCS Wow decoder's motor, horns, bell, and manual notching sounds. Once I become familiar with the decoder's functions, I'll post another video of the switcher under load using manual notching, and switching Reading. ☑



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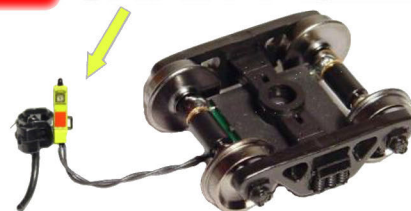
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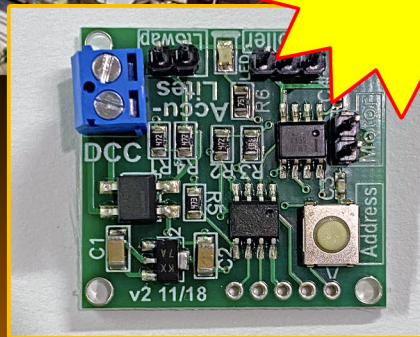
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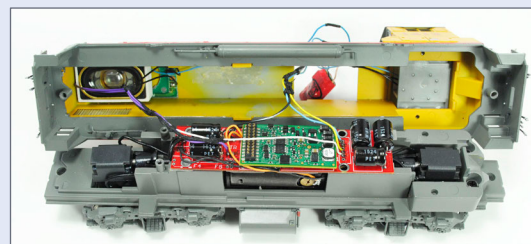
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TCS WOW 101 | 6

REMEMBER THIS!

Since this article was written, TCS, Athearn, and others have made several developments in their products. Especially if you are handy with a soldering iron, you should consider some of them for your installation.

TCS has a range of 21-pin locomotive-specific TCS WOWKits available that include a WOW121 decoder, a speaker, and a motherboard with built-in Keep-Alive. A Keep-Alive is a good idea for short-wheelbase locomotives, and there is no better way to fit one into the tight space [9].



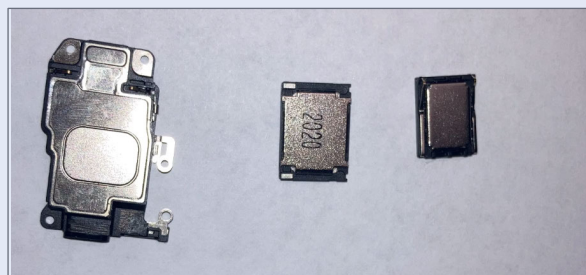
9. TCS installed a locomotive-specific WOW121 kit (no. WDK-ATH-11) in this Athearn MP15AC, which shares a chassis with the

SW1500. This installation not only has a full Keep-Alive capacitor, but it's small enough that you can leave the cab undisturbed. The kit includes a 1.5V regulator, which is important if you plan on keeping the original Athearn bulbs
TCS Photo

I would also upgrade the lighting to LEDs while the shell is off the chassis. There are a variety of upgrade kits available, including one from Athearn, that make changing to LEDs a simple, hassle-free process. It just makes sense to take care of this step during your sound install, rather than wait until the inevitable burnout, and dismantle the locomotive again.

Finally, I strongly recommend using smartphone speaker drivers instead of older oval speakers like the one the author recommends. In fact, I generally discard the oval speaker TCS includes in its WOWKit for that reason.

Many manufacturers market these cell phone speakers with baffles as sugar cubes. They vastly outperform their size in the sound they produce and are excellent for bringing out the full range of CD-quality sound in TCS's decoder [10].



10. Some common smart phone speaker driver sizes. From left: iPhone 7, 13x8, and 11x13. The iPhone has a

decent baffle as-is, but the others could benefit from a baffle. *James Regier photo*

I like designing and 3D-printing my own baffles. You can also find some premium custom speakers from Scale Sound Systems made to fit many specific locomotive models (www.scalesoundsystems.com). Not only does owner JT Burke sell speakers, but he also publishes his research into the subject for those interested in designing their own. ■

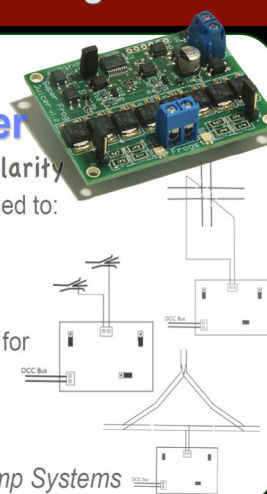


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11. Video demoing the loco in action on the layout after this install.

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JASON MILLER



Jason lives in Diamond Creek, Victoria, in Australia.

Jason has been a professional fire-fighter for 19 years. When not at work, he enjoys spending time with his family, coaching Toby's Australian Rules Football team.

Jason is married to Linden and has two sons, Lachlan, 13, and Toby, 10. ■



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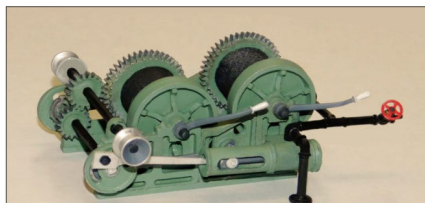
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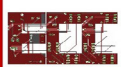
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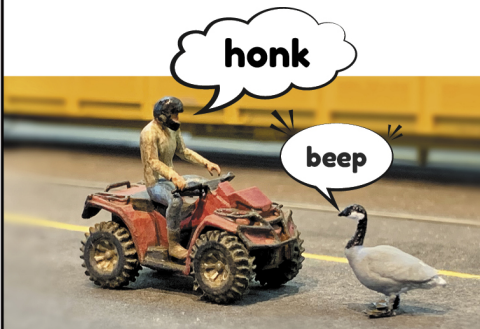
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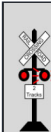
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DROVER'S CABOOSE



MICHAEL TYLICK, MMR SHOWS US A
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Model Railroad Hobbyist | August 2021



PASSENGER TRAFFIC WAS NEVER PLENTIFUL ON THE MARSHFIELD AND OLD Colony Railroad.

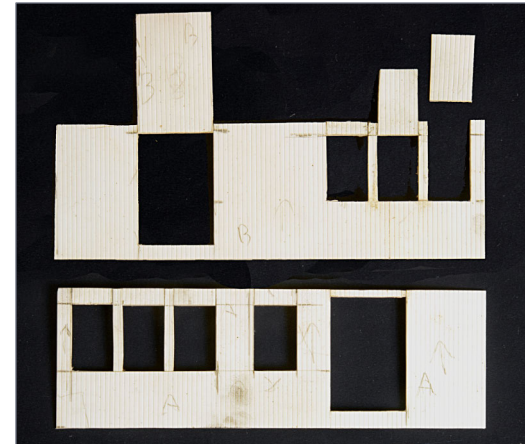
Competition from the Nantasket Electric and Plymouth & Brocton Street Railways grew stiff just after the turn of the century. The end of World War One brought the construction of US Highway 3 and many more automobiles with it.

The M&OC's small passenger fleet was carrying much less LCL freight and even fewer people than ever before. Management could never justify the cost of refurbishing its aging passenger cars, but the ICC required the railroad to maintain passenger service.

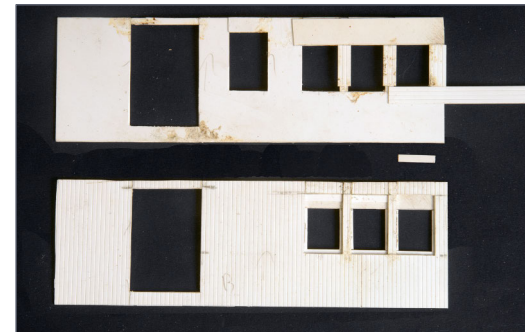
The railroad addressed this problem by rebuilding five cabooses into a configuration like the western style "Drover's Caboose" which combined the functions of a passenger and baggage car with those of a caboose.

The five cars remained in service until the Hurricane of '39 severed the route at the North River. One caboose lasted long enough to operate on the Braintree end until the end of World War Two.

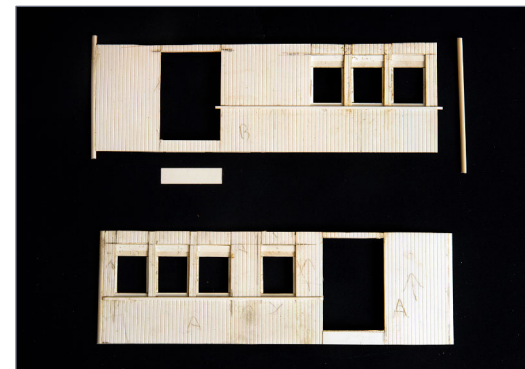
Until I get around to building passenger cars for my On30 version of the M&OC, a drover's caboose will provide a suitable alternative for the end of my train. My caboose is a composite of several designs from old magazines. Let's see how I did it. ☑



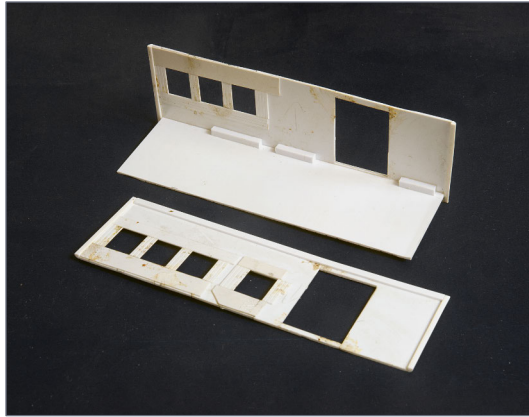
opening proved easy using John Nerich's "snap and glue" technique. This cuts the piece out completely, then glues the necessary part back in place.



2. I fashioned the window sash from 0.020" strips (Evergreen 120). Styrene is strong enough to allow materials near prototype thickness.

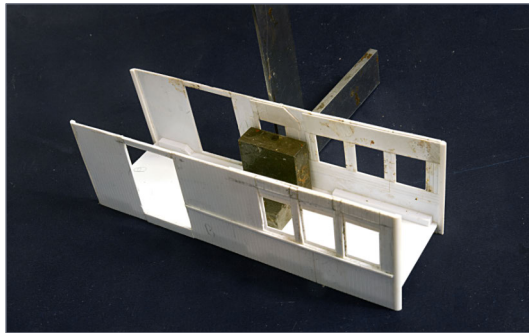


3. I added a styrene window sill and added corners using 0.060" quarter-round stock (Evergreen 248). I used .020" sheet for a baggage door kick plate (Evergreen 9020).

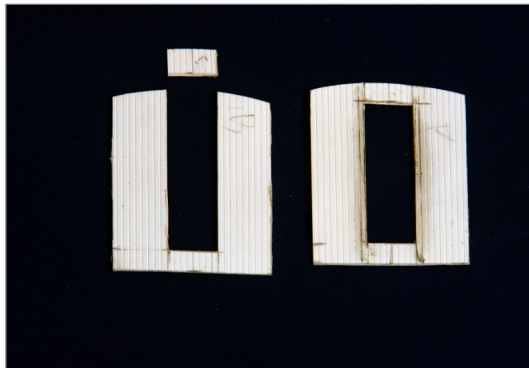


4. I assembled the sides to a floor of 0.040" sheet styrene (Evergreen 4250), using 0.125" square strips for bracing (Evergreen 186). I cut the floor a bit shorter than the walls so it would fit between the thicker corner posts and used strips of styrene to elevate the bottom of the floor 0.125" up from the base of the wall. The

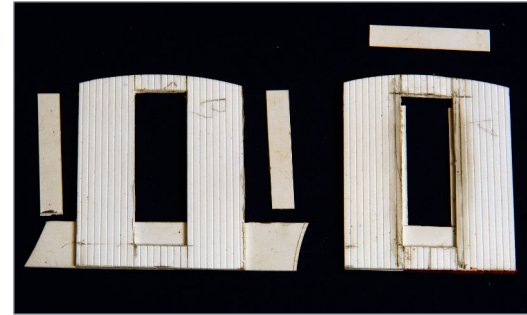
0.25" V-grooves on the underside of the floor will represent scale 12" floorboards on the bottom of the car.



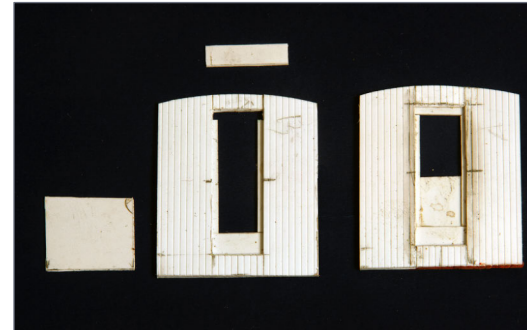
5. Using squares ensured a right-angle for the walls. I used MEK (Methyl Ethyl Ketone) from the paint store for glue. I allowed plenty of time for the glue to harden, since this was a major structural joint.



6. I built the ends in much the same way as the sides. I cut the rounded roof using an Olfa circle cutter. In most cases, the styrene snaps apart after a few score lines.



7. I built up the door from 0.020" sheet styrene. I cut the bottom piece to span the entire wall so that the wall's thickness matched the quarter-round and the floor.



8. I framed the sides and top of the door, and added a recessed panel on the bottom.



9. The final details for the door.



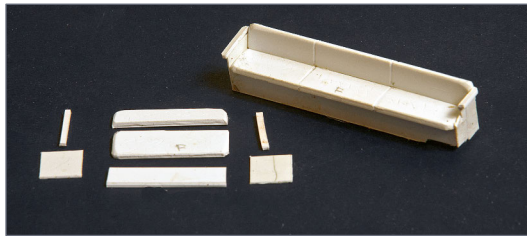
10. The ends are in place. The basic car body is assembled, but the fun has just begun.





11. I used four strips of 0.125" square stock to form the floor joists. With the V-grooved styrene of the floor and the timbers, this underframe has great detailing potential for brake lines. I decided my car would be one of those narrow-gauge cars

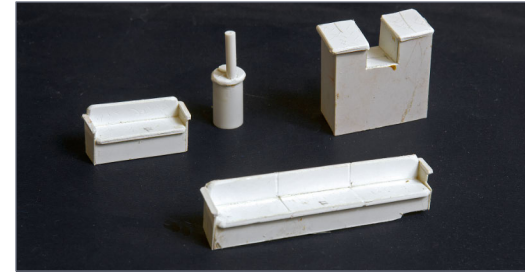
that never had air brakes installed. This might cost a few contest points, but it saves considerable work that is barely visible in operation.



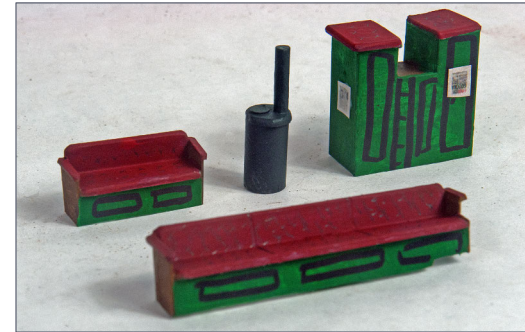
12. I fashioned the passenger seats from styrene. They needed very little fine detail. The prototype had long bench seats rather than the conventional 2x2 seating of most passenger cars.



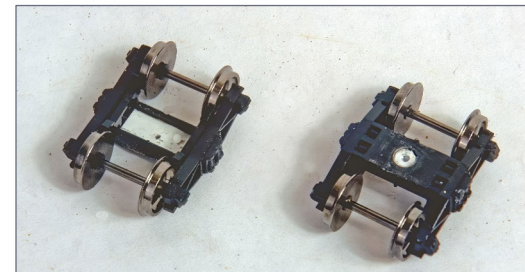
13. I made the crew storage lockers and cupola seats from styrene. On this narrow car, only one side had this feature.



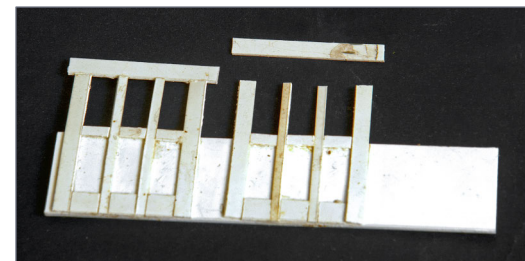
14. Finished interior details. I built the parts with minimal detail – the “potbelly” stove is an approximation – but they are more than adequate for viewing through the windows.



15. The interior assemblies came to life when I painted them.

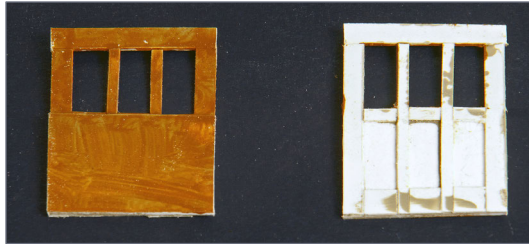


16. The Bachmann long arch bar trucks had an unusual mounting collar arrangement. I filled in the oversize hole with a plug I punched from styrene and redrilled it to clear a standard 2-56 screw. I installed a flat piece of 0.020" styrene into the underside of the frame (left) to prevent the plug falling out.

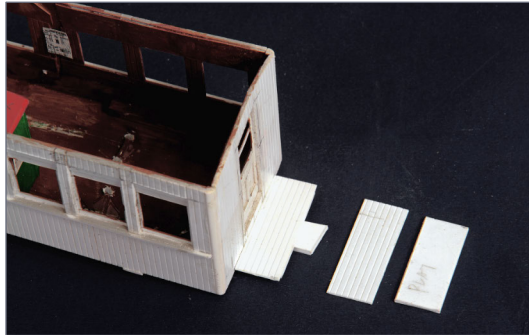


17. I assembled the baggage doors using 0.020"-thick strips cut from sheet styrene over the lower door panel. A NWSL Chopper made it easy to cut all parts to the correct length.

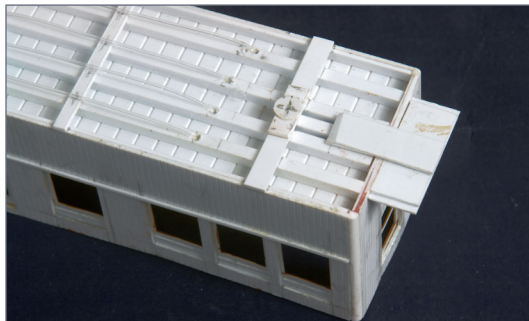




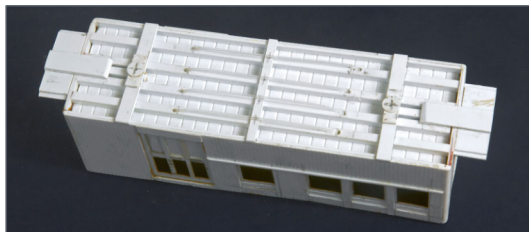
18. I painted the baggage door on the inside before glazing.



19. I built the end platform from 0.040" styrene overlaid with 0.020" V-groove styrene for finish. I glued these to the coupler drawbar support.



20. This is the end platform from the underside. I trimmed the drawbar support flush with the platform. The drawbar support will also support the end sill.



21. I made truss rods from 0.020" fishing line threaded through holes in the floor as tightly as possible. When the queen posts – in this case a single king post

– are in place, they will tighten the slack and make the rods lie straight.



22. I threaded the single strand of fishing line through holes in the car floor to make the trusses, and tied it tight on the inside of the car.



23. I used weights and interior details to obscure the fishing line inside the car. I will hide the weights in plain sight by painting them to look like baggage.

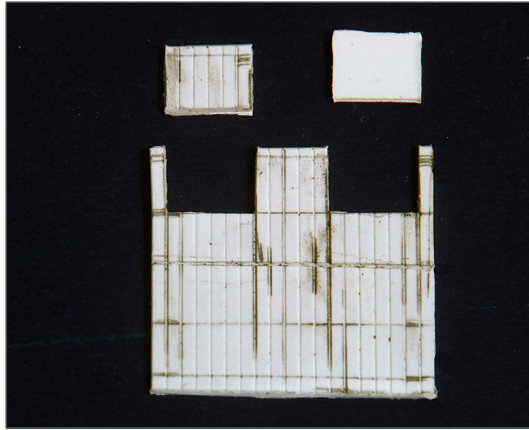


24. I made round roof supports from 0.40" V-groove styrene and rolled the material to form the roof. The spacing of the grooves is not important, but they help in rolling the curve. I used spring clothespins to hold the curve as the solvent cured.

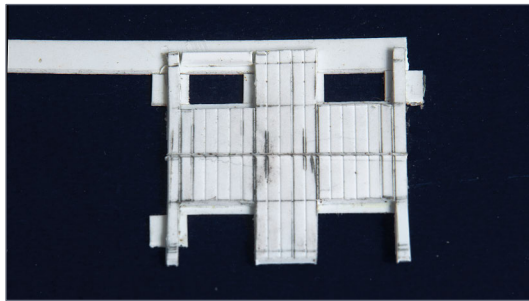


25. I drilled the end sill for the railings and the truss rod ends (NBW castings). There is no real pressure on this piece. Butt-gluing the sill to the coupler mounting was a strong enough joint.

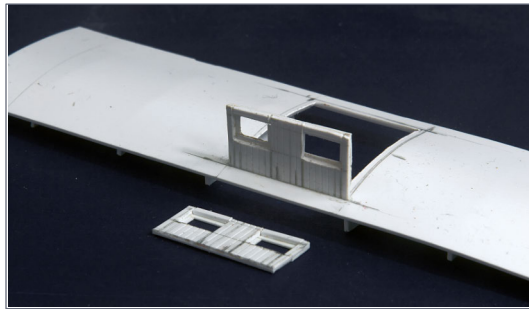




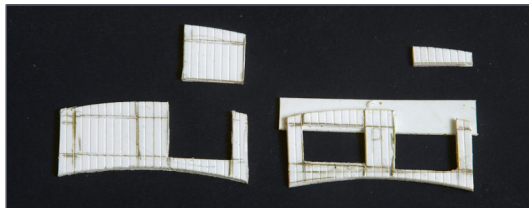
26. I built the cupola using the same snap-and-glue methods as for the car body.



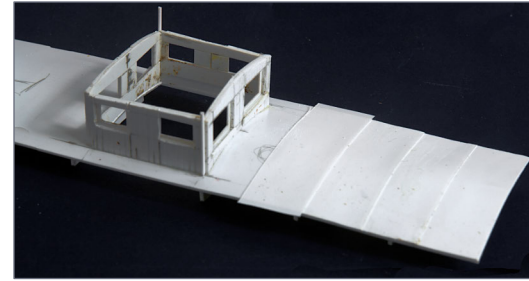
27. I cut two pieces the same to ensure accuracy while framing the cupola windows.



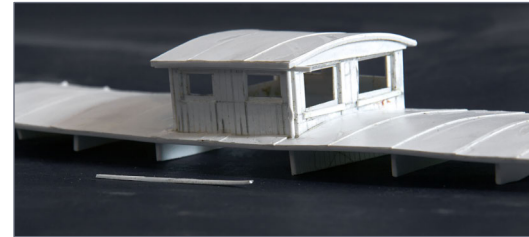
28. I glued the cupola sides to the roof.



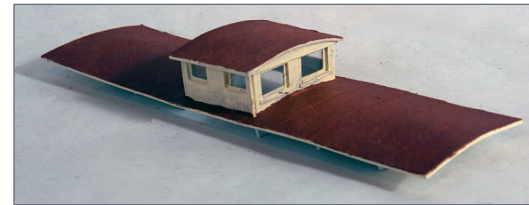
29. I cut and framed cupola ends and the windows. The window sashes are cut from sheet styrene.



30. I glued the cupola in place and began sheathing the roof with .005" sheet styrene strips.



31. The completed roof. I used strip styrene to create a standing seam.



32. I painted the roof dark red oxide to give a bit of color to the car and help reinforce a family resemblance with the locomotives.



33. I glued the roof to the car body and used rubber bands to hold it while it was setting.



34. I used the Olfa circle cutter to cut the end fascia from 0.020" styrene.





35. I made the side fascia boards from 0.020" x 0.100" strip (Evergreen 125). I carefully cut notches for the baggage door and the ends. I left the ends oversize and will cut

them flush with the end trim when I install that.

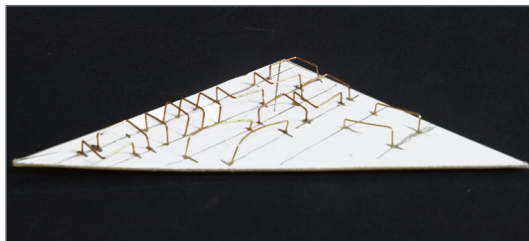


36. I made the end trim from 0.100" square strip (Evergreen 175). Although 0.100" was much too thick, it allowed me to curve the piece to match the roof easily, and clamp it with a clothespin. This is not

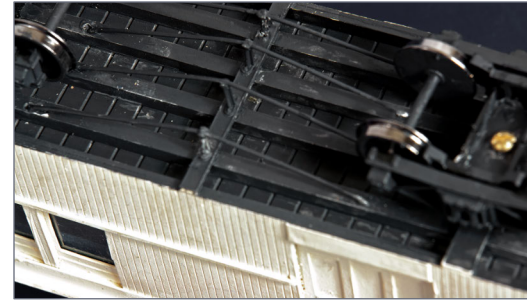
a good trick for a contest model, but it's something few people are likely to see.



37. The finished car body, ready for hardware, which is usually the most tedious part of the project.



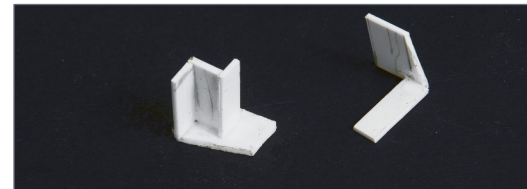
38. I bent the grab irons from 0.019" brass wire using a temporary jig. In this photo, I have lined them up on a piece of cardstock for painting.



39. I stretched the truss rods onto the king post for a snug fit. I did this late in the project to avoid damaging this detail while working on other parts.



40. Templates for bending the end grab irons come in handy as a locator for the mounting holes.

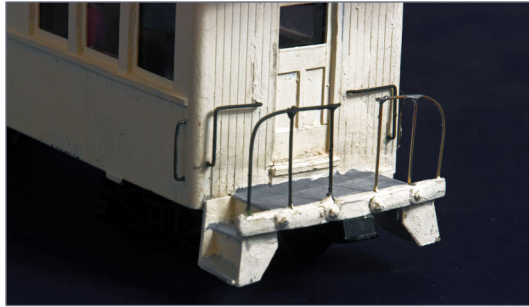


41. I built the end steps from styrene strips.



42. The steps glued in place.





43. I drilled holes for the platform railings before mounting the end sill to make the work easier. I used NBW castings to simulate the ends of the truss rods.



44. Finally, I made running board brackets from strip styrene, which I glued in place before trimming. Note the window under the cupola. The crew storage lockers and seats are on the other side of the caboose,

allowing for an extra window on this side.



45. I masked the window glazing to protect it from decal surface sprays. I used Testors Glosscote to give the model a smooth finish to match the sheen of the decals. The cupola seats and crew lockers are on this side

of the caboose, so there is no window under the cupola.



46. I drew my decals using CorelDraw 2019 software, and printed them on Microscale clear Thinfilm decal paper. Once the decals had dried, I used Walther's Solvaset to help the decals conform to the V-

grooves to give it a painted look. I followed this with several applications of Testors Dullcote.



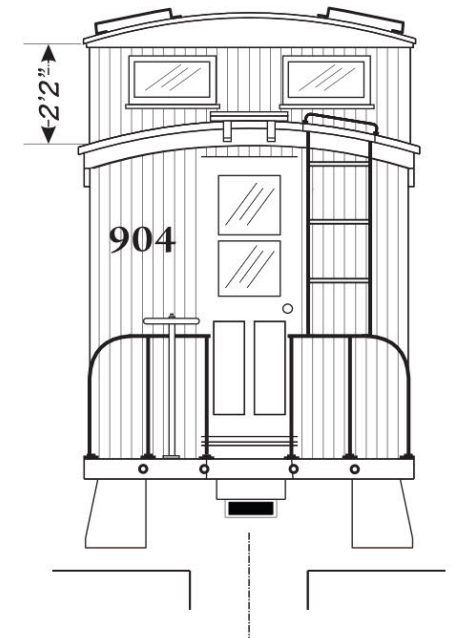
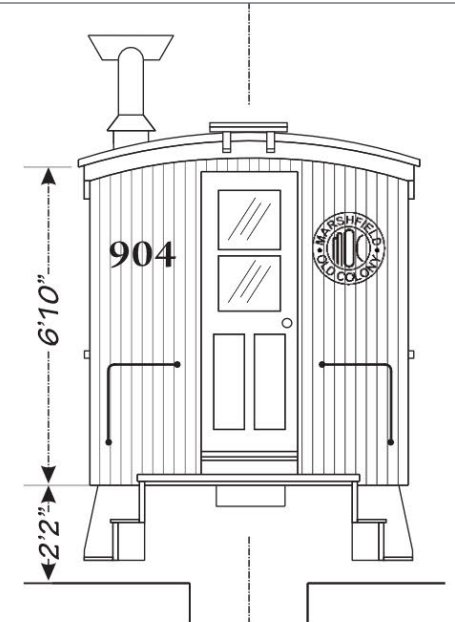
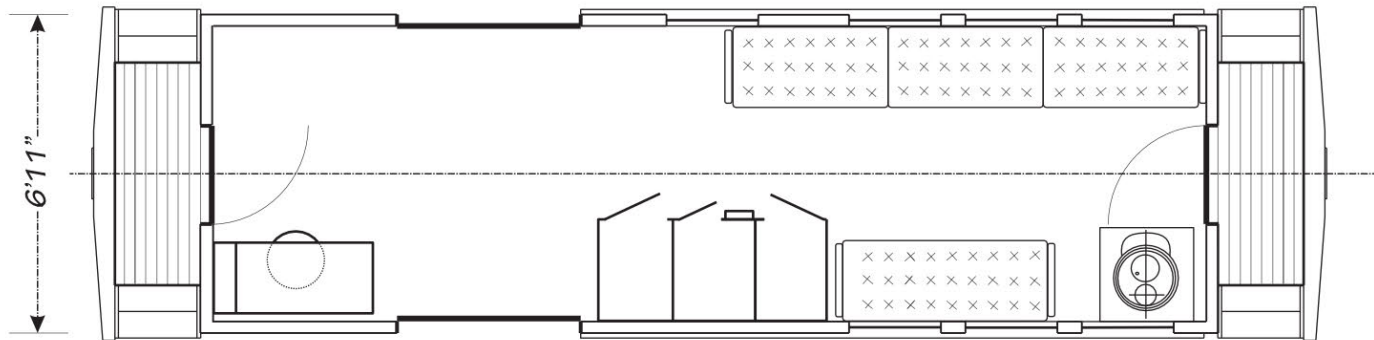
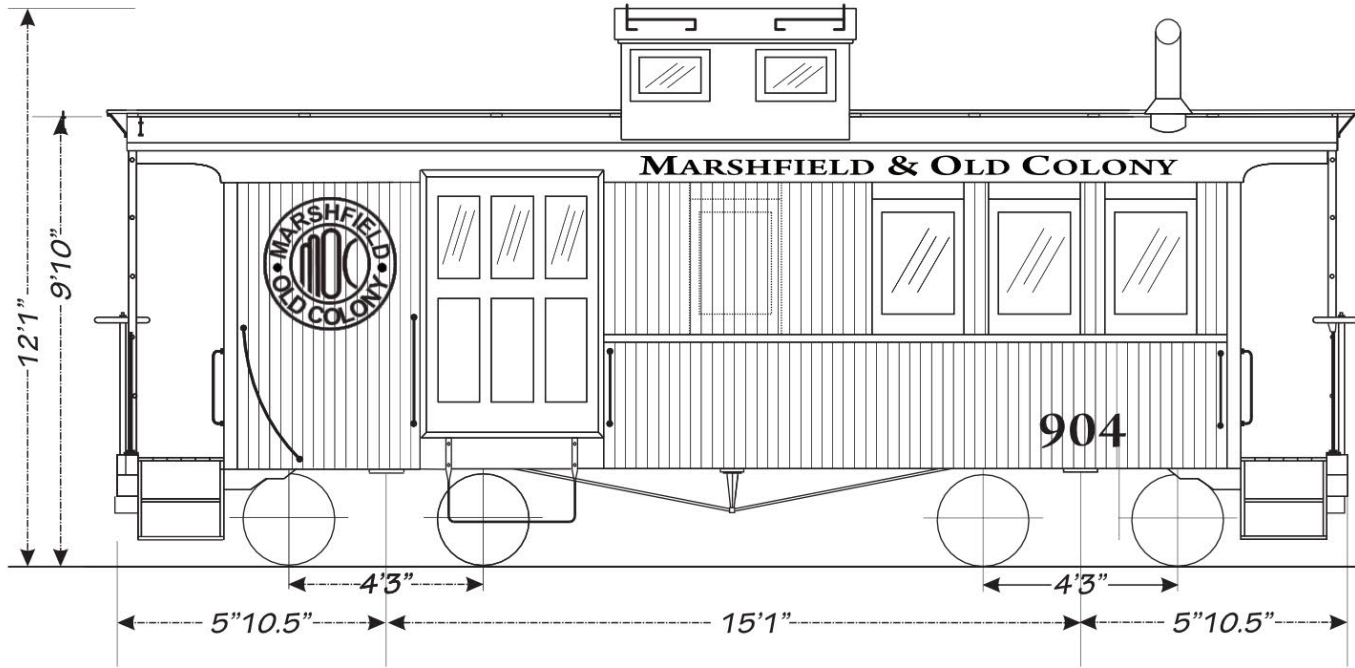
47. The finished caboose from the crew locker side.



48. The other side of the completed car. The passageway and luggage storage area permits a fourth window on this side.

49. (next page) Scale drawings of this caboose, drawn by me. →

★★★★★
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Marshfield & Old Colony Caboose
Michael Tylick

DROVER'S CABOOSE | 19



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50. Decal master drawings made by me.

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51. After a little weathering, I put the caboose on the layout. Here, we see it parked in front of the Parker and Tremont Nail Company. ☑



RATE THIS ARTICLE

MICHAEL TYLICK, MMR



Michael has been fooling with electric trains for as long as he can remember. Never one to commit to a

single large project, he has instead built a number of small layouts of various types and in various scales over the years. A retired inner-city art teacher, Mike has been a long-time contributor to many publications.

Railroad interests are leaning toward prototype rail and architectural photography. Much of his hobby time is now spent employed as a custom builder specializing in railroad structures and rolling stock.

Michael now lives in eastern Massachusetts and has an On30 railroad. He was awarded the honor of being named Master Model Railroader #523. ■



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Scratch-building a small miner's shack

1. Kris Blackmarr's finished Miner's Shack.

Model Railroad Hobbyist | August 2021



KRIS BLACKMARR EXPLORES PAINTING AND WEATHERING TECHNIQUES ON A PROJECT BASED ON **PAT HARRIMAN'S** *EARLY WOOD FRAME AND STONE STRUCTURES* BOOK IN THE **MRH** STORE...

I RECENTLY DID AN HO SCALE SCRATCHBUILDING PROJECT BASED ON plans for the "Small Miner's Shack" from Pat Harriman's book *Early Wood Frame and Stone Structures*. I wanted to develop my wood weathering skills and stone carving/coloring techniques, using some new techniques, and honing others to fit my modeling style.

SCRATCHBUILDING A MINER'S SHACK | 2

In this article, I describe the effects I am aiming for and discuss my techniques, including the tools and processes I used, and my analysis of the results. My aim is to include enough details that others can reproduce the effects. Because I did this project as a learning exercise, I welcome any feedback in this article's comment section.

MY BUILD GOALS

I want to recreate the raw, old wood colors of Chuck Doan's 1:16 scale Fordson Tractor Diorama in HO scale [5]. Since a lot



J. Fugate

A BETTER ALTERNATIVE TO WOOD GLUE

The old standby for cardstock and stripwood modeling has been white glue and/or yellow glue. Both are a form of what the folks in Europe call PVA, or polyvinyl acetate glue.

I recently discovered Deluxe Materials' Rocket Card glue as a PVA glue alternative for this kind of modeling. Full disclosure: Deluxe Materials is an MRH advertiser, but as a modeler, I am most impressed with Rocket Card glue for my own cardstock and stripwood modeling projects.

Instead of waiting for the white or yellow PVA glue to set up, Rocket Card glue is an instant superglue for cardstock and stripwood. Moments after I apply the Rocket Card and position the pieces together, the glue has set, and I can move on to the next step in the construction process.

I tend to use less Rocket Card than I do PVA for the same joint, so a bottle of Rocket Card glue should last longer than the same sized bottle of PVA. In the places the author mentions yellow PVA in this article, consider using Deluxe Materials' Rocket Card glue instead.



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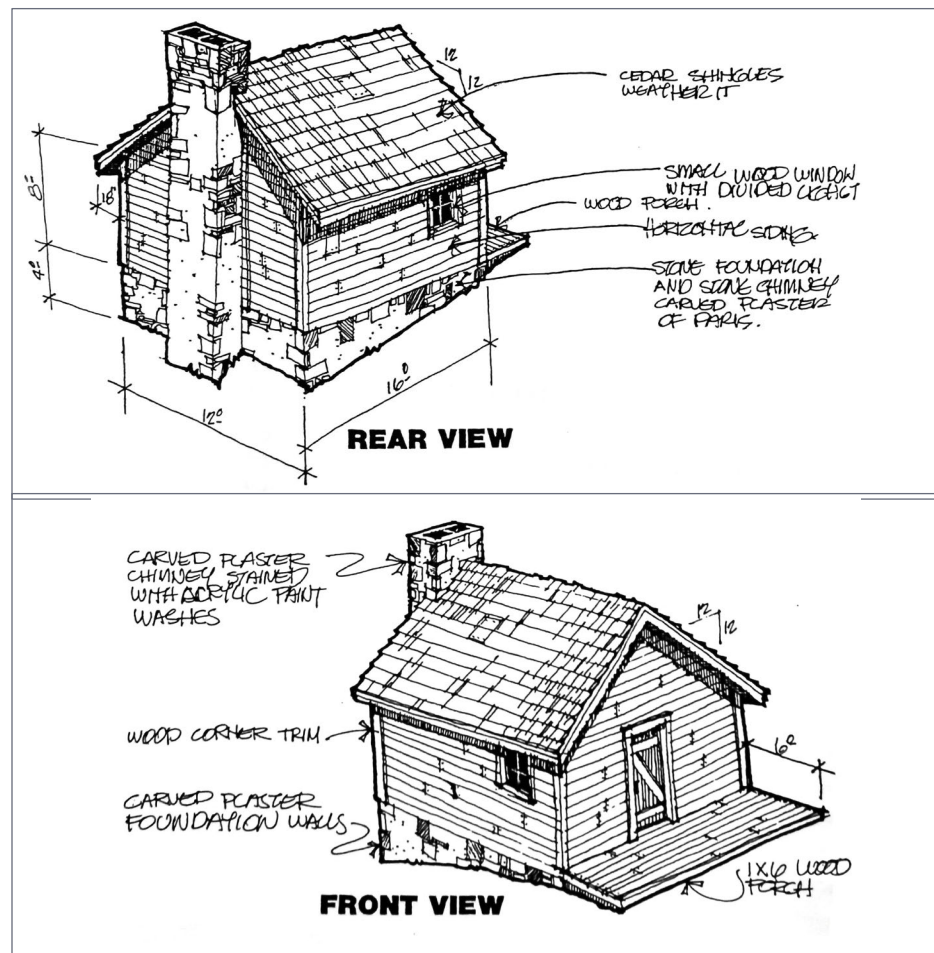
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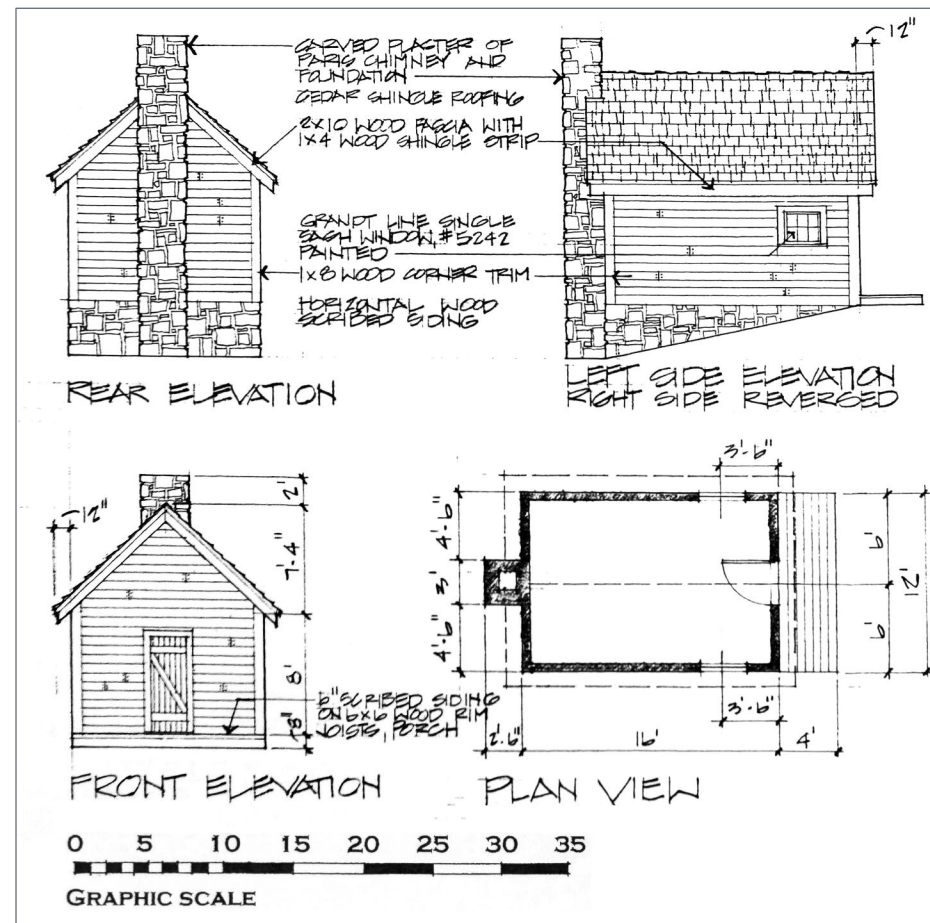
of the detail may not show up well in HO scale, I'm only looking at finding a variation of the base color weathering technique Chuck used.



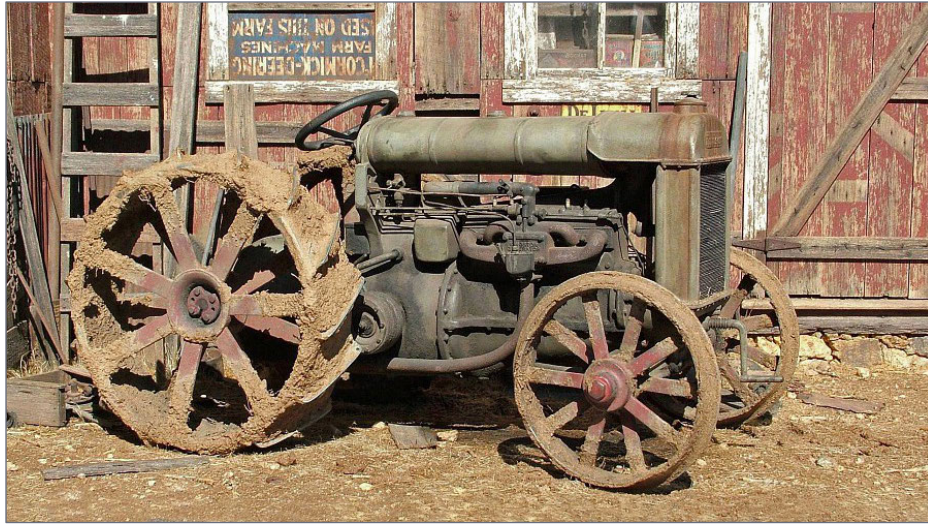
2, 3. "Miner's Shack" elevation drawings from *Early Wood Frame and Stone Structures*, available in the *MRH* store. Architect and modeler Pat Harriman has included 44 of his architecturally correct structure plans, small to large, specifically for model railroaders.

MY BUILD GOALS

I also want to test techniques for achieving the look of peeling paint on wood. Others online have described a resistance technique involving mineral spirits and acrylic paint that I would like to try.



4. "Miner's Shack" plans from the from *Early Wood Frame and Stone Structures*.



5. Chuck Doan's 1/16 scale Fordson Tractor diorama – Chuck Doan, photo (images15.fotki.com/v1669/photos/7/777399/2910037/1DSCF4073copydark1-vi.jpg)

I want to develop my stone carving and coloring techniques as well. I will use Plaster of Paris (POP) to create a stone chimney and foundation for the shack. I want to find a way to create or carve a hole in the top of the casting without damaging it.

I want to color the casting to fit into the Colorado rocky mountain hues found in the Clear Creek, Colorado area [6].

For the construction of the shack itself, I want to use HO scale lumber board-by-board siding over a matboard template. Instead of the horizontal boards used in Pat's drawings, I will go with the vertical boards of Chuck's diorama.

I want to shingle the shack's roof with cedar shakes. For added effect, I want to board-up one window of the shack using scale lumber or plywood.

BUILDING THE BASIC MODEL SHELL

I used an 8x10 sheet of 4-ply matboard to build the basic shell of the model (Crescent Manufacturing # 948). I killed the bright white color of matboard with two applications of my alcohol-India ink wash. For the alcohol-India ink wash, I added 2 teaspoons of India ink to 8 oz. of 70% isopropyl alcohol.

I used HO scale feet and inches for my measurements, as per the drawings [2, 3, 4]. I cut one long strip of mat board 16' wide for easy management. I measured and cut two 16' pieces and two 12' pieces from the strip and squared the cut edges using my NWSL True Sander.

I cut the two 16' pieces in half to create four 8x16 side wall pieces and squared the edges. Two of the wall pieces would be the sides of my shack, the other two were spares. I marked the tops of the walls.

I narrowed the two end pieces a scale 6" to compensate for the thickness of the side walls and squared my cuts. I marked the end walls at 8' height using the side walls as a template. Then I drew and cut the peak portion of the end walls.



6. These stones lining the banks of Clear Creek illustrate the hues I want to re-create for my projects – Jefferson County, CO website photo (www.jeffco.us/1196/Clear-Creek-Canyon-Park).



7. Here is a finished and weather-beaten wall. The peeling red paint exposes the silver-gray wood underneath. Look carefully and you can see rows of nails going horizontally across the wall, as well as pick out some knot holes in a few boards.

Finally, with all four walls cut, I located and cut out the door and window openings for the cabin. The wall templates were complete and ready for siding.

COLORING AND WEATHERING THE SIDING

I built the siding board-by-board using HO scale 2x8 and 3x8 stripwood that I affixed to the model with yellow glue. Because I liked the vertical siding of Chuck Doan's diorama, I decided to replicate it instead of the horizontal siding of Pat Harriman's drawings. Before I applied the siding, I distressed it and colored it to give it a faded, weather-beaten look [7].

I stained the siding stripwood with eight applications of Silverwood stain (Builders In Scale 106), allowing drying time between each application. Once the final coat was dry, I

roughed up the grain of the stripwood using a file card brush and sanded it lightly with a 3M Microfine green sanding pad.

With the initial treatment complete, I began working on color variance. I selected a quarter of the stripwood, made two applications of Silverwood using a ball brush, and sanded it with the microfine green pad when dry.

I added another quarter of the stripwood and did another two applications of Silverwood. With the applications complete, I roughed-up the wood again with the file card and sanded it with the microfine green pad.

I used a hot soldering iron needle to add a few knot holes, working sparingly. Too many knot holes would make the boards look unrealistically odd. After another application of Silverwood, I treated the knot holes with a wash of alcohol and Noodler's Kiowa Pecan Ink.

I sanded the wood with my green pad one more time after creating the knot holes. I did two more applications of Silverwood using the small brush. I then allowed the wood to dry before proceeding with the painting.

I brush-painted the dried stripwood with odorless mineral spirits, then with lightly thinned Barn Red acrylic paint from Delta Ceramcoat in a resistance technique. The idea was that applying mineral spirits would cause the surface to resist the acrylic paint, since the two mediums are not compatible.

After 2-3 minutes of drying time, I applied blue painters' tape to the stripwood using heavy pressure. I then lifted it from the stripwood, pulling off uneven bits of paint with it to simulate peeling.

I then flooded the stripwood with mineral spirits, using a #4 round brush and allowed three minutes for the mineral spirits to dry. I stippled the acrylic red paint mixture into the stripwood. After 2-3 minutes drying time, I again used the painters' tape to remove patches of paint.



8. Here you can see the stained and weather-beaten stripwood boards I'm gluing on top of the mat board.

APPLYING SIDING TO THE MATBOARD WALLS

Finally, with the wood stripwood weathered and painted to my satisfaction, I was ready to apply it to the matboard walls I had cut out. I used yellow glue and worked one board at a time, giving an 8' layer of siding to each of the four walls [8].

I added individual nail holes to the boards with a sharp needle scribe – a sewing needle in a pin vise would also work. I added a light India Ink wash over the wall face and edges.

I used an emery board to even up the board top edges, then distressed them with a wire brush. I applied a light India Ink wash to color the top board edges.

I still needed to do the peak area of the end walls. Starting at the center of the end all peak area, I applied siding using the bottom boards as a placement guide [9].

Before applying the individual siding boards, I treated the bottom edges with the light India Ink solution to cut colors, simply dipping them into some of the solution I had in the lid of the alcohol container.

Once I had applied the siding to the peak areas, I used the matboard edges as a guide to cut off the excess boards. I then sanded the edges with my emery board and colored them with the number 2 stain in this PDF: www.rustystumps.com/RSSMDownloads/Staining%20Stripwood.pdf.

ADDING DOORS AND WINDOWS

I roughed up the grain of some 1x4 and 1x6 stripwood for the door frame using the file card and sanded it with the green pad. I colored the wood with a Prismacolor French Grey 40% broad tip marker and sanded it again. I followed this same procedure to prime stripwood for the frame of the boarded window.

Instead of white trim, I opted for a faded blue, which I mixed using Vallejo Flat Blue #70962 and Vallejo Orange-Red #70910 in a ratio of 8:1. I dry-brush stippled the blue paint on with a #2 brush, aiming for a streaky, uneven application [10].

I used 1x6 stripwood to frame the door opening, first using three pieces to frame along the inside edge of the door opening, and then three more along the outside wall. I colored the cut ends of all boards with India Ink wash.



9. I applied the boards in the eaves end area, starting in the middle and working out.



K. Blackmarr

POST-PROJECT THOUGHTS: WOOD SIDING

After doing this project, here's what worked well and what did not work so well.

The peeling paint tape technique provided a "worn" paint effect but did not achieve the *peeling* paint effect I desired. Next time, I might try using stronger tack tape and possibly leaving a bit more drying time for the paint before applying tape.

The Silverwood base coloring lacks brown and orange-brown hues. I need to use pastel pencils in ocher and sienna hues to draw in color accents prior to the final two Silverwood applications.

I need to add some heavy tear graining around the oversize knot holes.

I like the effect of multiple applications of Silverwood. Six to eight applications may seem excessive, but it provided a good base color with natural variance in the gray tones. The color hues looked much more effective than with just two to three Silverwood applications.

Lightly sanding after every two to three applications of Silverwood seemed important in the final appearance of the coloring. Without the sanding, the final colors become too dark and muddled.

The nail holes look subtle, not overdone, and appear effective for a more detailed "contest build." But they're probably overkill for typical HO layout viewing since they can't be seen.

My choice of acrylic craft Barn Red turned out way too dark. It makes the structure a shadow when viewed under normal layout lighting. Ceramcoat Opaque Red #2507 might work better to get the preferred red hue.

For the door itself, I cut 1x4 stripwood to fit the door opening and used ¼" double-sided tape across the door opening on the inside matboard wall to align the 1x4s flush with the inside of the cabin and hold them in place for gluing. I cut the Z brace pieces from 1x6 stripwood and glued them into place on the door.

I wanted the frame of the boarded window to match the siding, with only a hint of blue paint that had long since worn off. Working in drops, I mixed a 2:4:1 ratio of water, Delta CeramCoat Barn Red, and Vallejo Pale Grey-Blue #70907. I stippled the paint on using a dry-brush method [11].

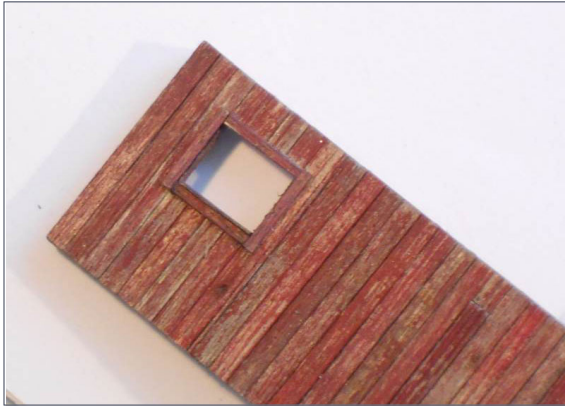
Once the paint dried, I framed the window using the same technique I had used for the door frame. I cut a painted 1x8 to size and placed it in the window to serve as a window sill.

I gave some unpainted 1x6 stripwood a heavy wash of Silverwood and cut four pieces to board-up the window. I glued them in place, then put in some nail holes as a finishing touch [12].

For the other window, I used a single window casting from Grandt Line (#5242). I primed the styrene casting with Buff (Vallejo #70976), then painted it using the same blue paint and stipple technique I did for the door. Though the window was styrene, the technique blended it nicely with the other materials, giving it a weathered wood appearance [13].



10. I used stripwood painted a faded blue to construct the door framing and the door.



11. On the one window I plan to board-up, I'm adding window framing to match the siding.



12. The finished boarded up window.

ASSEMBLING THE WALLS

I needed to add some internal bracing to the insides of the walls, both to add strength to the structure and to add gluing surface for the corners. I colored some 8x8 timbers with the French Grey 90% Prismacolor marker.

I cut them to size so that the timbers would follow the perimeter of the side walls' edges but have an 8" inset on either side of the end walls. I glued them to the back sides of the walls to serve as bracing [14].

I glued the walls together using a jig made of magnets (www.kjmagnetics.com), small metal squares, machinist blocks, and 2x2 metal plates. (Joe Fugrate described the process for making these jigs from parts readily available on Amazon (store.mrhmag.com/store/p226/RE2020-10.html-ed)). The jig made a good, square fit as the glue dried [15].

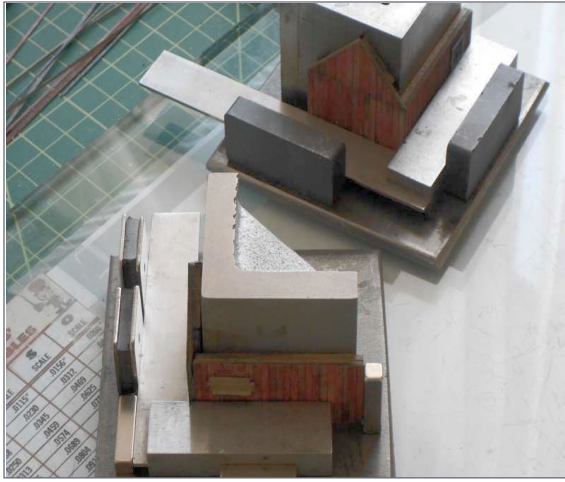
After I had the walls assembled, I added corner strips of 1x8 stripwood colored and stressed to match the fading of the walls.



13. The other window.



14. 8x8 timbers formed the bracing. Note the inset on the sides of the end wall to maintain fit with the side walls.



15. My metal block-and-magnets jig made nice, square corners while gluing.



16. Hand-carved stone on the plaster chimney. Unfortunately, the brushed-in texture does not show up well in the photo.

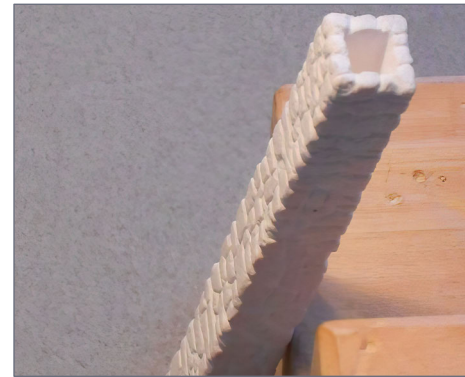
BUILDING THE STONE CHIMNEY AND FOUNDATION

I used POP to form blanks for the scale 3' square chimney and the stone foundation for the shack. I used a single casting for the chimney and three ¼" - thick casting blanks for the foundation walls.

After the plaster blanks had set, I marked them with horizontal pencil lines every half-inch to serve as a guide for hand-carved stone. I carved the stone, working for the look of natural stones. For added texture, I used a stiff wire brush to lightly stipple, then lightly brush the casting in a circular motion [16].

Once I had the chimney carved, I drilled a small hole into the top of the casting ½"-deep to represent the flue. I filed it to make the opening square. In the end, the outer walls of my chimney opening were about 1/16" thick, which made for the realistic appearance I was after [17].

I glued the foundation walls together and applied more POP in the corner seams once the glue was dry. After the plaster set, I sanded and carved the corners to match the existing grout lines and gave the whole foundation another wire-brush treatment. I made sure I supported the corner joints well and proceeded carefully to avoid breaking them [18].



17. The completed chimney flue.



18. The hand-carved plaster foundation consists of three flat walls glued together.



19. This prototype photo served as a reference for my stone coloring efforts.

COLORING THE STONE

With the chimney and foundation assembled, I was ready to begin painting the structure. I wanted to see if I could capture the speckled, textured coloration of rocks found in the Clear Creek area of Colorado [19].

Randy Pepprock from Downtown Deco has a complete how-to on using plaster castings available online (www.downtowndeco.com/site/assemble-paintweather-Hydrocal-structure-kit). I followed his technique of using a base of Krylon Flat White spray paint, followed by paint washes thinned about 75%.

I began with three very light coats of Krylon Flat White to quasi-seal the castings. I made quick passes at about arm's length from the castings to create an "orange-peel" texture on the surface. As it turned out, the orange-peel texture I achieved looked out-of-scale, so I wouldn't repeat this for future projects.

When the spray paint had dried, I applied a wash of Silverwood using a #4 soft round brush in quick, light, circular strokes. This provided a nice, off-white base color for the stone.



20. Variation of colors on the chimney casting.



21. With a smoky-colored flue and soot powder, this chimney looks used.



22. My completed foundation and chimney, with a penny for scale. Note the square stripwood bracing.

When the Silverwood had dried, I applied washes of Delta Ceramcoat Raw Sienna to some of the squarish stones, beginning with a 4:7 ratio of paint to water. I modified the ratio and continued painting similar stones, then added a drop of Americana Burnt Sienna to the mix and continued.

I coated and re-coated at random to maximize variation, modifying the mix to include Burnt umber. Finally, I mixed a Sandstone wash and applied it to the remaining stones. I misted the castings and repeated the process until I had a satisfactory mix of colors [20].

I applied my India Ink wash to the grout lines using a Winsor & Newton Galeria Round-S #1 brush and capillary action. I colored the chimney interior and feathered the crown with Lifecolor Smoke acrylic smoke paint. Soot weathering powder completed the weathered look [21].

I had used yellow glue to assemble my foundation, and all the moisture and motion in painting the foundation made my joints unstable. I resolved this using $\frac{1}{4}$ " square stripwood to create corner braces for the foundation and a cross brace at the open end. I used 5-minute epoxy for the application and will be using epoxy instead of yellow glue for future plaster projects [22].

ROOF CONSTRUCTION AND FINAL ASSEMBLY

I cut out the whole roof in one piece from 14-mil cardstock. I drew shingle placement guidelines, cut a notch for the chimney, and



23. The assembled structure. Only the porch and porch roof remain.

and scored a center line for the peak. I colored the bottom and edges with a French Grey 50% Prismacolor marker.

I placed Rail Scale Models Cedar Shakes (#D5002) along the marked lines. I trimmed the excess, allowing for a 1/16" overhang on the sides.

I cut 2x4 strips for the long sides of the roof, which I colored and distressed to match the sides of the building, using the same processes, and glued them under the long bottom edges of the cardboard roof. I used the same materials and processes to create the eve fascia for the roof.

With the roof completed, I used 5-minute epoxy to attach it to the structure, making sure that the chimney notch sat flush with the structured end wall. I then epoxied the structure to the foundation and the chimney to both, taking care that the chimney casting was plumb – I left one side of the chimney uncarved to aid in this process. Finally, I added the roof fascia to both ends of the building, gluing it flush against the roof cardstock under the shingle overhang [23].

WOOD PORCH AND FINISHING TOUCHES

I used 1x6 stripwood on a 4x6 stripwood frame to create a wood-planked porch. I weathered, distressed, and detailed the stripwood using the same processes described for the walls. I also scored the surface to show foot path wear.

I weathered a piece of 8x8 stripwood and cut it to fit across the open end of the foundation to support the porch. I glued the strip to the foundation with yellow glue, then affixed the porch to the base and structure with 5-minute epoxy.

I prepared the porch roofing and applied the shingles to 14-mil cardstock, using the same methods I used for the main roof. I framed the porch roofing with weathered 4x4s and used



24. The structure with the porch and porch roof added.

★★★★★
RATE THIS ARTICLE



25. The miner's shack with its final details.

weathered 2x4s to form additional porch roof rafters. I glued the porch roof to the structure front with yellow glue and added weathered 4x4s to serve as roof supports [24].

I applied gallery glass liquid leading around the chimney-roof joint to simulate a tar seal. While it was still damp, I dusted it with a medium-gray pastel powder.

I lightly weathered both roofs using various soft pastel powders set with Silverwood and Weather-All that I applied with a small fan brush. I drybrushed the structure with light gray craft acrylic. As a final touch, I dusted finely sifted dirt on the roof areas, and added a figure on the porch.

CONCLUSIONS

I see a real advantage to using several applications of Silverwood with light sanding every two-three applications. That process gives some great silver-toned wood.

I will continue to color-prime stone castings with Silverwood, that works great. I also like the India Ink wash to color mortar lines, but I'm going to discontinue the use of hairspray as a plaster casting fixative. Possibly use artist's pastel fixative instead.

Overall, the structure turned out better than I expected. I did, however, find it difficult to not add more details to the structure. I was forcing myself to "let go" and not super-detailing a structure destined for typical layout aisle-distance viewing rather than the contest room.

I suspect many folks, especially young modelers, may be intimidated by scratchbuilding. Most tend to run from anything using a "board-by-board" construction method. I decided to do this build so that anyone who wants to do the build can start the same day as they are reading the article. Obtaining the plans is



J. Fugate

FINDING STRUCTURE PLANS LIKE THIS

You can find the source of these structure plans here: store.mrhmag.com/apps/search?q=%22wood+frame%22.

This first book has 44 plans in all. These plans are drawn by Architect and model railroader Pat Harriman, MMR. Pat designed these structures deliberately to fit the space constraints of a model railroad, but they're also designed to be architecturally correct as if they were real prototypes.

A PDF download is available from the MRH Store for \$14.99. You can get the hardcopy version (printed on demand by Lulu) for \$29.99. The hardcopy version is high-quality spiral-bound so the plans lay open flat.

There's also a volume 2 with forty more plans, with many of the structures being larger and having more detailed plans.

often the stumbling block to construct a model, but as the plan book is available for purchase or downloading, there is no reason not to get a copy of the book and hit the modeling bench! ☑



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KRIS BLACMARR



Kris has been modeling railroads and related structures for about 50 years. He has always been fascinated by weathering. This interest actually resulted in him being grounded after his parents found a ashtray full of ashes in his room. He just could not convince them that he was using the ashes to weather his models and that he had not taken up smoking (as

he recalled, the magazine article called for cigar ashes however).

He was born and raised in Boulder, Colorado, and had a natural affinity for mountain railroading. He was particularly drawn to narrow gauge, so he model in HOn3 and On3 scales.

He focuses his modeling on dioramas, structure weathering and scenery, and has been a member of the Colorado Springs modular group Slimrails for several years. He has presented multiple clinics on weathering techniques, and has earned awards in NMRA Regional and other contests. ■



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First LOOK column

Model Railroad Hobbyist | August 2021

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RATE THIS ARTICLE

THE MRH STAFF LOOKS AT NORTH AMERICAN RAILCAR'S 50-FOOT PULLMAN STANDARD 5077 SINGLE-DOOR HO BOXCARS ...

NORTH AMERICAN RAILCAR IS KNOWN FOR EMBRACING SOME OF THE more challenging model railroad car projects. NARC sells their cars through the Pacific Western Rail Systems (PWRS) website [www.pwrs.ca].

NARC has released one such project: the 50' Pullman Standard 5077 cubic feet single door box car. Pullman Standard built 4,301 of the 5077 cubic foot plate B box cars with sliding doors between October 1972 and August 1979 for seven original customers.

Throughout its production life, this car had two different body styles, five different side sills, three different roof versions, three different end variants, and eight different door styles as well as some minor road-specific modifications.

North American Railcar is bringing HO modelers many variations of this car: see for yourself in the following pages. ☑

FIRST LOOK: NARC PS 5077 BOXCAR | 2



1. Lot 9602 - PC 168000-168499 10/72



2. Lot 9832 - RBOX 21000-21599 6/76

These two photos represent just the beginning of the variations of this car produced. For a detailed accounting of all the variations made, visit the PWRS website link below.

WEB: www.pwrs.ca/announcements/view.php?ID=11796

LOT 9602 VERSION 1 – PENN CENTRAL



Body version 9602-1 with 12 side posts. *Photo courtesy of Ron Hawkins*

Pullman Standard built 500 of their original 5077 cubic-foot, plate B, single door boxcars at their Bessemer, Alabama plant during October 1972 (Lot 9602) for Penn Central in series PC 168000-168499 (PC class X-75). These cars were delivered in jade green paint with white italicized “Penn Central” to the left of the door and a large, white PC “worm” to the right of the door. Other features on the as-delivered version of Lot 9602 include:

- Type 1 body with 12 side posts (6 on each side of the 10-foot centered door) which includes a Z-post for the first post with the remaining posts being hat-section channels
- L-channel side sill unique to this lot
- Pullman’s proprietary 15-panel “bow-tie” roof
- Pullman’s N4/5 “sine-wave” corrugated ends (with narrow top corrugation)
- Pullman’s embossed panel sliding doors
- Ajax hand brakes
- Type 1 stirrup steps



Lot 9602-1/PC boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Rigid (non-cushioned) underframe
- Horizontal-level brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33” diameter metal wheels
- Kadee #158 semi-scale magnetic couplers
- As-delivered jade green paint with large PC worm logo

This detailed replica of Pullman Standard’s 5077 cubic-foot single door boxcar (Lot 9602) has been carefully researched and designed by North American Railcar. The plastic body shell has accurate details in plastic, wire, and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253932

LOT 9602 VERSION 2 – CONRAIL (YELLOW DOOR)



Body version 9602-2 with 12 side posts. *Photo courtesy of Grant Lowry*

Pullman Standard built 500 of their original 5077 cubic-foot, plate B, single door boxcars at their Bessemer, Alabama plant during October 1972 (Lot 9602) for Penn Central in series PC 168000-168499 (PC class X-75). These cars were later transferred to Conrail and were repainted boxcar brown with a block “Conrail” to the left of the door and a medium Conrail “can opener” to the right of the door. Other features on the as-delivered version of Lot 9602 include:

- Type 1 body with 12 side posts (6 on each side of the 10-foot centered door) which include a Z-post for the first post with the remaining posts being hat-section channels
- L-channel side sill unique to this lot
- Pullman’s proprietary 15-panel “bow-tie” roof
- Pullman’s N4/5 “sine-wave” corrugated ends (with narrow top corrugation)
- RCS replacement 6-panel sliding doors



Lot 9602-2/CR boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Ajax hand brakes
- Type 1 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-level brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33” diameter metal wheels
- Kadee #158 semi-scale magnetic couplers
- Repainted Conrail livery with yellow door

This detailed replica of Pullman Standard’s 5077 cubic-foot single door box car (Lot 9602) has been carefully researched and designed by North American Railcar. The plastic body shell has accurate details in plastic, wire, and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253933

LOT 9602-1 VERSION 4 – CPR (EXTENDED ROOF)



Body version 9602-1 with 12 side posts. *Photo courtesy of Ron Hawkins*

Pullman Standard built 500 of their original 5077 cubic-foot, plate B, single door boxcars at their Bessemer, Alabama plant during October 1972 (Lot 9602) for Penn Central in series PC 168000-168499 (PC class X-75). Some of these cars were later transferred to Canadian Pacific Railway (CP) and were repainted red with their beaver logo and stacked block "Canadian Pacific Railway" to the left of the door. These cars were modified for pulp and paper service by raising the roof, adding a taller (plate C) door; adding vents along the roof and floor lines on both side of the door; increasing the capacity from 70 to 100-tons and replacing the original 70-ton trucks with 100-ton versions. Other features include:

- Type 1 body with 12 side posts (6 on each side of the 10-foot centered door) which include a Z-post for the first post with the remaining posts being hat-section channels
- L-channel side sill unique to this lot
- Pullman's proprietary 15-panel "bow-tie" roof with a roof extension
- Pullman's N4/5 "sine-wave" corrugated ends (with narrow top corrugation and reinforcing plates added between the corrugations)
- Prime replacement 8-panel sliding doors



Lot 9602-1/PC boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Upper vents along the roof line (separate parts)
- Lower vents along the floor line (separate parts)
- Ajax hand brakes
- Type 1 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-level brake gear
- NARCorp low friction 100-ton Barber S-2 trucks with 36" diameter metal wheels
- Kadee #158 semi-scale magnetic couplers
- Bright red livery with Beaver logo

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9602-1) has been carefully researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253752

LOT 9794 VERSION 1 – RAILBOX



Body version 9794-1 with 10 side posts. Photo courtesy of Christopher Palmieri

Lot 9794 was Pullman's second order for their 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant between January and March, 1975. Some 1000 cars were built for American Rail Box Car Company for general service and placed into series RBOX 14000-14999. Lot 9794 differed from Lot 9602 in several ways (different body, different side sill, different ends, different stirrup steps):

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 1 side sill
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's N4/5 "sine-wave" corrugated ends (with narrow top corrugation and vents)
- Pullman's embossed-panel sliding doors



Lot 9794-1/RBOX boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Ellcon-National hand brakes
- Type 2 stirrup steps
- Rigid (non-cushioned) underframe
- Vertical-lever brake gear (hook and eye)
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Kadee #158 semi-scale magnetic couplers
- Original "early" Railbox paint scheme

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9794) has been carefully researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253935

LOT 9831 VERSION 1 – ATSF



Body version 9831-1 with 10 side posts. *Photo courtesy of Ron Hawkins*

Lot 9831 was Pullman's third order for their 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant between August and November, 1975. Some 1500 cars were built for American Rail Box Car Company for general service and placed into series RBOX 15000-16499. In 1983, 676 cars from RBOX 15000-15675 were transferred to SOUTHERN ownership and put into the SOUTHERN 15000-15675 series, with only the reporting marks changed. 386 cars (RBOX 15676-16061) were transferred to ATSF 51336-51712, 218 cars (RBOX 16062-16279) to C&O 400305-400522 and 220 car (RBOX 16280-16499) to BN 249249-249460. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 2 side sill
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's N4/5 "sine-wave" corrugated ends (with narrow top corrugation)



Lot 9831-1/ATSF boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Pullman's embossed-panel sliding doors
- Ellcon-National hand brakes
- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers
- ATSF 1980s circle/cross logo

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9831) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253937

LOT 9831 VERSION 4 – CSXT



Body version 9831-4 with 10 side posts. *Photo courtesy of Bill Gawthrop*

Lot 9831 was Pullman's third order for 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant 8-11/75. Some 1500 cars went to American Rail Box Car Company for general service into series RBOX 15000-16499. In 1983, 676 cars from RBOX 15000-15675 transferred to SOUTHERN ownership into the SOUTHERN 15000-15675 series, with only reporting marks changed, with 386 cars (RBOX 15676-16061) transferred to ATSF as 51336-51712. Another 218 cars (RBOX 16062-16279) went to C&O as 400305-400522 and 220 cars (RBOX 16280-16499) went to BN as 249249-249460. The 218 cars assigned to C&O later went to SBD 141306-141522 and then to CSXT 141306-141522. When shipped the CSXT cars had new doors installed and repainted into the CSX blue and yellow scheme with the large, underlined CSX to the right of the door. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 2 side sill
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's N4/5 "sine-wave" corrugated ends (with narrow top corrugation)



Lot 9831-4/CSXT boxcar. [Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.](#)

- YSD replacement corrugated-panel sliding doors
- Ellcon-National hand brakes
- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers
- Dark blue livery with bold yellow CSX logo

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9831) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253941

GOLDEN TYE KIT CAR VERSION 4 – B&O



Body version GT-4 with 10 side posts. *Photo courtesy of Alan Gaines*

Pickens Railroad purchased a number of kits from both Berwick Forge and Fabricating (BFF) and Pullman Standard to be assembled in Golden Tye's Pickens, SC shops. Between May and July, 1976, Golden Tye (GT) assembled 81 kits and put them into the PICK 55500-55580 series. In 1985, Chessie System took possession of 30 of those 1976- built kit cars, refurbished them and placed them in the B&O 401170-401199 series. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 5 side sill (no jack pads, Golden TYE rivet placement)
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's N4/5 "sine-wave" corrugated ends (with narrow top corrugation)
- Pullman's embossed-panel sliding doors with NRUC logo plate
- Ellcon-National hand brakes



Golden Tye-4/B&O boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- Hennessy "Slide-Well" power-assist door opener with type 3 hand wheel
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers in semi-scale coupler boxes
- Chessie System blue and yellow B&O livery with blank NRUC logo panel on the door and Chessie kitten logo to the right

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9831) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253940

LOT 9832 VERSION 1 – RAILBOX



Body version 9832-1 with 10 side posts. *Photo courtesy of Ric Hamilton*

Lot 9832 was Pullman's fourth order for their 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant between April and June, 1976. 600 cars were built for American Rail Box Car Company for general service and placed into series RBOX 21000-21599 (class XPF11A). In 1983, 360 cars from RBOX 21000-21359 were transferred to Union Pacific ownership and put into the UP 130800-131159 series, while RBOX 21360-21599 (240 cars) were transferred to UP 130400-130637. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 2 side sill
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's 5/5 "sine-wave" corrugated ends
- Pullman's embossed-panel sliding doors



Lot 9832-1/RBOX boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Universal hand brakes
- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Body-mount Micro-Trains couplers
- "Late" Railbox livery (small logos) with black doors

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9832) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253648

LOT 9832 VERSION 2 – MRL (LIONS HEAD)



Body version 9832-2 with 10 side posts. *Photo courtesy of Eric Larson*

Lot 9832 was Pullman's fourth order for their 5077 cubic-foot single door box cars, built at the Bessemer, Alabama plant between April and June, 1976. Some 600 cars were built for American Rail Box Car Company for general service and placed into series RBOX 21000-21599 (class XPF11A). In 1983, 360 cars from RBOX 21000-21359 were transferred to Union Pacific ownership and put into the UP 130800-131159 series, while RBOX 21360-21599 (240 cars) were transferred to UP 130400-130637. In 1997 UP 130800-131151 were transferred to MRL 21457-21599 and to SSAM 41500-41599. During 1998, 55 cars were transferred to MRL 21620-21674 and painted into MRL's blue livery with the large white "Washington Group" logo with the lions head. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 2 side sill
- Pullman's proprietary 15-panel "bow-tie" roof



Lot 9832-2/MRL boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Pullman's 5/5 "sine-wave" corrugated ends
- RCS replacement 6-panel sliding doors
- Universal hand brakes
- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9832) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253945

LOT 9832 VERSION 3 – UP



Body version 9832-3 with 10 side posts. *Photo courtesy of James Kirkman*

Lot 9832 was Pullman's fourth order for their 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant between April and June, 1976. Some 600 cars were built for American Rail Box Car Company for general service and placed into series RBOX 21000-21599 (class XPF11A). In 1983, 360 cars from RBOX 21000-21359 were transferred to Union Pacific ownership and put into the UP 130800-131159 series, while RBOX 21360-21599 (240 cars) were transferred to UP 130400-130637. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 2 side sill
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's 5/5 "sine-wave" corrugated ends
- EZ-Roll replacement 7-panel sliding doors
- Universal hand brakes
- Type 3 stirrup steps



Lot 9832-3/UP boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers
- Mineral red livery with small UP shield

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9832) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253942

LOT 9962 VERSION 1 – NSL



Body version 9962-1 with 10 side posts.

Lot 9962 was Pullman's fifth order for their 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant in September and October, 1977 and April 1978. Some 300 cars were built for The National Railway Utilization Corporation (NRUC) for general service and placed into series NSL 101600-101899. This order was unique to all the other PS 5077 orders in that these cars were equipped with diagonal-panel roofs instead of the typical PS bow-tie roof. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 2 side sill
- Stanray 15-panel "diagonal panel" roof
- Pullman's 5/5 "sine-wave" corrugated ends
- YSD 5/6/6 sliding doors with separate NRUC logo panels
- Hennessey "Slide Well" power-assist door openers
- Ellcon-National hand brakes



Lot 9962-1/NSL boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers
- As delivered St. Lawrence Railroad distinctive red, white & blue National Railway Utilization Corp. livery with logo panel and door opener

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9962) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

WEB: www.pwrs.ca/view_product.php?ProductID=253946

LOT 1059 VERSION 3 – CNW



Body version 1059-3 with 10 side posts. *Photo courtesy of Stephen Borleske*

Lot 1059 was Pullman's seventh and final order for their 5077 cubic-foot single door boxcars, built at the Bessemer, Alabama plant in July and August, 1979. Some 300 cars were built for Chicago and North Western for general service and placed into series CNW 163000-163299. This car represents a car shopped and repainted with black ends, yellow car body with a small red and black "System" logo and a Rail Car Specialties replacement sliding door. Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat-section channels
- Type 3 side sill
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's 5/5 "sine-wave" corrugated ends
- RCS 6-panel replacement sliding doors complete with latches, handles and other fine detail



Lot 1059-3/CNW boxcar. Click this image to view this HO model on a web page and spin it a full 360 degrees to study the details.

- Universal hand brakes
- Type 3 stirrup steps
- Cushioned (15" end-of-car cushioning) underframe
- Vertical-lever brake gear (hook and eye)
- Brand New NARCorp high performance/low friction, super detailed 70-ton ASF Ride Control trucks with 33" diameter metal wheels with spinning bearing caps
- Genuine Kadee #158 semi-scale magnetic couplers
- Repainted yellow CNW livery with "system" logo

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 1059) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal. ■

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Model Railroad Hobbyist | August 2021



Painting an HO scale Preiser figure

The YouTube channel **Wiley's Scale Modeling** (Brett Wiley) has this superb how-to on painting HO scale Preiser figures. These figures include a lot of molded details, but unless you know some tricks, those details can go un-noticed. Brett shows how to paint these figures and make sure those details can be seen.

Watch this 12-minute video and paint your own HO figures like an expert! ☑



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AUGUST NEWS

column

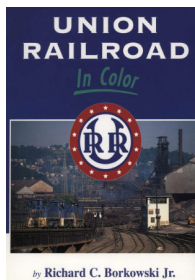
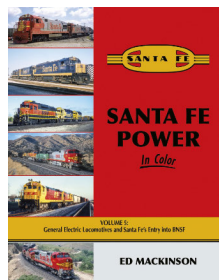


Model Railroad Hobbyist | August 2021

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



NEW PUBLICATIONS



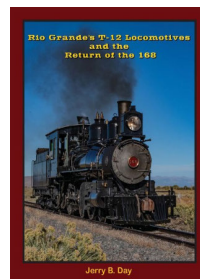
Morning Sun has published Volume 5 of *Santa Fe Power In Color*. Authored by Ed Mackinson, this final volume features General Electric locomotives operated by the great southwestern railroad as it assimilated into the BNSF

system.

A downloadable PDF version of *Union Railroad in Color*, by Richard C. Borkowski, Jr., is available as a reprint from Morning Sun. The seldom-photographed Union Railroad fed the blast furnaces of Pittsburgh, PA with its fleet of EMD switchers and so-called Buffalos. Steel mills and heavy industry get extensive coverage in this book that was originally published a decade ago. For additional information contact a dealer or visit www.morningsunbooks.com.

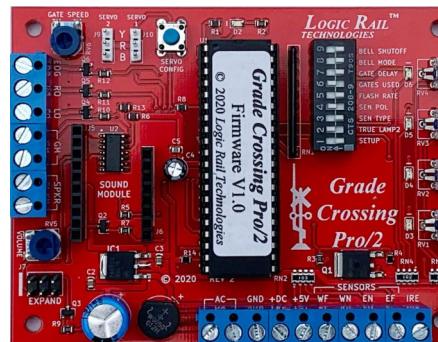
THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS

AUGUST NEW PRODUCTS MULTIPLE SCALES | 2



The **Rio Grande Modeling & Historical Society** has announced the publication of its first book, *The Rio Grande T-12 Locomotive and the Return of the 168* by Jerry Day. The book covers the history of each of the Rio Grande's twelve T-12 4-6-0 narrow gauge passenger locomotives. The book also details the restoration and return to service of No. 168 by the Cumbres & Toltec Scenic RR. A two-page color foldout shows the engine backhead. To purchase visit rgmhs.org/store.

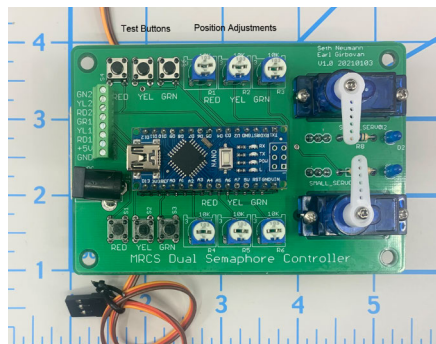
NEW PRODUCTS FOR MULTIPLE SCALES



Logic Rail Technologies has released Grade Crossing Pro/2 (GCP/2), the second generation of its Grade Crossing Pro. The new GCP/2 provides train detection and prototypical control of a grade crossing with outputs for signals and slow motion switch motors or servos.

Logic Rail now offers its own line of grade crossing bell sound modules that plug directly onto the GCP/2 circuit board. Train detection is accomplished using photocells, IR components, or third-party detectors. The sensitivity of IR detection has been improved over the original GCP. For additional information visit www.logicrailtech.com.

Model Railroad Control Systems has released the Dual 3-Position Semaphore Servo Controller. Designed to control train order boards or paired semaphores in ABS/APB territory, the board has two SG90 servos mounted facing each other. The board can be mounted below benchwork and operate either



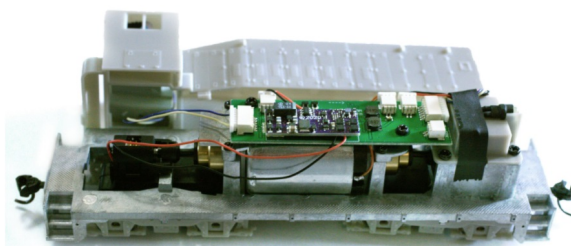
two blades on one mast or two single arm masts. The servos are controlled by an Arduino sketch written by Jon Schmidt and is downloadable and modifiable subject to the Creative Commons license. Due to the power used by the servos, a separate power supply from that used for the

Arduino Nano is recommended. For more information visit www.modelrailroadcontrolsystems.com/dual-semicolon-servo-controller.



Model Train Technology has introduced Pennsylvania 3 aspect color position signals in N, HO, S and O scales. They include a small adapter that allows them to be used with any of Model Train Technology's LED signal

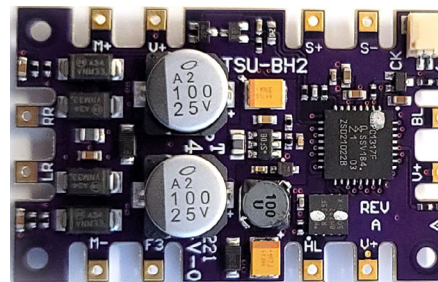
controllers. Photos are of the N scale signals. For more information visit modeltraintechology.com.



SoundTraxx has introduced the TSU-N18, a new, small (25 x 10.5 x 4.1mm) Tsunami2 decoder that is well-suited for N scale and small HO scale models with a

NEXT 18 socket. The Tsunami2 family of digital sound decoders offers a full-featured sound system, Hyperlight

lighting effects, Hyperdrive2 advanced motor control, and a sound DCC decoder, all in a single package. Additional features include 20-plus lighting effects, reactive dynamic digital exhaust, and functioning locomotive and train brakes. Selectable sound effects for specific prime movers include steam, EMD, GE, ALCO, Baldwin, and electric locomotives.



Also new from SoundTraxx is a replacement decoder for Bachmann HO scale Sound Value steam locomotives. Identified as TSU-BH2, the new device offers 8 function outputs. The TSU-BH2, which provides all of the features of

Tsunami2 technology, is specifically designed to replace the board in Bachman HO scale Sound Value steam models 2-6-0, 2-8-0, 4-6-2, 4-8-4 Class J, and 4-8-4 GS4. It is reported to be an easily installed replacement for the Bachmann OEM decoder. For additional information contact a dealer or visit www.soundtraxx.com.

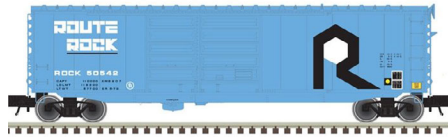
O SCALE PRODUCT NEWS



Atlas O has opened preorders for a new Premier Series model of the EMD GP40 locomotive. With an estimated 2nd Quarter 2022 arrival, the locomotives will include directionally

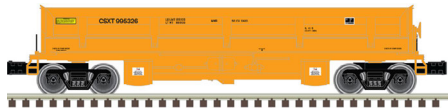
controlled headlights, metal wheels, axles, and gears; die-cast truck sides, pilots, and fuel tank; remote controlled Proto-Couplers, flywheel equipped motors, and spinning roof fans. Control is provided through Proto-Sound 3.0 DCS. The locomotive

will operate on O-31 curves. Road names in this first release are CSX-Bright Future, Penn Central, Port Harbor "1st Responders," Rio Grande, and Union Pacific. Additionally, an Operation Lifesaver 50th Anniversary limited edition paint scheme will be offered, and a portion of the proceeds from that model will be donated to Operation Lifesaver.



Also scheduled for a 2nd Quarter 2022 release is this Master Series 50' PS-1 (Modernized) double-door

boxcar, being offered in the above Rock Island, Chesapeake & Ohio, Detroit & Mackinac, Norfolk & Western, Western Pacific, and undecorated. The models come with prototype appropriate 50-ton Bettendorf or 70-ton roller bearing die-cast trucks, Youngstown or Pullman Standard style doors, and separately applied grab irons, ladders, and brake line details. Two-rail cars come with Kadee-compatible scale couplers and 3-rail cars come with die-cast articulated couplers.



Another new model from Atlas O is this Premier Series operating side dump car. Constructed of die-cast metal,

the model includes an operating dump with shake action, decorative brake wheels, metal wheels and axles, and operating die-cast metal couplers. Roadnames for this 2nd Quarter 2022 release are CSXT (seen above), Amtrak, BNSF, Missouri Pacific, Norfolk & Western, SCL, and Southern Pacific.

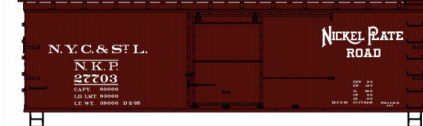
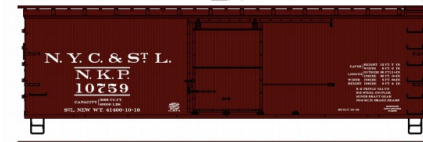


The final Atlas O product on the 2nd Quarter 2022 schedule is this Trainman

52'6" flatcar with load. Based on cars that were built by the Canadian Pacific Railroad around 1953, the cars feature rivet detail and fishbelly sides. Each car comes with a pipe load that

includes tie-downs. Roadnames are the above Union Pacific, British Columbia, Grand Trunk Western, Western Maryland, Burlington Northern, Conrail, and CP Rail. Both 2- and 3-Rail versions will be available. For more information visit a dealer or <http://atlaso.com>.

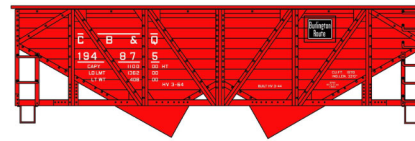
HO SCALE PRODUCT NEWS



New HO scale car kits from **Accurail** include a 3-car set of 36' Nickel Plate boxcars, including one single-sheathed and two double-sheathed cars. The outside bracing of the SS car includes a ladder. Both DS cars have individual grab irons. The models represent prototypes built before WWI.



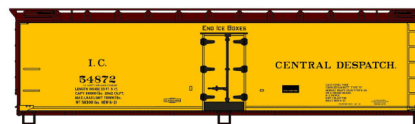
Also new from Accurail is a kit for a Burlington Northern twin-bay ACF Plate C Center Flow covered hopper.



This Chicago Burlington & Quincy twin-bay hopper is based on a prototype built during WWII with wood sides.



The red shield on this Canadian Pacific 40' steel boxcar reads *Newsprint Service Only*.



Completing the list of new HO scale car kits from Accurail is a 40' Illinois Central

Despatch wood reefer built by Pullman in June 1921. All Accurail HO car kits include Accumate couplers and appropriate trucks with Delrin plastic wheelsets. For additional information contact a dealer or visit www accurail.com.



R. Bale

AMD 103 LOCOMOTIVES

GE's Genesis AMD103 is a series of passenger diesel locomotives. Unique among recently manufactured North American passenger locomotives in that it uses a single, monocoque car body, that makes it lighter, more aerodynamic, and more fuel efficient than traditional designs. In 2004, Amtrak began installing bolt-on nose cones on its AMD103s for easy replacement in the event of a grade crossing collision. Until the introduction of the Siemens Charger, the GE's Genesis series were the lowest North American locomotives, which allowed them to be used through the low profile tunnels on the Northeast Corridor.



Genesis AMD103/P42 diesel locomotives. The HO scale model will be offered in five Amtrak commemorative paint schemes.



years as America's Railroad, each with a different design.

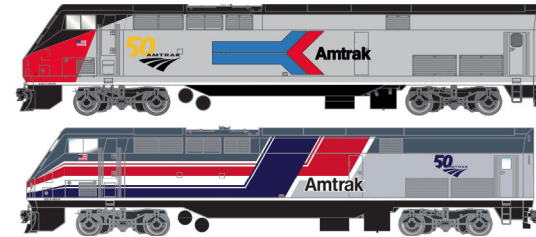


Athearn has announced its production schedule for September 2022. At the top of the list is a run of

Amtrak's five 50th Anniversary P42 locomotives were created to celebrate 50

The lineup includes earlier Phase I and Dash 8 Phase III schemes, a present-day

Phase V version, and two new designs; Midnight Blue and Phase VI.



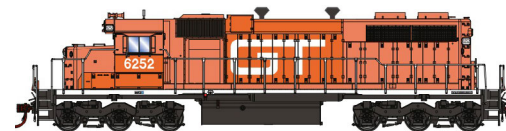
Athearn reports that it will produce the AMD103/P42 from new Genesis tooling. Details include flexible rubber MU and trainline hoses, wire

handrails, photo-etched metal radiator fan grilles, and LED lighting including operating ditch lights and red marker lights. A redesigned diecast frame features the Genesis multi-link drivetrain with a 5-pole skew wound motor with machined flywheels.



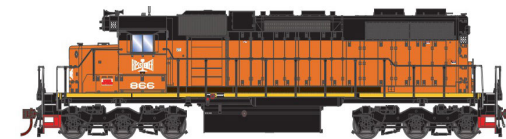
Athearn's September 2022 schedule includes an RTR HO scale version of an SD38 diesel locomotive as

built by EMD between 1967 and 1971. Aside from the 3-axle trucks and a longer frame to accommodate them, the SD38 was identical to the GP38.



The list of road names for Athearn's SD38 includes Reading, Blue Mountain & Northern No. 2003, and an

ex-DTI/GTW unit with front and rear ditch lights and a small front plow.



Two Grand Trunk Western versions will be available including one in the road's familiar red, white and blue scheme, and one in faded Primed for Grime red.



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A Primed for Grime Bessemer & Lake Erie SD38 will have a cab-mounted gyra-light, dynamic brakes and a large paper air filter box.



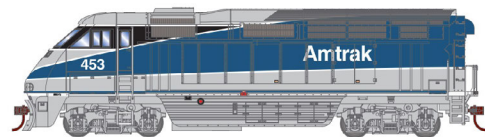
Additional SD38 road names include CCGX-CANDO Rail Services, Conrail, Norfolk Southern (ex-Conrail), and Detroit, Toledo & Ironton in a Primed for Grime scheme.



R. Bale

F59PHI LOCOMOTIVE

The F59PHI diesel locomotive was designed for Amtrak California intercity service and began production in 1994. It is distinguished from the F59PH by its streamlined cab. The enclosed body provides protected walkways for access to the engine room. This arrangement allows routine maintenance while the locomotive is in service. The noteworthy aspect of this locomotive's exterior is the use of composites to present a streamlined appearance. The F59PHI was built originally by EMD, but is now built by the successor company Progress Rail, a division of Caterpillar.



Athearn has included an RTR F59PHI in its September 2022 production schedule. The HO scale ready-to-run model will have LED lighting and see-through radiator and dynamic brake fans.



Decorating schemes will be Amtrak No. 453 and 461, and Amtrak No. 457 with the *Be Track Smart* slogan.



The Amtrak California scheme complements Athearn's Genesis Surfliner cars (see MRH July 2021).



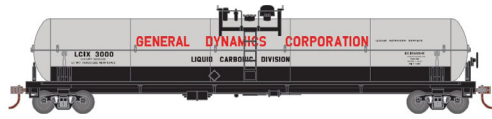
Metra's Heritage program honors various railroads that made Chicago the rail hub of America. Athearn will offer Metra F59PHI locomotives decorated for CNW Heritage, MILW Heritage, and RI Heritage. The paint schemes are preliminary and are not currently applied to real Metra locomotives.



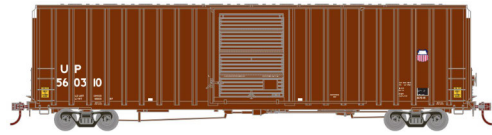
Additional decorating schemes on Athearn's F59PHI locomotives include North Carolina DOT City of Salisbury and City of Asheville. A Southern California Metrolink version will have decorative corrugated panels on each side.



All of the Athearn locomotives mentioned in this report will be available with a Soundtraxx Tsunami2 sound decoder. Analog DC versions will be DCC-ready with Athearn's Quick Plug plug-and-play technology that includes a 21-pin NEM connector.



Freight cars coming from Athearn in 2022 include this RTR 62' tank car. In addition to the General Dynamics car shown here, road names will include American Car & Foundry, General Electric Rail Services, Praxair, San Angelo, General American Marks, and Wisconsin Southern. The HO scale ready-to-run model will have separate wire grab irons and 33" machined metal wheels.



This RTR HO scale version of an FMC 60' hi-cube boxcar with exterior posts is also coming from

Athearn late next year. The model will have separately applied grab irons and 10' Youngstown sliding doors. Road names will be Grand Trunk Western, Milwaukee Road, CP Rail, Western Pacific, and three Union Pacific schemes.



An RTR 60' bulkhead flatcar decorated for Columbia & Cowlitz, CP Rail, Milwaukee Road, Pacific

Great Eastern, Trailer Train, and Western Pacific is included in Athearn's September 2022 production schedule.

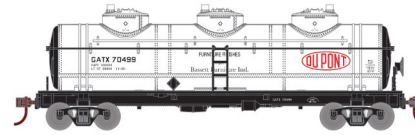


Roundhouse brand models coming from Athearn in September 2022 include this 40' single sheathed boxcar. The economy priced ready-to-run model will ride on appropriate trucks with machined metal wheels. In addition to Seaboard Coast Line, road names will be Canadian Pacific, Ann Arbor, Great Northern, Southern Pacific, and Western Pacific.

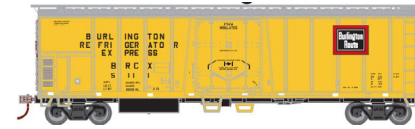
This Roundhouse Eastern-style 4-window caboose will be equipped with Barber-Bettendorf swing motion caboose



trucks with 33" machined metal wheels. Road names on the September 2022 production run will be Chicago & North Western, Conrail, Louisville & Nashville, Penn Central, Reading, and Western Maryland.



Completing the list of freight cars coming from Roundhouse in September 2022 are a 3-dome tank car and a 50' mechanical reefer with exterior posts. The tank car will be available for American Car & Foundry, East Jersey Railroad, DuPont, Ambrose Wine, De Soto Chemical, and Warner Quinian Co.



Road names for the ex-post reefer with plug doors will be Burlington, Burlington Northern, Great Northern, Canadian Pacific, Pacific Fruit Express, and Union Pacific. For additional information contact a dealer or visit www.athearn.com.



Atlas has announced another run of its Master series GP40 locomotive, with several new paint schemes and ditch lights on some roadnames. Ditch light equipped units are CP Rail, CSX, CSX (MOW), Port Harbor, and Susquehanna. Non-ditch light equipped roadnames are Main Central, MKT, Penn Central, Rio Grande, Santa Fe, Union Pacific, and undecorated.



All models feature golden-white LED lighting, a five-pole skewed armature motor with dual flywheels, Accumate knuckle couplers, separately installed scale windshield wipers, metal

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grab irons, fine scale handrails, and multiple unit hoses and trainline hoses, as well as other details.

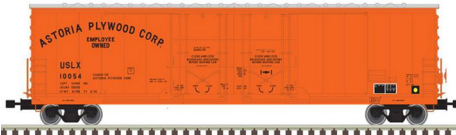


Gold models are equipped with ESU Sound DCC decoders and Silver models are DCC ready with an NMRA 8-pin plug.



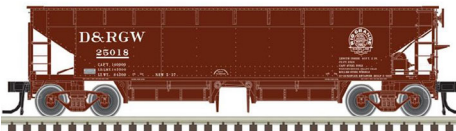
Also from Atlas in the 2nd Quarter of 2022 is a new run of Evans 53' double plug door insulated boxcar.

Primarily used to haul produce, wood, paper products, and canned goods, the prototype is classified as an RBL.



The Master series models are equipped with 70-ton roller bearing trucks, Accumate couplers, and blackened

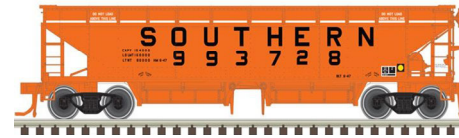
metal wheels. Roadnames in this run are British Columbia, Missouri Pacific, Astoria Plywood (USLX), Burlington Northern, PET Inc. (USLX), Plywood Marketing Associates (USLX), Ralston Purina (as delivered), Simpson Timber (USLX), and undecorated.



The Atlas Master series HO scale 70-ton Hart ballast hopper will be available in new paint schemes and road

numbers. Built by ACF between 1940 and 1953, the car had the ability to dump ballast to either the sides of the rails, the center of the rails, or both simultaneously. The model features a die-cast body, 70-ton friction-bearing trucks, a fully detailed interior, and separately applied grab irons, coupler cut lever, train line hose, and air brake piping detail. The model comes with Accumate couplers.

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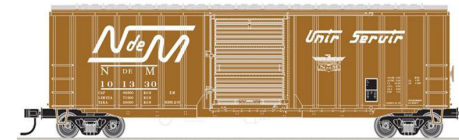


Road names in this run are Conway Scenic, Southern, British Columbia, Canadian National, Erie, Rio Grande, Santa Fe, and undecorated. Southern, British Columbia, Erie, Rio Grande, and Santa Fe will be available in 3-packs.



Atlas Trainman is also releasing a new run of its 50'6" ACF boxcar model.

Road names in this run are the Canadian National seen above, Burlington Northern, CSX, Ferrocarriles Nacionales de Mexico (below), PanAm, Railbox, Union Pacific, and undecorated.



The model has non-terminating corrugated ends, a diagonal panel roof, and a single 10' Youngstown door.

It is equipped with Accumate knuckle couplers.



The final HO scale item in Atlas' 2nd Quarter 2022 schedule is the Trainman HO C&O cupola caboose. An all-steel caboose, it was built for the C&O by Magor in 1937. Similar cabooses were built for the C&O by Magor, St. Louis Car Company, and ACF through 1949.



Roadnames in this run are Alaska (top), Chesapeake & Ohio (above), Chicago & Illinois Midland, Detroit Toledo and Ironton (below), Richmond, Fredericksburg & Potomac; General Electric, Metro North, Black River Western, and undecorated.



The Trainman model includes free rolling metal wheels, Accumate knuckle couplers, clear window inserts, and separately applied side railings. For information on this or other Atlas products, see a dealer or visit shop.atlasrr.com.



R. Bale

SCALE TEST CAR

Loaded freight cars are weighed to verify the amount of cargo it is carrying. The information is used to determine how much the railroad's customer is to be charged for handling the freight.

It is essential that the track scales be accurate. A scale test car, aka test weight car, is a unique maintenance of way car of precisely known weight that is used to calibrate the accuracy of the scales used to weigh loaded railroad cars.

Scale test cars require special handling to prevent damage which might alter their weight. They are reweighed periodically on accurate scales at the railroad's shops. The weight of the scale car can be adjusted by adding or removing small amounts of lead in a compartment accessed through a small door on each side of the car.

Very early scale test cars were small, old railroad cars carrying heavy metal weights. In 1917 the Pennsylvania Railroad, in conjunction with the US Department of Commerce, developed a 13' scale test car with an 80,000 lb cast body riding on four 36" wheels. The design was used by numerous railroads into the 1980s.



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wheels with non-magnetic blackened-brass axles.



A black unlettered model is also available.



Bachmann has included two new road names in the second production run of its HO scale Siemens Charger SC-44 locomotive.



New decorating schemes for the Tier 4 compliant diesel-electric locomotive include ACE-Altamont Corridor Express, and San Diego's North County Transit District Coaster. Popular schemes reissued in this run include Amtrak Cascades, Amtrak Pacific Surfliner, and two Amtrak Midwest locomotives.



Bachmann's SC-44 comes with a TCS WOWSound decoder and a Keep-Alive device for uninterrupted operation. Additional features include directional headlights, interior corridor work



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lights, roof-mounted white and emergency red strobe lights, marker lights, flashing ditch lights.



Bachmann has announced several new HO scale items scheduled for release during the final quarter of

this year. Four old time gondolas will be released in October. The truss-rod era cars will be decorated for Virginia & Truckee, Santa Fe, Eastern & Atlantic, and Union Pacific. The model will be equipped with knuckle couplers and arch bar trucks with machined metal wheelsets.



HO scale versions of Siemens ALC-42 Charger locomotives are scheduled for release in

November. The models will be available decorated in Amtrak's Phase VI scheme as well as in Amtrak's one-off 50th Anniversary scheme applied to locomotive No. 301.



Bachmann plans to release an 85' smooth side dining car in December. Decorating schemes for the HO scale model will be Baltimore



& Ohio, Union Pacific, Pennsylvania Railroad, PRR Fleet of Modernism, and Southern Pacific Daylight. An aluminum, unlettered car will be included in the release. Additional HO scale models coming in December include a 55' steel coil car and a 50' express reefer. For additional information contact a dealer or visit www.bachmanntrains.com.



ExactRail has announced another production run of its highly regarded HO scale Bethlehem 3737/3716

quadruple bay hopper car. The HO scale coal hopper will be available in five paint schemes and as an undecorated kit. Decorating schemes include EWSX-Indianapolis Power & Light schemes in both the 1973 Reddy Kilowatt and the 1975 bold IPALCO schemes.



The 1980 Missouri Pacific scheme will be available in nine road numbers. The unique MP car emblazoned with Union Pacific on its side will be available in just one prototypically correct road number.



Models decorated for INLX-Inland Steel and Soo Line will be available exclusively through TrainLife.com, ExactRail's in-house retail outlet.



Features of the accurately detailed model include wire coupler cut levers, grab irons, brake rods and lever hangers; single door Wine locks, welded top chord gussets, etched-metal slack adjuster, equalized 100-ton ASF Ride Control trucks with machined metal wheelsets, and Kadee #158 couplers. Availability is expected in September. For additional details visit www.exactrail.com.

★★★★★
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R. Bale

PRR DD-1 ELECTRIC LOCOMOTIVE

Beginning in the early 1900s, steam locomotives were prohibited from operating in tunnels under New York City. The Pennsylvania Railroad designed and built the DD-1 electric locomotive in conjunction with the opening of Pennsylvania Station in Manhattan in 1910. The DD-1s shuttled passenger trains between the new Penn Station, a transfer yard in New Jersey, and to the PRRs Sunnyside Yard in Queens.

A total of 66 DD-1s were constructed in 1910-1911 at the Pennsylvania Railroad's Juanita Locomotive Shop in Altoona, PA. They were equipped with Westinghouse DC motors connected to 72" drivers through a jackshaft and side rods. Despite their ungainly appearance, DD-1s ran quietly and smoothly, with a minimum amount of rod clanking. In 1924 some DD-1s were moved to the Pennsylvania-owned Long Island Railroad, which had substantial electrified commuter rail operations. The Long Island RR used DD-1s to haul long distance trains between Penn Station and its major hub Jamaica Station, where steam locomotives were used beyond the electrified branches. DD-1s on the LIRR were sometimes used for freights, milk trains, and racetrack specials. DD-1s were last used in 1951.



The **GHB International** HO scale DD-1 electric locomotives are available for order. The models are decorated and detailed for

the Pennsylvania or the Long Island railroads in the 1939 New York World's Fair scheme that many operating DD-1s wore until withdrawn from service in 1951.



Both units are powered with a flywheel drive. The models are available for DCC-ready operation or with a factory installed

ESU LokSound 5 DCC decoder that controls both units. A very slight side rod clank has been incorporated into the sound units. For additional information visit www.ghbintl.com/DD-1_PRICE_LIST.png or email GHB at geoghb@erols.com.



InterMountain has released an HO scale 1958 cu. ft. twin bay covered hopper in 14 road names. Cars with open sides are available

for Denver & Rio Grande Western, Frisco, NAHX-Plybor-Chlorate, Monon, Elgin, Joliet & Eastern; Chicago & Eastern Illinois, Missouri Pacific, Great Northern, and Missouri-Kansas-Texas.



Cars with closed body sides are available decorated for ATSF, Northern Pacific, Colorado & Southern-Burlington, Chicago &

North Western, and Chicago, Burlington & Quincy.



Both body types come with machined metal wheels and metal knuckle couplers.



InterMountain is booking advance reservations for a new production run of 4750 cu. ft. triple-bay covered hopper cars. Delivery is planned for spring 2022.



Ten road names will be produced in this run including The Rock, C&NW, Illinois Central Gulf, Terminal Grain,

CN/Chicago Central & Pacific, DGHX, Missouri Pacific, Morrison-Quirk Grain, Rocky Mountain Brokerage, and Frisco-BN.



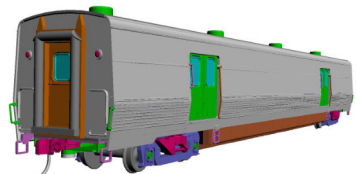
Features on the HO scale ready-to-run models include etched metal roofwalks, machined metal wheelsets, and metal couplers. For additional information contact a dealer or visit intermountain-railway.com.



Kadee has released a 40' PS-1 boxcar decorated for Maine Central. The HO scale ready-to-run model accurately replicates a prototype Pullman-Standard PS-1 built in 1947 with 7' seven-panel Superior sliding doors. Like the prototype, Kadee's version is painted boxcar red with a black roof and ends. The model comes with Kadee couplers and Kadee Bettendorf-style solid-bearing trucks with metal wheels.



Kadee has announced the availability of a 75th Anniversary Edition of its Twin "Rail Spiker". Identified as Gen 3.0, the deluxe version of the patented spiker comes with two boxes of spikes and can be converted for use on code 70, 83, or 100 rail. The Gen 3 edition, which features a gold anodized aluminum body, uses the same internal parts as the original. For additional information contact a dealer or visit www.kadee.com.



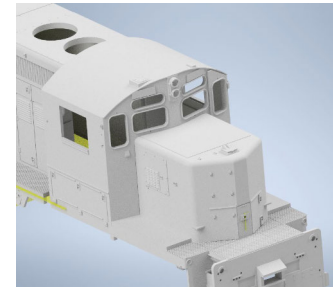
Kato has announced pre-orders for a new HO scale Amtrak Viewliner II Baggage car, with delivery in early 2022. Features of the car will be tubular style diaphragms, prototypical trucks with rotating bearing caps, Kato knuckle couplers, and optional illuminated marker and interior lights. Separately applied parts include handrails, steps, doors, and

vents. The model will be decorated in Amtrak's Phase III Heritage paint scheme. Pre-orders close on August 30th, 2021. For more information visit a dealer or www.katousa.com.



Maple Leaf Models has released a kit for an HO scale GP9RM detailed for locomotive No. 2008 of the Massachusetts Coastal Railroad (Mass

Coastal). Specific details include cab with louvers on the right side, cab headlight, blank classification light housings, anti-climbers with ditch lights, etched-metal details (fan blades, grilles, stanchions, windshield wipers), and etched-metal steps with both diamond and rounded treads.



3D printed details include brake wheel, bell, battery boxes, and clear number boards and headlight lenses. Maple Leaf's GP9RM body kit is designed to fit a Walther's Mainline GP9 chassis which is not included. For additional details visit www.mapleleaftrains.com.



New releases and reissues of 1:87 vehicles from **Oxford Diecast** include a 1955 Buick Century coupe decorated for the California Highway Patrol.



The DeSoto Suburban, capable of seating eight people, was introduced in 1946. It was popular with families and taxi companies. Oxford's version features a non-working TAXI roof sign.



Oxford's 1965 orange Chevy Stepside pickup features bumpers, front grille and wheels in simulated chrome.



Completing Oxford's summer 1:87 release is a 1950 Chevrolet panel truck colorfully decorated as Hank's Country Diner. For additional information contact a dealer or visit www.walthers.com.



Rapido Trains has announced a Procor 5820 covered hopper in HO scale. Suitable for the late 1970s to today, approximately 1700 cars were built for Procor and Dow Chemical to carry plastic pellets. Secondary owner

Essex Hybrid has also used them in seed service. The model will feature three styles of roof hatches, two styles of outlet gates, etched roof walks and end walkways, factory installed grab irons, and full end cage details. Two styles of trucks are available in this run, the Barber S-2 and Dofasco. Additionally, spare hatches and different outlet gates will be included with the model to enable the modeler to modify the car to fit their era. Roadnames in the first run include PROCOR – Blue (UNPX stencil), PROCOR – Blue (UNPX solid), Union Carbide (UNPX blue), BF Goodrich (UNPX blue), PROCOR – low logo (UNPX black), PROCOR – mid logo (UNPX black), PROCOR – no logo (UNPX black), Dow Chemical, Essex Hybrid, and an undecorated version. Visit rapidotrains.com for more information.



New resin cast details from **Rusty Rail** include this 1:87 scale 1934 Ford pickup truck with an optional load. The unpainted resin castings include wire wheels.



Also new are castings for a 1926 Mack Bulldog truck. It is available with a bare frame and with an optional log load. The cast resin parts come with assembly instructions. For additional information visit <http://www.rustytrain.com>.



ScaleTrains.com is accepting reservations through August 23, 2021 for a group of ET44 GEVO locomotives decorated as Canadian National Heritage and Military units. Availability is scheduled for March 2022.



Decorating schemes for the HO scale Rivet Counter models will be CN-British Columbia Railway, CN-Illinois Central, CN-Elgin, Joliet & Eastern; and CN-Wisconsin Central.



In addition to the Heritage units, two CN Veterans locomotives will be available in a special camouflage scheme honoring both Canadian and American Veterans. One side of the locomotive reads *Thank You For*



Your Service, in French, while the same phrase is repeated in English on the opposite side.



Additional road names in this production run will be BNSF, CSX, Kansas City Southern,

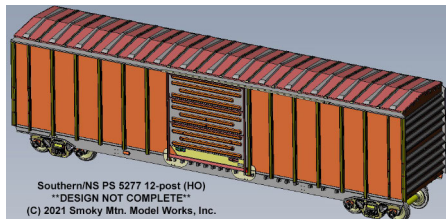
Norfolk Southern, and Union Pacific. For reservations contact a dealer or visit www.scaletrains.com. Previously announced Operator and Rivet Counter ET44 locomotives are expected to arrive this month.



Photo courtesy of Jim Kinkaid Collection

Smoky Mountain Model Works is booking orders through the end of August for a prototypically accurate HO scale kit for a 12-post PS 5277 cu. ft. boxcar. Pullman-Standard built the prototype cars exclusively

for Southern Railway and the original Norfolk Southern starting in early 1973.



Southern/NS PS 5277 12-post (HO)
"DESIGN NOT COMPLETE"
(C) 2021 Smoky Mtn. Model Works, Inc.

The kit will consist of a one-piece urethane body with a separate urethane underframe. Detail parts will include a 3D SLA printed brake system, separate door

castings, Accurail trucks, Kadee 33" wheelsets, Kadee #158 Whisker couplers, and Mask Island decals. A mini-CD with detailed instructions and photos comes with the kit. For additional information visit smokymountainmodelworks.com.



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R. Bale

THE GENERAL

The Pennsylvania Railroad's General was an important name train that operated on the railroad's vital Chicago-New York corridor. Launched in 1937, the consist of the original General included both coaches and sleepers plus head-end equipment to expedite lucrative mail and express service. The General was only minutes slower the PRR's extra-fare Broadway Limited. The General received some lightweight equipment in 1938 and became all Pullman in 1942. By 1948 all of the heavyweight sleepers had been replaced with modern lightweight equipment. The General lost its all-Pullman status in 1951 when lightweight coaches were added. In 1967 the General also lost its name when it was merged with the PRR's Broadway Limited.



Walthers next complete HO scale name train will be The General, a long-standing member of the Pennsylvania

Railroad's New York-Chicago fleet of passenger trains. Walthers will create a 1960s edition of the classic train that includes a mix of mail, coaches, and sleepers.



Individual cars will be released on a monthly basis beginning with a 50' class R50b express reefer in June 2022, followed in July by a 60' class B60b baggage car.



An ACF-built 85' baggage/dormitory car will be released in August followed



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a month later by a PRR Rapids-series 10-6 sleeper built to plan 4129.



scheduled for release in October.



It will be followed by a 12-4 Creek-series sleeper in December.



diner is scheduled to arrive in late February.



Appropriate motive power for The General will be provided by Walther's Proto EMD E8A units detailed for PRR class EP-22 prototypes in both single and five-stripe Tuscan schemes. E8A sets and single A units with a choice of LokSound or standard DC operation are planned for release in March 2023.



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A Budd-built 21-roomette sleeper with a PRR Trainphone roof antenna is

This PRR Falls-series sleeper with six double bedrooms will be available in November.

The 2023 releases begin in January with an 85' kitchen/dormitory car. A 68-seat

Eighty-five foot class P85 coaches based on Pullman-Standard prototypes are due in March. A buffet-lounge-observation car scheduled for release in April 2023 will complete Walther's series of cars for the PRR General.



R. Bale

PRR X29B BOXCARS

In an attempt to compete with trucking companies for the lucrative less-carload-lot (LCL) freight traffic, the Pennsylvania Railroad introduced Merchandise Service in 1954. To handle the expedited service, PRR launched a major rebuilding of a group of its 40' X29 boxcars. The result was a larger capacity car with a bigger body mounted on the original underframe. Classified as X29b, the rebuilt cars were given a distinct paint and lettering scheme that clearly identified the cars and promoted the Merchandise Service program. The X29B cars, often running in blocks, operated on expedited schedules between 11 of PRR's major destination cities.

Trucks eventually won the fight for LCL freight and by 1958 the dedicated Merchandise Service program had been dropped and the distinctly decorated X29B boxcars, like all PRR freight cars, were seen throughout the North American interchange system.



Walther's has announced plans to produce a limited-run freight train based on the PRR's Merchandise Service of the 1950s. The special set will include 12 Walther's Proto X29B boxcars in the Merchandise Service paint scheme, and a PRR class N6B wood cabin car.



Motive power will be available in upgraded versions of FP7 and F7B diesel units based on PRR class EFP-15 units. Two schemes will be available.



Walther's has scheduled a late September release date for a new production run of 40' PS-1



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boxcars. Details on the HO scale models include Pullman-Standard proprietary ends, and a bowtie roof with a flat panel at the ends. Commercial details include a see-through Apex steel running board and 6' seven-panel Superior sliding doors.



Road names will be Ann Arbor, Green Bay & Western, Chicago & Illinois Midland, Lake Superior & Ishpeming, New York Central,

Vermont Railway, and a Southern Pacific car with T&NO reporting marks.



Walthers will offer the 40' PS-1 boxcars decorated for Santa Fe in special 4-packs.

One side of each car will display the *Santa Fe All The Way* slogan with the opposite side promoting one each of the Super Chief, El Capitan, Grand Canyon Line, and The Chief passenger trains. Three separate 4-packs with different combinations of slogans will be available later this month.



will handle 20' to 40' containers in the well with 40' to 53' containers on top. Five variations of the TTX-DTTX car will be available including the old logo, new logo, Forward Thinking logo, and Railbox logos.



detailed brake gear. All of the Walthers PS-1 boxcars and

Also coming from Walthers in August is a Gunderson rebuilt 40' well-car. The HO scale model

The Proto series model features authentic body weld line details, wire grab irons, and

Gunderson well-cars mentioned in this report will come with ProtoMAX metal knuckle couplers and 33" machined metal wheelsets.



Walthers has just released an HO scale 60' NSC 5150 cu. ft. triple-bay covered hopper. The economy priced Mainline series model is

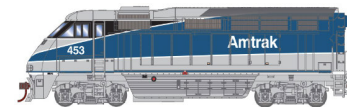
based on a design introduced by NSC in 1996. Features include raised welding seams on the side panels, trough-style roof hatches, metal knuckle couplers, and 100-ton roller-bearing trucks with 36" machined metal wheelsets.



Road names include Union Pacific, ADM, Canadian National, BNSF, Canadian Pacific, Canadian Pacific Soo, Illinois Central, and FURX-First

Union Rail. For additional information contact a dealer or visit www.walthers.com.

N SCALE PRODUCT NEWS



Athearn has included an F59PHI in its September 2022 production schedule. The N scale ready-to-run model will have see-through radiator

and dynamic brake fans, and LED lighting. DC models will be DCC-ready.



Decorating schemes will be Amtrak No. 453 and 461, and Amtrak No. 457 with the *Be Track Smart* slogan. An Amtrak California

scheme is included in this production run.

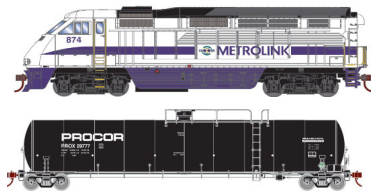
Metra's Heritage program honors various railroads that made Chicago the rail hub of America. Athearn will offer Metra



F59PHI locomotives decorated for CNW Heritage, MILW Heritage, and RI Heritage. The paint schemes are preliminary and are not currently depicted on real Metra locomotives.



Additional decorating schemes on Athearn's F59PHI locomotives will include North Carolina DOT City of Salisbury and City of Asheville, and Southern California Metrolink with decorative corrugated panels on each side.



A 33,000-gallon LPG tank car is included in Athearn's September 2022 production schedule. Separately applied details on the N scale model will include a manway, outlet, ladders, brake rigging

detail, safety rail supports, tank saddles, and a photo-etched walkway platform.



In addition to the two Procor schemes shown here, the N scale ready-to-run model will be available decorated for Union Tank Car, Union Tank Car with flat panel, Greenbrier Leasing, and Andrews Company. The model will come with screw mounted 100-ton roller-bearing trucks with machined metal wheels. For additional information contact a dealer or visit www.athearn.com.



Atlas has opened pre-orders for several N scale models with an estimated arrival of 2nd Quarter 2022. The first of these is a new run of GP40 locomotives in new paint schemes and road numbers. Several of the road names come equipped with ditch lights.



Roadnames in this run with ditch lights are CP Rail, CSX (Bright Future), CSX (MOW), Port Harbor "1st Responders," and Susquehanna. Non-ditch light equipped road names are Main Central, MKT, Penn Central, Rio Grande, Santa Fe, Union Pacific, and undecorated, both with and without dynamic brakes.



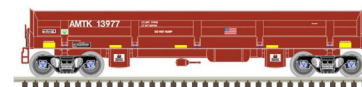
Gold series locomotives are equipped with ESU LokSound DCC and Silver series DC locomotives are equipped with a speaker for easy conversion to sound. All locomotives come equipped with blackened metal wheels and Accumate knuckle couplers.



The next N scale model on Atlas' 2nd Quarter 2022 schedule is the Master series 1932 ARA boxcar. Over 14,500 1932 ARA boxcars were produced for 23 railroads during the 1930s.



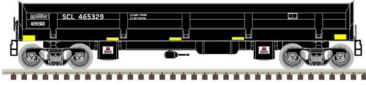
The car features accurate painting and printing, friction bearing trucks, and Accumate couplers. Roadnames in this release are New York Central, Maine Central, Missouri Pacific, Central of Georgia, NC&STL (Dixieland), Ferrocarriles Nacionales de Mexico, Nickel Plate Road, Linde Air Products, and three undecorated body styles – long tab body, Murphy panel roof, and 4/4 Dreadnaught ends; long tab body, 11 panel flat riveted roof, and flat riveted ends; and long tab body, 11 panel flat riveted roof, and 4/4 Dreadnaught ends.



Atlas has also announced a new run of the N scale Difco side dump car. A common maintenance of way car from the 1960s through today, the model represents a 50 cubic



yard car with the capability of dumping its load on either side of the tracks.



Road names in this run are Amtrak, BNSF, CSXT, Missouri Pacific, Norfolk & Western, SCL, and

Southern Pacific. The model features Accumate couplers and 100-ton roller-bearing trucks.

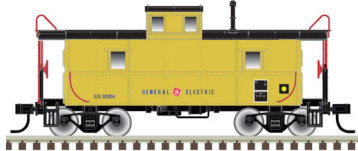


Atlas Trainman is also releasing a new run of its N scale 50'6" ACF boxcar model. Road names in this run are the

Burlington Northern seen above, Canadian National, CSX, Ferrocarriles Nacionales de Mexico, PanAm (below), Railbox, Union Pacific and undecorated.



The model has non-terminating corrugated ends, a diagonal panel roof, and a single 10' Youngstown door. It is equipped with Accumate knuckle couplers.



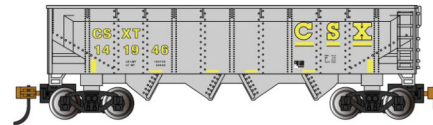
The final N scale item in Atlas' 2nd Quarter 2022 schedule is the Trainman HO C&O cupola caboose. An all-steel caboose, it was built for the C&O by Magor in 1937. Similar cabooses were built for the C&O by Magor, St. Louis Car Company, and ACF through 1949.



Roadnames in this run are Alaska, Chesapeake & Ohio, Chicago & Illinois Midland, Detroit Toledo and Ironton, Richmond, Fredericksburg & Potomac; General Electric, Metro North, Black River Western, and undecorated.



The Trainman model includes Accumate knuckle couplers and window glazing. For information on this or other Atlas products, see a dealer or visit shop.atlasrr.com.



New N scale models scheduled to arrive from **Bachmann** late this year include a 40' quadraple-bay hopper due in November. Road names will be CSX, Pennsylvania Railroad, Norfolk & Western, and Peabody Coal Co.



Also due in November is an N scale 52' flatcar decorated for Santa Fe, CSX, Pennsylvania Railroad, and Union Pacific. Both the hopper and flatcar will be equipped with appropriate trucks with machined metal wheelsets.



Bachmann's 2022 production schedule of N scale models includes a streamlined PRR K4 4-6-2 Pacific steam locomotive.

For additional information contact a dealer or visit www.bachmann-trains.com.



Eastern Seaboard Models has a kit to enhance an N scale

Wheels of Time 53' flatcar. The ESM kit consists of five laser-cut plywood deck pieces and two laser-cut cardstock assemblies that mount above the bolster position. The kit upgrades one flatcar which must be supplied by the modeler. For additional information visit www.esmc.com.



InterMountain is booking advance reservations for a new production run of 4750 cu. ft. triple-bay covered hopper cars. Delivery is planned for spring 2022.



Ten road names will be produced in this run including The Rock, C&NW, Illinois Central Gulf, Terminal Grain, CN/Chicago Central & Pacific,

DGHX, Missouri Pacific, Morrison-Quirk Grain, Rocky Mountain Brokerage, and Frisco-BN.



Features on the N scale ready-to-run models include etched metal roofwalks and machined metal wheelsets. For

additional information contact a dealer or visit intermountain-railway.com.



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R. Bale

UNION PACIFIC FEF STEAM LOCOMOTIVES

The Union Pacific received its first 4-8-4s in 1937.

Introduced a decade earlier, the popular wheel arrangement was known by numerous names, with Northern being the most common. The UP added to the lexicon by calling their new 4-8-4s, FEF for the four eight four wheel arrangement. By any name, 4-8-4s had enough pulling power for fast freight trains and enough speed for passenger service. Until diesels took over, the FEFs pulled a variety of premier UP passenger trains including, the Overland Limited, Los Angeles Limited, Challenger, and the Portland Rose. UP received a second batch of 15 FEFs in 1939. Dubbed FEF-2, they had several improvements, including larger cylinders, better tractive effort, taller driving wheels, and large smoke deflectors on the sides of the smokebox. The greatest change, however, was the inclusion of a 14-wheel centipede tender.

UP's final group of 10 FEF-3s, delivered in 1944, were nearly identical to the FEF-2. They were the last steam locomotives acquired by the Union Pacific. After WWII, UP converted the 800 series FEFs to oil burning, and a 6,000 gallon tank was installed in the bunker of the tender. They were also painted in a stunning gray livery to compliment the UP's Overland fleet of lightweight passenger equipment. Today, FEF-3 No. 844 survives to pull excursion trains as a publicity locomotive for the Union Pacific. Since availability of water is unreliable in today's diesel-era, No. 844 is always accompanied on excursions by one or two UP water tenders.

Kato USA has announced plans to produce an N scale version of Union Pacific FEF-3 steam locomotive No. 844 in the two-tone gray Overland color scheme. Along with the new paint version of the FEF-3, Kato will be re-releasing the Union Pacific



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water tender set to accompany it. They are scheduled for release in January 2022.



Standard DC versions of the FEF-3 will also be available in January. Locomotives with TCS DCC, and special order FEF-3s with ESU Loksound Sound DCC are scheduled for

release in February. A video showing Kato's Greyhound FEF-3 in operation can be viewed at www.youtube.com/watch?v=x8nuvTZCAQ. For additional information contact a dealer or visit www.katousa.com.



New N scale models from **Micro-Trains** include this modernized heavyweight business car. It is decorated

in Amtrak's original Phase I paint scheme on one side and the current Phase VI livery on the opposite side.



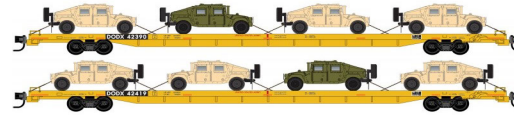
Micro-Trains has released this 33' twin-bay hopper car with offset sides to dealers. The N scale model is decorated for the St. Louis & San Francisco Railroad with a *Frisco Fast Freight* slogan.



This Union Pacific 4750 cu. ft. triple-bay covered hopper is painted aluminum with red and black lettering. The N scale model comes with Barber roller-bearing trucks.



Two different road numbers are available for this Southern Pacific 50' steel gondola.



Micro-Trains is selling an N Scale 89' DODX flatcar with four Humvee military vehicles. The

model comes in a 2-pack with different road numbers. Contact a dealer for additional information on Micro-Trains models.

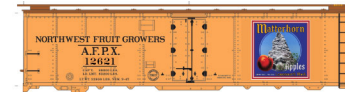


Rail Smith Models is booking reservations for an N scale

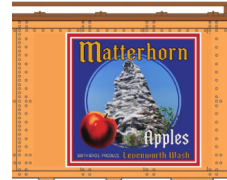
Northern Pacific duplex sleeper. The model is based on Pullman-Standard Plan 4119 with eight duplex roomettes, six regular roomettes, three bedrooms, and one compartment. NP ordered the lightweight cars for their new streamlined version of the *North Coast Limited*.



Matterhorn Apples is the latest addition to Rail Smith's series of American Fruit Packers reefers. The N scale model of a 50' Northwest



Fruit Growers steel refrigerator car, produced exclusively for Rail Smith by Micro-Trains, is scheduled for release this fall.



The reefer is decorated with a multi-color herald promoting Matterhorn Apples of Leavenworth, Washington. For additional information contact lowellsmith.net.

Showcase Miniatures continues to expand its selection of 1:160 scale kits for well-detailed fire and rescue vehicles. The newest kit is based on a Pierce F-M2 crew cab pumper truck.





The model features a resin cast body, several cast pewter and stainless-steel photo-etched detail parts. The pumper can be assembled with the tool doors closed or left off to reveal detailed fire-fighting apparatus. For additional information visit www.showcaseminiatures.net.

NEW STRUCTURES



Conowingo Models has released several new structure kits, beginning with the HO scale Whitby's Mill. A near replica of a mill built by John Allen and located at Phillips Lake on the Gorre & Daphetid Railroad, the mill utilizes modern construction techniques, including corrugated roofing and, Rail Scale cedar shake roofing, a working lamp, and an optionally motorized waterwheel.



The Whispering Chapel is an Americanized HO scale replica of the Maroltova Kapelica in Smartno, Pohorje Hills, Slovenia. Its footprint is approximately 2" x 2". It comes with optional stained-glass windows. The cross is also optional.

St. Mary's Gate Lighthouse is based on the East Channel Lighthouse on Lake Superior in Munising, MI. The HO kit is expected to be available mid-September.



The last of Conowingo's new releases is the O scale Molly's Trolley Station. Approximately 4" x 4" in size, the kit was inspired by the trolley shelter at the Seashore Trolley Museum



in Kennebunkport, ME and could easily be repurposed as any sort of small structure. For more information visit conowingomodels.com.



The Electric Wallpaper Co. has released two new Roomettes kits that provide detailed interiors to commercial HO scale structures.



The new Roomettes kits include Greystone Bus Terminal that is designed to fit Walthers Silver Springs Bus Terminal (item 933-2934). The interior kit has five laser-cut rooms, including a snack bar, ticket office, counter-tops, posters and exterior signs.



The second new kit is Hughes' House that fits a variety of generic HO scale residential buildings. This kit features designs styled after bedrooms from two popular movies: Ferris Bueller's Day Off and Pretty in Pink.

All Roomettes kits include LEDs with plugs compatible with lighting systems from Woodland Scenics Just-Plug, Model Train Technology, and NCE. For more information visit www.roometteslighting.com.



Fos Scale Models has reported that The Flat Iron District, a limited run kit, has sold out. It is an extensive HO scale craftsman kit that builds into an eight-structure diorama with a footprint of approximately 18" x 36". The multiple structure kit features laser-cut walls, laser-engraved brick walls, laser-cut parts and details, and numerous new metal cast details, color signage, building templates, and detailed instructions for assembly. The kit also includes Tichy injection molded windows and doors.



The eight buildings are Willet Coat & Uniform, Willet Annex Building, Pendleton Plumbing, Sackett Welding, Kintner Marine Products, Connie's Market, Kargol Chainsaw & Tools, and a Traffic Shanty.

The bird's eye photo gives an indication of the wedge shape of the Flat Iron District buildings. For full details visit fosscalemodels.com.



scale lumber, corrugated metal, and signage. The buildings

Frenchman River Models Works has released a new O scale structure kit, The Barn Find. Designed by Thomas Yorke, the kit is composed of resin parts and is partially stick built. Details included are the car, assorted junk, a 1940's tractor kit, assorted

dimensions are 6.50" x 7" with a lean-to shed, and 4" high. For more information visit frenchmanriver.com.



more information visit gnrhs.myshopify.com.

The Great Northern Railway Historical Society store is now selling the Touhey, Washington elevator kit. The 20,000-bushel crib-style elevator was originally built in 1913, with the construction style dating back to the 1880s. The HO scale kit includes the elevator structure, a covered scale and unloading pit with ramp, and a machinery shed. The finished kit has a footprint of 12" x 7" x 8.75" tall. For



Monster Models has released both HO and S scale craftsman kits for the historic Whitley & Whitley Building in Placerville, Colorado. The structure was built in 1920 to serve mining operations in the San Juan Mountains including the narrow gauge Rio Grande Southern Railroad.

The location became known as Placerville after the RGS constructed a depot and several passing sidings west of the original settlement. Historical information and accurate drawings for the building were provided by Steve Harris, Michael Blazek, and Jake Johnson.



Components in the kit include 3D laser-engraved block stone and block stone coping and corners, laser-cut doors and windows with glazing, metal roofing

material, and signage. When assembled, the S scale structure has an approximate footprint of 5.6" x 7.5". The HO version measures 4.5" x 6.75".



Monster Models has released An HO scale craftsman kit for this Brick Pumping Station. The model is based on the Rutland Railroad Pumping Station, a historic facility built in 1903 in the town of Alburgh,

Vermont. The kit includes 3D laser-engraved American Bond brick walls, brick corner pieces, and shake shingle siding; laser-cut peel & stick asphalt roofing and windows with glazing, laser-cut front door, rooftop exhaust pipes, large 3D printed water pipes, metal roofing, and printed signage. When assembled the structure has a footprint of 4.25" x 5.75". For more information visit www.larkspurlaserart.com.



Motrak Models has announced pre-orders for Earl Smallshaw's Tenement Row kit, previously a Northeastern Scale Models product, in HO and N scales. The kit will include laser-cut walls, railings, porch floors, window shades, and

roofing material, Northeastern Scale Lumber stairs, and other detail parts and templates. The HO scale model will have laser-cut windows and doors, with plastic windows available, and the N scale kit will have plastic windows and doors. The size of the HO diorama is 13" x 15" and the N scale version is 6" x 7.5". S and O scale background kits are planned. For more information visit motrakmodelsusa.com.

Walthers Cornerstone has announced two new HO scale kits for modern steel engine houses. A single track engine house is 4.25" wide. The double track version is 7" wide. Both are 11"



long. Parts are included to build them as run-through or single-ended structures.



They can also be customized for left or right entry with two styles of front and rear walls included in the kit. Details include non-working security lights and separate gas and electric meters.

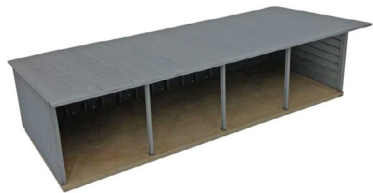


Walthers plans to release an HO scale kit for this vehicle maintenance garage late this month. The structure is well suited for servicing buses, modern mass transit systems, highway department, railroad maintenance, or as a trucking company garage. Details include a vending machine, covered wastebasket, air compressor, two styles of modern gas pumps, parts for two dry hydrants, electric and gas meters, and nonworking lights. When assembled the structure has a footprint of approximately 6.125" x 3.375".



Walthers also has an HO scale Chicken Coop and Sheds kit expected this month. Containing parts to build a chicken coop, a machine shed, a lean-to and a

fuel tank, the kit combines with other kits to create a full farm scene. The machine shed features positionable doors. The chicken coop has a footprint of 2.125" x 1.25" x 1.375", the machine shed is 2.875" x 3.875" x 2.875" with the lean-to adding 3.5" x 1.875" x 1.5". The fuel tank is .68" x .6" x 1.5".



Finally in HO scale is the Cornerstone Machinery Storage Shed. Representing a modern steel structure, it has an open front and interior frame details. It measures 9.75" x 4.5" x 2.75".



The newest N scale Cornerstone kit from Walther's is a set of Trackside Structures that includes an interlocking tower, a speeder shed, and a crossing shanty. Details include

positionable crossing gates, and a speeder/motor car. All items are molded in gray plastic and require assembly and painting. For additional information contact a dealer or visit

www.walthers.com.



Woodland Scenics is preparing to release Carver's Butcher Shoppe. The Built & Ready structure will soon be available in N, HO and O scales. For additional information visit

woodlandscenics.com/show/item/BR5872.

NEW DECALS, SIGNS, AND FINISHING PRODUCTS



Great Decals has reissued HO scale decals for The Virginian Railway's EL-C (E-33) rectifier electric locomotives, in yellow and white. The set includes the

white end heralds and yellow striping, and the yellow side road names. The decals are suitable for decorating HO models produced by Alco, Bachmann, and Overland. For additional information visit www.greatdecals.com.

! BRIEFLY NOTED AT PRESS TIME ...

AtlasO has released a video that features its O scale 44-ton center-cab diesel switcher scheduled for release during the 4th quarter of this year. To view the video go to youtu.be/PaleDAcrbs4.

A new venture named **Home Shops** plans to offer limited editions of quality HO rolling stock decorated for well-known model railroads. The initial offering is a Tangent PS-4750 covered hopper decorated for Arkansas Valley, Copper State Railway, Kansas Pacific, Gulf & Ship Island, Michigan Interstate, Texas & Great Northern, and West Falls Northern. Details at homeshops.net ...

Mask Island has issued new HO scale decals for PC, NYC, and P&LE mill gondolas, and two Southern cars: an as-delivered 50' PS-1, and a deluxe gold REA car. Details at maskislanddecals.com.

Early next month **Morning Sun** plans to release volume 3 of *Canadian National Power: Covered Wagons*. This edition covers both passenger and freight engines produced by GMD and EMD, as well as Canadian Locomotive Company and Montreal Locomotive Works ...

Tangent has completed the third release of its prototypically-accurate Greenville 86' auto parts car with double plug-doors. New road names available now are B&O, CB&Q, EL, MP, Penn Central, and Wabash. Reruns with new numbers are available for Conrail, DT&I, and Southern ...

A new production run of 72' Centerbeam flatcars will be released by **Walther's** in late September. Both opera window and open braced styles of the HO scale Mainline series model will be offered ...

New HO scale projects underway at **Rapido** include a USRA SS boxcar with a Hutchins roof, a Canadian Pacific clone of the same car with 7/8 Murphy ends, and another release of its 52'6" mill gondola... ■

SELECTED EVENTS



Model Railroad Hobbyist | August 2021

AUGUST

Due to COVID-19 restrictions, please check with any organization hosting an in-person event for the latest status of the event.

Ongoing 2021

ONLINE, Zoom, dates vary, see website. Operation Special Interest Group Meetups – limited attendance available. For more information visit www.opsig.org/Virtual. Past meets are available online at www.opsig.org/Virtual/Past.

ONLINE, Zoom & YouTube, Wednesday & Saturday, see Facebook page. “New Tracks” Meetup, hosted by Jim Kellow, MMR. See newtracksmodeling.com for more information.

ONLINE, Facebook & YouTube, dates vary, see Facebook page. “NMRax” organized by Gordy Robinson, Martyn Jenkins, Gert Muller, Jordan Kramer. See www.facebook.com/groups/nmrax for announcements.

ONLINE, YouTube, every other Saturday. 4th Division, Pacific Northwest Region, NMRA hosts online layout tours and clinics. Archive available at www.youtube.com/c/4DPNRMovies.

ONLINE, Zoom, Second Tuesdays, 8pm EST. “Off the Beaten Track” featuring Narrow Gauge layouts, clinics and manufacturers. For more information visit groups.io/g/NNG.

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August-September 2021

ARKANSAS, JACKSONVILLE, August 21-22, 11th Annual Jacksonville Train Show. Jacksonville Community Center, 5 Municipal Drive. For more information www.facebook.com/JacksonvilleTrainShow.

CALIFORNIA, IRVINE, September 8-11, Pacific Southwest Region/NMRA Convention, “Orange Blossom Special.” Hilton Irvine/Orange County Airport Hotel, 18800 MacArthur Blvd. Visit www.psrconvention.org/OrangeBlossomSpecial2021 for more information.

FLORIDA, MELBOURNE, September 4, December 4, Original Melbourne Train and Toy Show, sponsored by Schultz Space Coast Trains, Azan Shrine Center, 1591 W Eau Gallie Blvd. For more information visit schultzspacecoasttrains.com.

GEORGIA, ATLANTA, September 9-12, Anton’s Antique Toy & Train Show, hosted by Scott Antique Markets. South Building, Atlanta Exposition Centers, 3650 & 3850 Jonesboro Rd. SE. For more information visit www.scottantiquemarket.com.

ILLINOIS, WHEATON, September 12, October 10, November 14, December 12, Great Midwest Train Show, Dupage County Fairgrounds. For more information visit trainshow.com.

CANCELLED - MARYLAND, LINTHICUM HEIGHTS (BALTIMORE), September 10-11, 2021, Mid-Atlantic Railroad Prototype Modelers Meet, Doubletree by Hilton – BWI, 890 Elkridge Landing Rd. For more information visit www.marpm.org.

MISSOURI, SPRINGFIELD, August 21, 2021, Ozarks Model Railroad Association Train Show, Oasis Conference Center, 2546 N Glenstone Ave. For more information visit www.omraspringfield.org/train-shows.html.

MONTANA, MISSOULA, September 21-25. Annual Convention of the Northern Pacific Historical Association. Big Sky High School, 3100 South Ave. West. For more information go to www.nprha.org/Pages/NPRHA.aspx.



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NEW JERSEY, EDISON, August 14-15, 2021, Greenberg's Train & Toy Show, New Jersey Expo Center. For more information visit trainshow.com.

NORTH CAROLINA, DENVER, September 23-25, Sipping and Switching Society of NC modular display. Salem United Methodist Church, 378 N Pilot Knob Rd. For more information visit www.facebook.com/Sipping-Switching-Society-of-NC-352084328982.

NORTH CAROLINA, HICKORY, September 1-4, 2021, 41st National Narrow-Gauge Convention, Hickory Metro Convention Center and Crowne Plaza Hotel. For more information visit 41nngc.com.

OHIO, DAYTON, August 14-15, 2021, Great Train Show, Montgomery County Fairgrounds. For more information visit trainshow.com.

PENNSYLVANIA, KUTZTOWN, August 28. Renningers Model Train Meet, 740 Noble Street. For more information see renningers.net/events/model-train-meet.

PENNSYLVANIA, OAKS (Philadelphia area), August 21-22, 2021, Greenberg's Train & Toy Show, Greater Philadelphia Expo Center. For more information visit trainshow.com.

SOUTH CAROLINA, GREENVILLE, September 9-12, 2021. 2021 NMRA Southeast Region Convention, the Swamp Rabbit Express. Greenville Hilton, 45 West Orchard Park Drive. For more information visit swamprabbitexpress.org.

TEXAS, STAFFORD (GREATER HOUSTON), August 14, 2021, Greater Houston Train Show, Stafford Centre, 10505 Cash Rd. For more information visit sanjacmodeltrains.org.

Future 2021-2022 by location

AUSTRALIA, SYDNEY, October 16-17, 2021. Great Train Show, sponsored by the Epping Model Railway Club, Grand Pavilion, Rosehill Gardens Racecourse, James Ruse Drive, Rosehill. For more information visit www.eppingmodelrailway.org.au/exhibition.

FLORIDA, PLANT CITY, October 14-16, 2021. Sunshine Express II, Sunshine Region Regional Convention. 2102 Park Rd. For more information visit www.sunshineregion.org/region-convention.

GEORGIA, CARTERSVILLE, October 2-3, 2021. Piedmont Division Model Train Show, Clarence Brown Conference Center, 5450 GA-20. For more information visit themodeltrainshow.com.

ILLINOIS, BELLEVILLE, October 2-3, 2021. Great Train Expo. Belle-Clair Fairgrounds and Expo Center, 200 S Belt E #2650. For more information visit bcfairgrounds.net/belleville-great-train-expo.

ILLINOIS, WHEATON, September 12, October 10, November 14, December 12, 2021. Great Midwest Train Show, Dupage County Fairgrounds. For more information visit trainshow.com.

INDIANA, NAPPANEE (Elkhart), October 16, 2021. Elkhart Model Railroad Club Annual Train Show. Claywood Event Center, 13924 N W (County Line Road). For more information visit www.emrrc.com/index.php/2021-train-show.

MARYLAND, HUNT VALLEY, October 21-24, 2021, Mid-Eastern Region Convention – Mount Clare Junction Model Railroad – NMRA membership not required, Delta Hunt Valley, 245 Shawan Road, mtclarejct.com.

MASSACHUSETTS, GARDNER, October 2, 2021. O Scale Model Train Show sponsored by The Southern New England Model Railroad Club. Chestnut Street United Methodist Church, 161 Chestnut Street. For more information visit www.snemrr.org.

MASSACHUSETTS, WESTFORD, October 8-11, 2021, Mill City 21, the NER Convention. Westford Regency Inn, 219 Littleton Rd. For more information visit millcity21.org.

MICHIGAN, WYOMING (GRAND RAPIDS), October 9, 2021. The Greater Grand Rapids Train Show, presented by the Grand River Valley RR Club. HSB Inc., 5625 Burlingame Ave. SW. For more information visit grvrrc.org.

MISSOURI, KIRKWOOD, October 9-10, 2021. 30th Annual Greater St. Louis Metro Area Train Show, sponsored by the Mississippi Valley N Scalers. Kirkwood Community Center, 111 S. Geyer Rd. For more information visit mvns.railfan.net.

MISSOURI, St. LOUIS, August 7-14, 2022, NMRA National Convention and National Train Show.

NEW ZEALAND, CHRISTCHURCH, October 2-3, 2021, The BIG Model Train Show, Pioneer Stadium, Lyttelton Street. For more information visit trainshow.co.nz.

NEW ZEALAND, LOWER HUTT (Wellington), November 14-15, 2021, RailEx Model Train Show, Walter Nash Centre, 20-22 Taine St., Taita. For more information visit www.railex.org.nz.

NEW YORK, BATAVIA, October 17, 2021. The Great Batavia Train Show, Richard C. Call Arena at Genesee Community College, 1 College Rd. For more information visit gsme.org.

OHIO, CAMBRIDGE, October 17, 2021. Third Annual Buckeye Division Train Show, Pritchard Laughlin Center, 7033 Glenn Hwy. For more information visit div6-mcr-nmra.org/trainshow.html.

OHIO, TOLEDO, October 21-24, 2021. Black Swamp Junction – NCR 2021 Convention, hosted by the NMRA, open to all, featuring clinics, tours, layouts, op sessions, and door prizes. Radisson Hotel at the University of Toledo, 31100 Glendale, Ave. For more information visit www.divisiononencr.com/2021.

OKLAHOMA, TULSA, October 6-10, 2021. 2021 Tulsa Union Convention, Indian Nations Division, Mid-Continent, and Lone Star Regions joint convention. Embassy Suites by Hilton Tulsa I-44, 3332 S. 79th East Avenue. For more information visit www.2021tulsaunion.com.

OREGON, EUGENE, May 10-14, 2022. PNR 2022 Regional Convention, Valley River Inn.

PENNSYLVANIA, ALLENTOWN, October 8-10, 2021. 25th National Trolley Meet, Agriplex at Allentown Fairgrounds, 17th and Chew Streets. For more information visit www.eastpenn.org.

PENNSYLVANIA, KUTZTOWN, July 17, August 28, 2021. Renningers Model Train Meet, 740 Noble Street. For more information see renningers.net/events/model-train-meet.

UNITED KINGDOM, DERBY, October 22-24, 2021. 75th+1 Grand Junction Convention, British Region regional convention. Derby Conference Centre. For more information visit www.black-diamonds.org.uk/convention.

WASHINGTON, CHEHALIS, October 9-10, 2021. Lewis County Model Railroad Swap Meet. Blue Pavilion, Southwest Washington Fairgrounds, 2555 N. National Ave. For more information contact TedsTrains@LewisCounty.com.

MICHIGAN, WYOMING (Grand Rapids), October 9, 2021. The Greater Grand Rapids Fall Train Show, presented by the Grand River Valley RR Club. HSB Inc., 5626 Burlingame Ave SW. For more information visit gyrrc.org. ■



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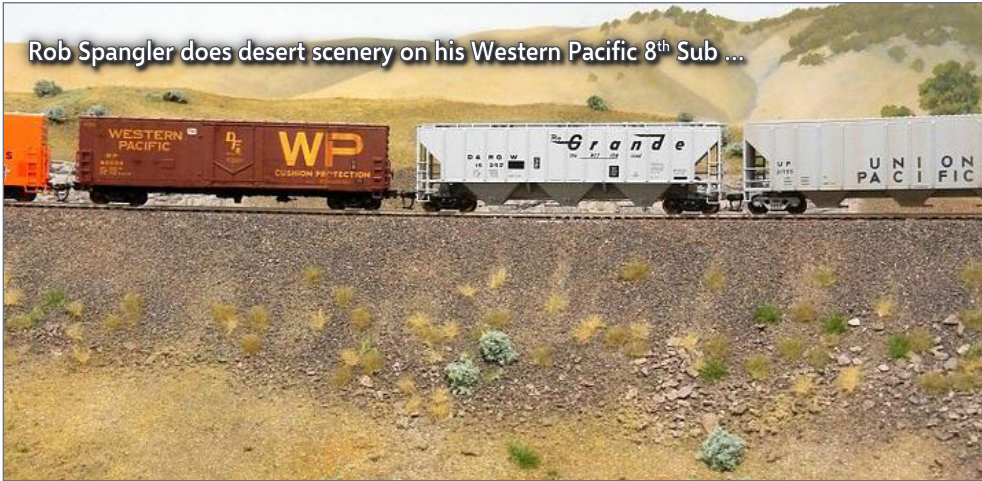
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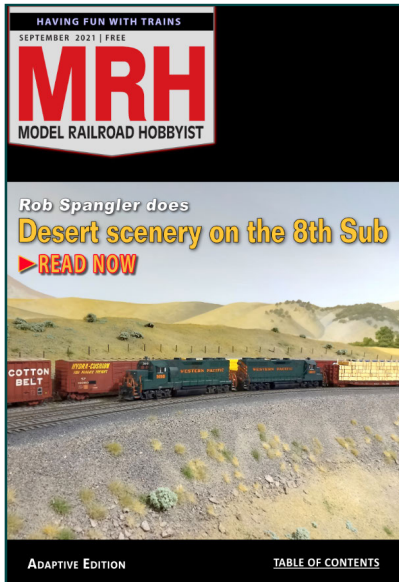
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