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ISSN 2152-7423

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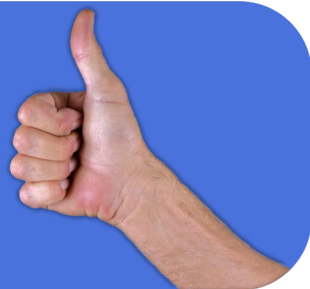
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Model Railroad Hobbyist | February 2021

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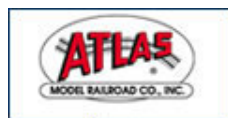
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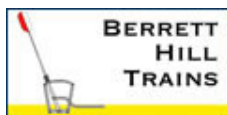
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Take me there!



Publisher's Musings: Gordy Robinson NMRAX interview

GUEST EDITORIAL: JEFF PALMER, JOE FUGATE



MRH Website this month: lighted vehicles on your layout, ...

Compiled by JOE FUGATE

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What's Neat: Visiting Austin and Steve Allard, ...

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Step-by-step DCC install: Lights, sound, action!

NELSON BEAUDRY

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Modeling water with plexiglass

NEIL R. SCHOFIELD

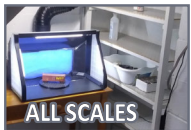
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Conveying your layout story

DOUG MATHESON

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Ventilated painting station on a budget

J.W. SNYDER

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Savvy Modeler online: Realistic carved foam rocks

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February 2021 news and events

RICHARD BALE and JEFF SHULTZ



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January 2021

RUNNING
EXTRA

Publisher's Welcome: More neat & tidy DCC installs

JOE FUGATE



Limited Modeler: Pre-USRA NYC steam locomotives

JIM SIX



Scratchbuild an accurate sand house

TONY THOMPSON



Modeling UP's new Maintenance-of-way train

KARL ANDRASCHKO



Stock cars used for other things

RAY BREYER



Ah-Hah Moment: LED lighting strip mounting solutions

JOE FUGATE

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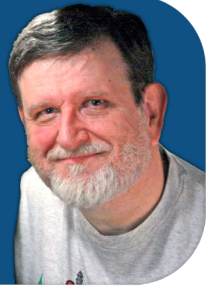


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PUBLISHER'S MUSINGS



GUEST EDITORIAL

Model Railroad Hobbyist | February 2021

JEFF PALMER INTERVIEWS GORDY ROBINSON ABOUT NMRAX ...



I FIRST MET GORDY ROBINSON IN APRIL 2020 WHEN I WAS ASKED TO DO A SCENERY CLINIC FOR NMRAX. Let's chat with Gordy and learn how NMRAX came to be.



Gordy: Actually the concepts for NMRAX began in 2018. I started talking about “virtual” sessions, as I live in a remote & rural area, so the concept for “virtual meetings” was born out of necessity.

Early meetings within my own Division were conducted on “Free Conference Call”, using their meeting facilities. Like “Zoom”, when there are only a few people meeting, it's a great environment, but as the audience grows, it's hard to control the chaos.

In February of 2020, I was working with the NMRA Social Media Team to do a “Facebook Live” event with the Twin Cities Division (TCD). People from around the world took notice of the event.

In early April, the pandemic started taking its toll on local meetings and conventions.

The team of Martyn Jenkins, Jordan Kramer, Gert "Speed" Muller, Brad Anderson and I recruited 24 clinicians who were willing to live stream using Facebook, and NMRax was born.

Our biggest problem was controlling the transition from clinic-to-clinic. It was awkward and difficult until Martyn Jenkins turned us on to OBS Studio (Open Broadcaster Software Studio). We still had rough spots, but the overall presentation was smooth and transparent to the audience.

On April 24th, the first NMRax online event went live and the rest is history.

Jeff: What are your plans in the near term?

Gordy: Our goal is to move more into hands-on type of clinics like Make-n-Takes. The goal is to provide more in-depth education.

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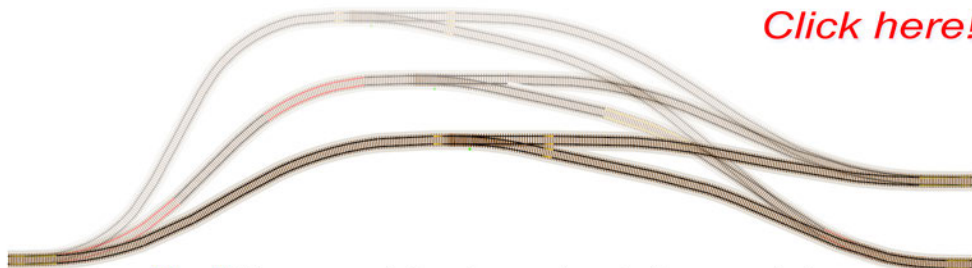
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PUBLISHER'S MUSINGS | 3

Our first rollout of this type of broadcast will occur in January 2021. I think this will help revolutionize how we (the NMRA) do hobby education.

Jeff: Do you have a feeling for how NMRAX has impacted the NMRA overall?

Gordy: Not directly. We only know the impact by channel subscribers, views, and comments made on social media. There are no tools in place to empirically quantify our impact, but let me provide you with an anecdotal impact example.

I live about 200 meters from a neighbor who has contacted me because of NMRAX and has re-joined the NMRA because of the value he experienced viewing NMRAX. We all know you don't have to be an NMRA member to be a model railroader – look at the world class layout of Rod Stewart.



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GET READY, GET SET, MODEL!



John Ward of Mentor, OH submitted this impressive entry for the 2020 NMRBO contest.

THE 2021 WALTHERS NATIONAL MODEL RAILROAD BUILD-OFF IS FINALLY HERE!

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People are building layouts and running trains regardless. NMRax is reaching for these people.

NMRax is a grass roots event that is bringing a lot of attention to an organization that has a history of doing “good” for the hobby. NMRax is exposing a class of model railroaders that, not by any fault of the NMRA, has been ignored.

NMRax also allows the talents of those who have been working behind the scenes, unknown to the NMRA community, to appear on a larger stage.

My view of the NMRA is, every model railroader for over 80 years has benefitted in some way from the activities of the NMRA. My role in the NMRA gives me the opportunity to work with many of the people who support standards within the hobby; i.e. track, switches, power, etc.



This impacts everyone who runs a train. If we fail to provide a benefit to model railroaders, we will not be a necessary part of the world of model railroading, we will cease to exist.

NMRax is what I and the team were able to do as ordinary members of the NMRA – it brought light to those dark areas (areas where the individual model railroader lacks knowledge) so we could educate them.



Doing this keeps me founded in my goals of “Acting with honesty, integrity, and doing right for model railroaders.”

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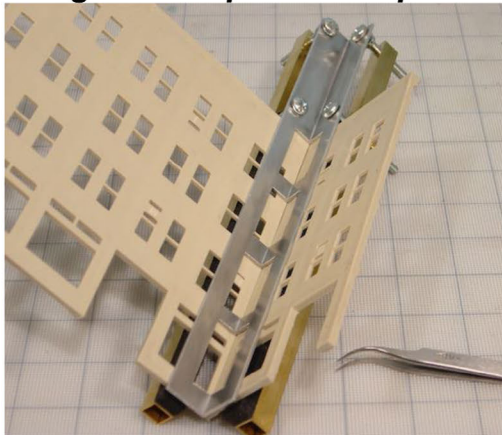
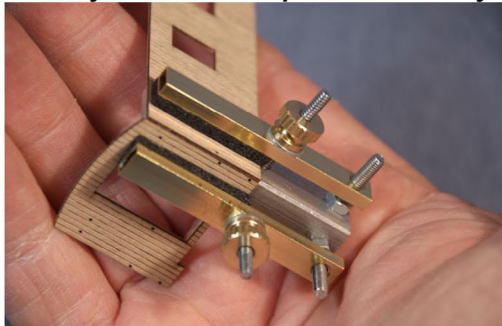
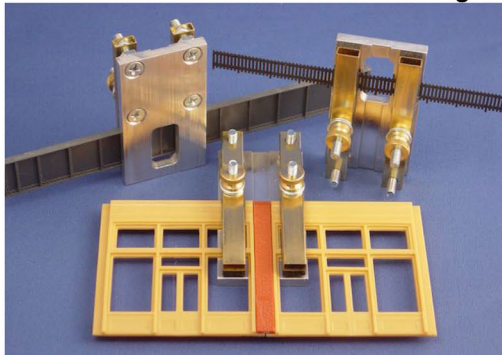
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These virtual meetings need to continue past the pandemic days. One of the things we've learned is there are more than just shut-in's (sick, elderly, and injured) who benefit from virtual meetings.

We're seeing members attend virtual meetings that have not attended a face-to-face meeting in years.

We got inexperienced modelers who know how to use Google but don't know to reach out to the NMRA. For too long we have allowed model railroaders to be left behind.

If NMRAx taught us anything, it's that model railroading is bigger what we expected.

It connected us and showed us "you don't have to be an NMRA member to be a model railroader."

Interest is alive and doing well. For years we've been told "model railroading is dying", yet 2020 has been a banner year for the hobby as to audience and traffic levels.



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FAST TRACKS

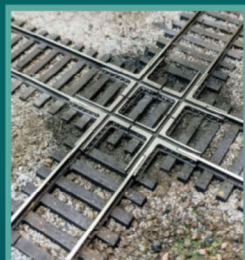
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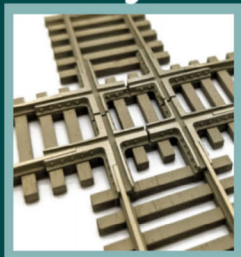
Building an accurate crossing has long been a challenge in our hobby.

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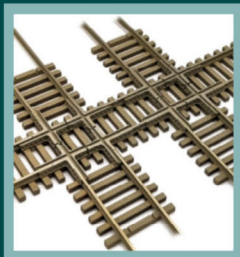
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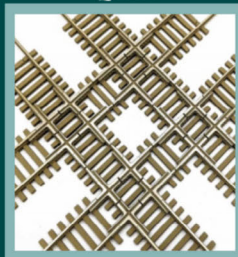
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I'm left with the question "Why do these modelers not know about the NMRA?"

Every train set, loco, or car sold has to meet the NMRA standards. The NMRA is a major component of the hobby, yet virtually no one knows this.

Now, we need to do our work and figure out how to show this community the value of the NMRA.

Jeff: I for one have enjoyed the NMRAx sessions and videos. The education presented is top notch. Gordy and the team have made the NMRAx experience pleasurable and full of good information.

If you're not a YouTube subscriber, then go to Google and do a search for "NMRAx." You will get a list of many videos. Pick your pleasure – and remember to subscribe (it's free) if you want to be informed of more NMRAx events in the future.

Joe Fugate: Speaking of web events

We (MRH Media) have started doing a monthly live event for TrainMasters TV members as well: we call it the MRH QAT session, featuring various MRH Staff members.

The general agenda includes some updates on what's coming to TMTV, a mini-presentation with helpful tips and some show-and-tell.

Then we open up the floor to questions. Ask any hobby question you want and we will do our best to answer it. Some of the other modelers may also chime in with good insights. If



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- Attendee Q/A

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we can't directly answer your question completely on the spot, we will make notes and plan on giving a more in-depth answer in next month's live MRH QAT.

We record each live session and post it on TMTV for members to watch if they could not make the live session.

We're planning the next MRH QAT session to be Saturday, March 6th. Watch for the registration link on the TMTV site and in our weekly MRH reader email blasts.

MyLayout has come back!

We've also posted our very first MyLayout story from Lee Bishop. Given our limited ability right now to go shoot layouts, MyLayout allows you to video your layout, a friend's layout, or a club layout and send it to us to become a MyLayout segment.

If you might be willing to do a story on your layout, just visit this link for the details on how to submit your layout video:

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LAST ISSUE'S RATINGS

The three top-rated articles in the [January 2020 issue](#) of *Model Railroad Hobbyist* are:

4.8 The Santa Rita mini-layout

4.8 What's Neat: Four kinds of conifers, ...

4.8 January 2021 news

Issue overall: **4.4**

Please rate the articles! Click the reader comments button on each article and select the star rating you think each article deserves. We depend on these ratings to help us determine which articles to publish, so your rating matters! ■

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THIS
MONTH

Model Railroad Hobbyist | February 2021

Compiled by **JOE FUGATE**



Adding lighted vehicles to an overpass

We find this thread by *MRH* forum member **mayor79** to show a fascinating but seldom discussed layout enhancement – lighted vehicles! From this thread:

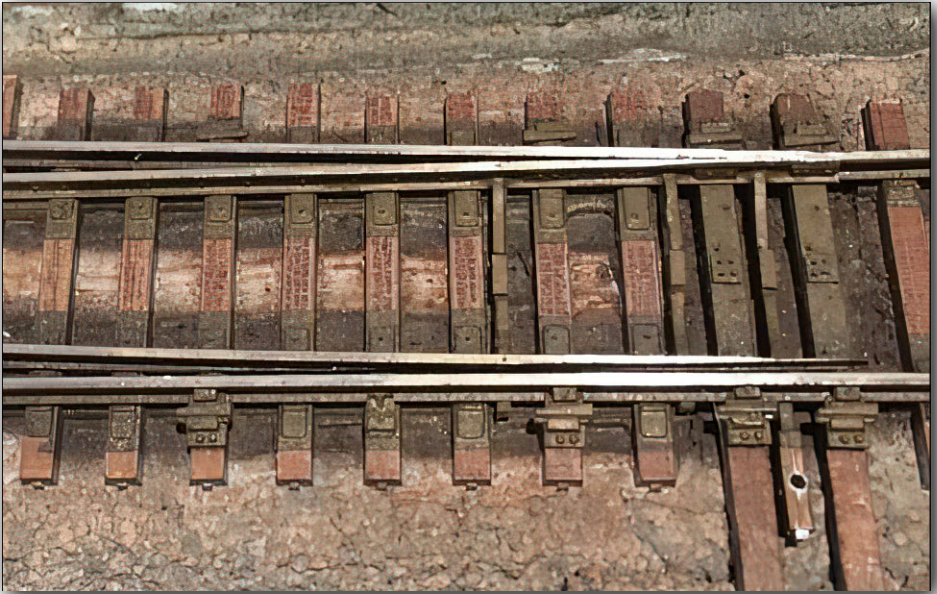
“For this portion of the layout what I decided to do was light the cars and street lights on the bridge. But I didn’t just want them on all the time, I wanted them to respond to the layout lighting. So I’m learning the Arduino. It wasn’t as hard as I thought it would be.”

Visit this fascinating thread to learn more!



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

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



1. Mark Paul posted this photo of his realistic HO turnout throwbars and how he makes them on the MRH forum.

Proto:87 turnouts

MRH forum member **MikeHughes** (Mike Hughes) is researching how to build more realistic HO turnouts. Member **Nsmapaul** (Mark Paul) posted some of his amazing turnout modeling work:

“I use z scale pcb Xover ties as my throw bars and secondary support bars on my switch points. The point rails are soldered to 3/32 brass bar stock on the work bench, then after in place on the switch the bar stock is soldered to the z scale pcb ties. The throw bar assembly is made at the bench, then soldered to the points on the layout.”

See Mike’s thread for more great insights being shared!

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



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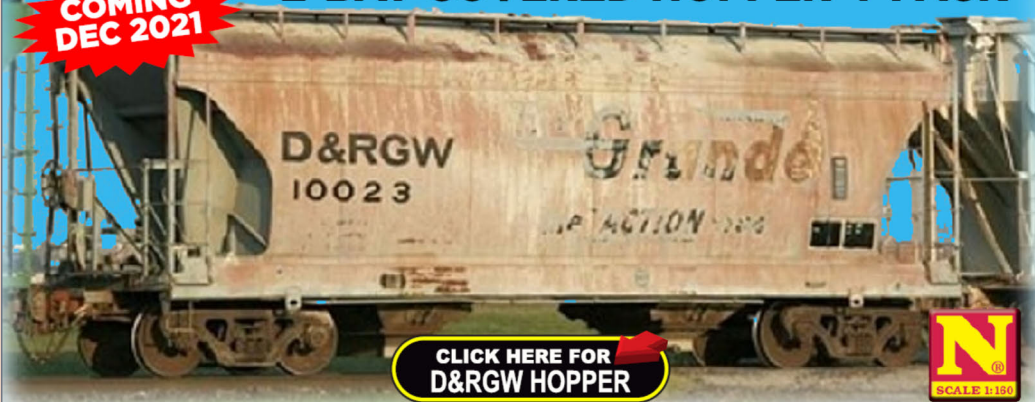
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2. Chris Monje built this nice-looking rock cut using a Woodland Scenics facet rock mold in different orientations to hide the repetition.

Modeling a nice corner rock cut

Forum member **steamhog** (Chris Monje) details how he built this nice rock cut:

“This rock cut uses the Woodland Scenics facet rock mold multiple times. Although this might make a geologist cringe, changing orientations of the same mold conceals the repetition. I used three iterations of the facet mold and then filled in the gaps with casting plaster.”

In this case, the “rock cut” suggests a reason for the track to curve. It’s also at the edge of the layout, preventing a derailment from sending something over the edge. I’ve added some grey chalk to some rock, and I also sprinkled a light coat of graphite to give the rocks some sparkle.”

Check out this thread and ask Chris for more details!

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



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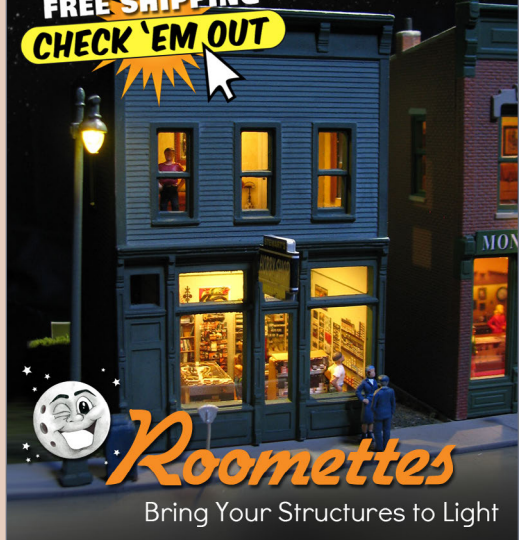
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3. Jeff Johnston posted some of his DCC tricks on a recent thread. One clever trick uses foam blocks to see if things will fit.

DCC decoders and stay alive – will it all fit?

MRH forum member **Jeff Johnston** posted a recent thread outlining some of his home made tools to make DCC installs easier:

"I'm in the midst of upgrading several brass steam locomotives from straight DCC to full sound DCC with Keep Alive/Current-Keeper devices. I cut out styrofoam sample pieces sized to match the Soundtraxx and TCS keep alive offerings. I use these when making my initial assessment of what can fit inside my often-compact logging steam locos."

Visit Jeff's thread and follow his DCC tool tips!

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Latest *MRH* Weekly photo fun thread

Every week, a new Weekly Photo Fun thread appears. It's frequently loaded with inspiring photos of great modeling ...

View the full thread on the *MRH* website



4. The top photo is from kevin's Arcata & Mad River showing his new MP15 AC to replace the aging GE 44 toners. The bottom photo catches Penn Central GP38 and two F7s pulling a freight on Tom Haag's railroad. That's some great scenery in an area that's only 10" wide! Make sure to visit the weekly photo fun threads on the *MRH* forum to get more inspiring photos such as these.



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WHAT'S NEAT

column



Model Railroad Hobbyist | February 2021

KEN PATTERSON'S COLUMN THIS MONTH ...



- Visiting Austin and Steve Allard
- Modeling ideas from above: Chasing the 4014
- Building a 4-LED Stratolite beacon



click to play video

PHOTOS AND VIDEO OF SUPERB MODELS

ON THIS MONTH'S WHAT'S NEAT VIDEO, Ken visits the double-decker father-and-son layouts of Steve and Austin Allard, What's Neat's new drone pilot Dan Scheidell takes us on a chase of UP 4014, and James Rigier shows us how to make our own HO scale (or larger) four-LED Stratolite beacons, including writing the code to make it work.

Austin and Steve Allard's Father and Son layouts



1. Ken visits father-and-son model railroaders Steve and Austin Allard, who have spent the past six months building separate layouts on double-decker around-the-wall benchwork.



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2. The two levels are not connected, with Austin's DCC-equipped layout on the top level and Steve's DC layout on the bottom level.

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3. Steve's lower level can be upgraded to DCC, once Austin helps him add decoders to his locomotives, and a few more track feeders are added.

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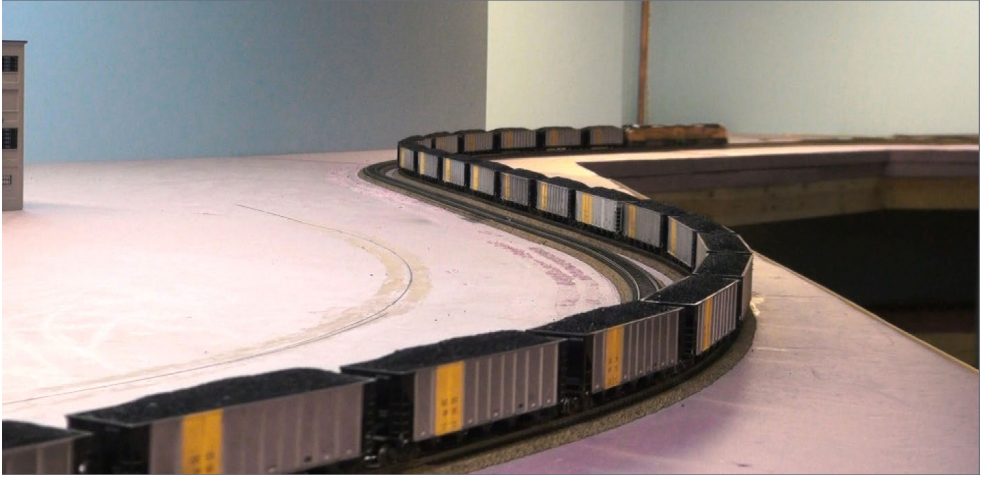
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4. Both levels are built for long trains, with mainline curve radii starting at 48" and going up to 72". Austin's layout depicts the Union Pacific Jefferson City Sub in 2013.



5. Austin's layout, which is at 53½" above the floor, features a two-track mainline and lots of yard space for his rolling stock and locomotives.



6. Steve's layout, at around 37" above the floor, features storage drawers for his trains instead of a yard.



7. This river section was included on the original layout plans, and hints at the scenery and structures that will be added to Austin's level, now that the layout is operational.



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Modeling ideas from above – chasing the UP 4014



9. Dan Scheidell, also known as Railfan Dan (Instagram: www.instagram.com/railfan_dan14, YouTube: www.youtube.com/channel/UCSLspsNY3KJstSs2NqaKQbA) chases trains with a drone. In this month's video he chases the UP 4014 on its trip between Salt Lake City and Las Vegas.



10. The Union Pacific special led by the 4014 adds a bright yellow note to the muted browns and greens of the desert terrain.



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Making your own four-LED Stratolite beacons



11. Santa Fe 2233 is an Athearn Genesis model of a GP7u. Except for an upgrade to LEDs, this unit is as it came from the factory, with Tsunami sound. The rotary beacon has a flash pattern that mimics the brightness of a Stratolite, but without any real rotation.

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12. Santa Fe 7494 is a Rapido model of a B36-7. Rapido was the first manufacturer to deliver a production model with a four light Stratolite beacon. This model pushed James to attempt to create his own rotary beacons for other locomotives so that they would look good side by side.

To make the four-LED Stratolite work, James set up an Arduino with a bread board and four LEDs. Then he wrote an Arduino sketch to animate the lights in a Stratolite pattern. Please find two Arduino sketches – one for the Arduino itself and one for the AtTiny13a – and a readme file in the following download: [downgit.github.io/#/home?url=https://github.com/jpregier/ModelRailroadingProjects/tree/master/FourLedStratolite](https://github.com/jpregier/ModelRailroadingProjects/tree/master/FourLedStratolite).



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

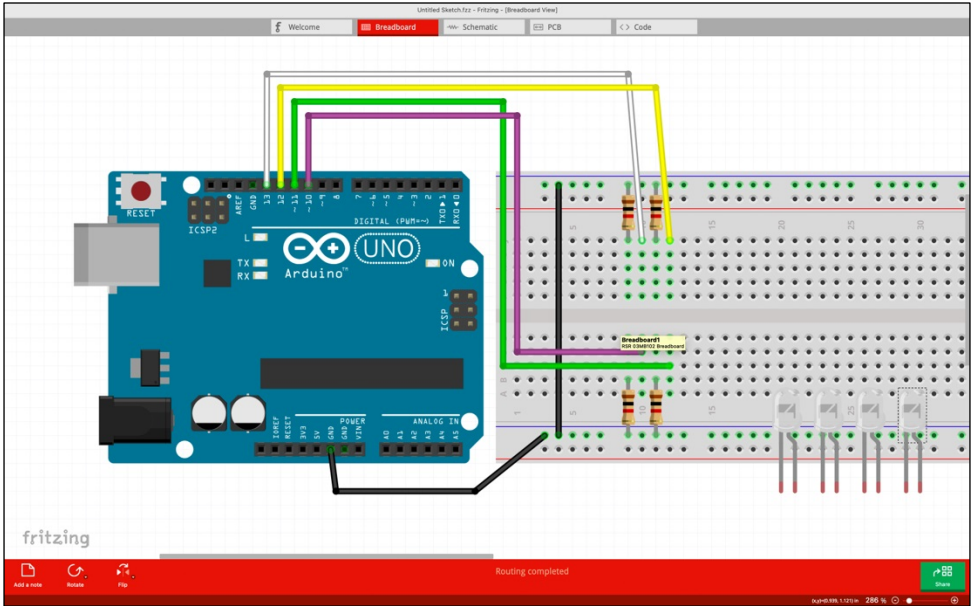
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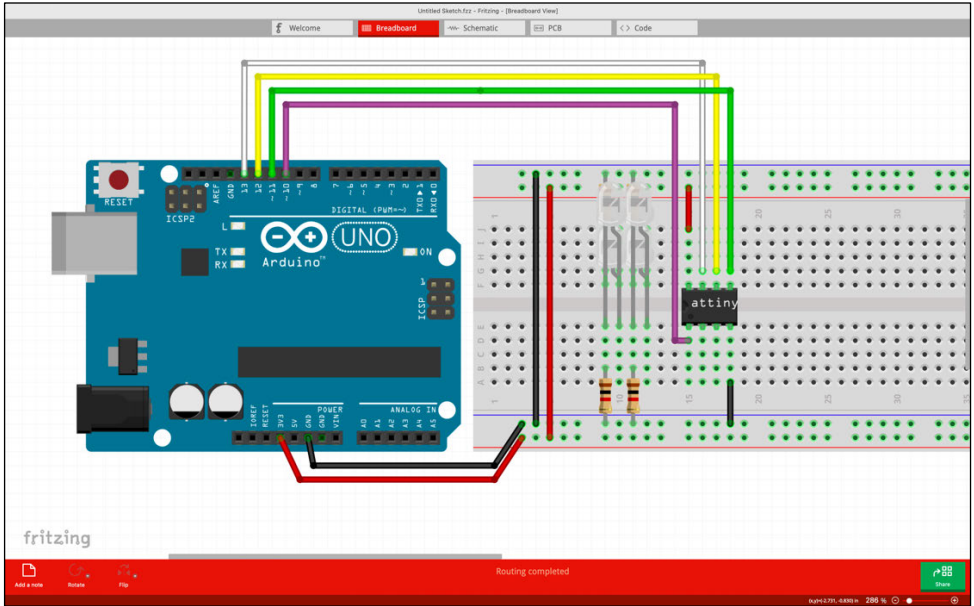


13. This is a Fritzing diagram of the circuit board setup. The LEDs are left off to the side because otherwise they would obscure the resistors in the illustration. Each LED should be installed with its cathodes (negative poles) connected to a resistor and its anodes (positive poles) connected to a colored wire that is in turn connected to an Arduino pin. The Arduino and AtTiny13a use a common cathode ground represented here by the black wire. Use the file [arduinoMillisStratolite.ino](#) from the download package to the left to program the Arduino to flash the LEDs in sequence. Feel free to tweak the variables to suit your needs.



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14. Once the sketch is satisfactory, it is ready for writing to the AtTiny13a chip. Wire the Arduino to the AtTiny13a chip as shown here.

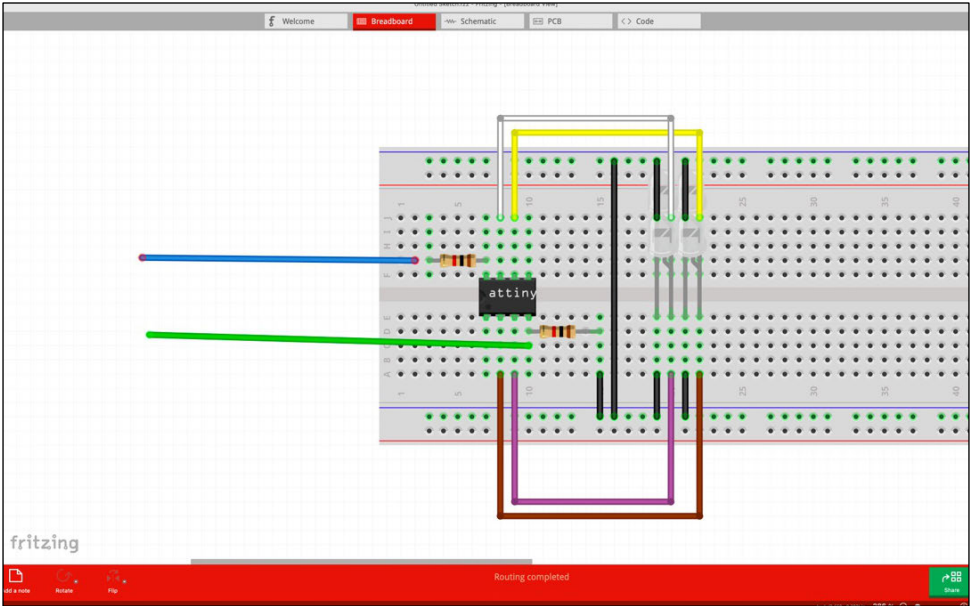
The small half-moon indentation on the AtTiny13a chip is to the right, on the side of the controller facing the Arduino. Use the sequence and addons from the following website to prepare your Arduino to write to the AtTiny13a chip: create.arduino.cc/projecthub/taunoerik/programming-attiny13-with-arduino-uno-07beba.

Once the Arduino and AtTiny13a are prepared, flash the following sketch included in the download packet: [attiny13aStratoliteSequence.ino](#).



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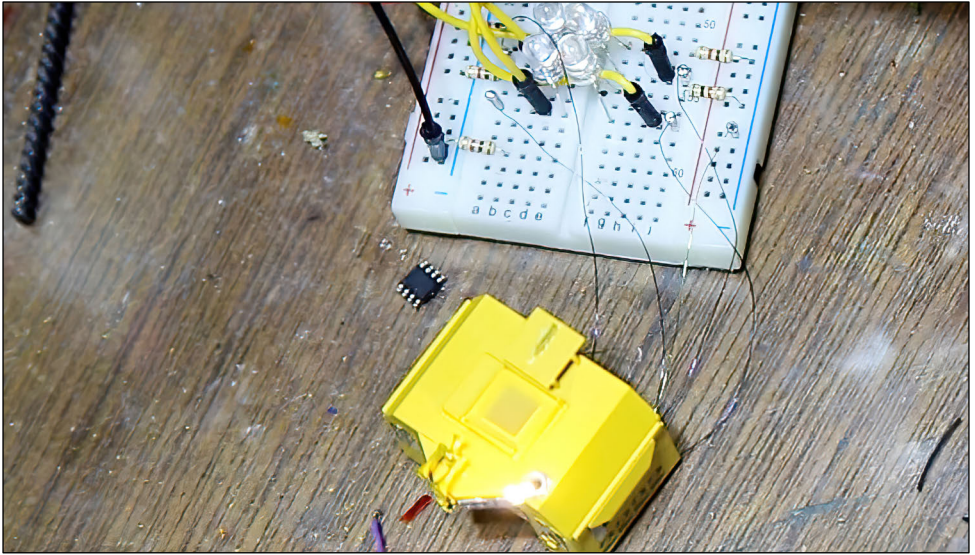
15. Here is the final wiring configuration for the AtTiny13a and LEDs as it will go into the locomotive. The blue wire is the positive, function common wire to the decoder, and the green wire connects to a decoder lighting function set to “constant bright”.

Note the 1kΩ resistor on the function common. The AtTiny13a operates on 3V and will burn at higher voltage. If your decoder already has built in resistors for LEDs, then the additional 1kΩ on the function common is unnecessary. The 1K resistor between the AtTiny13a ground and the LEDs, by contrast, is required for proper function.



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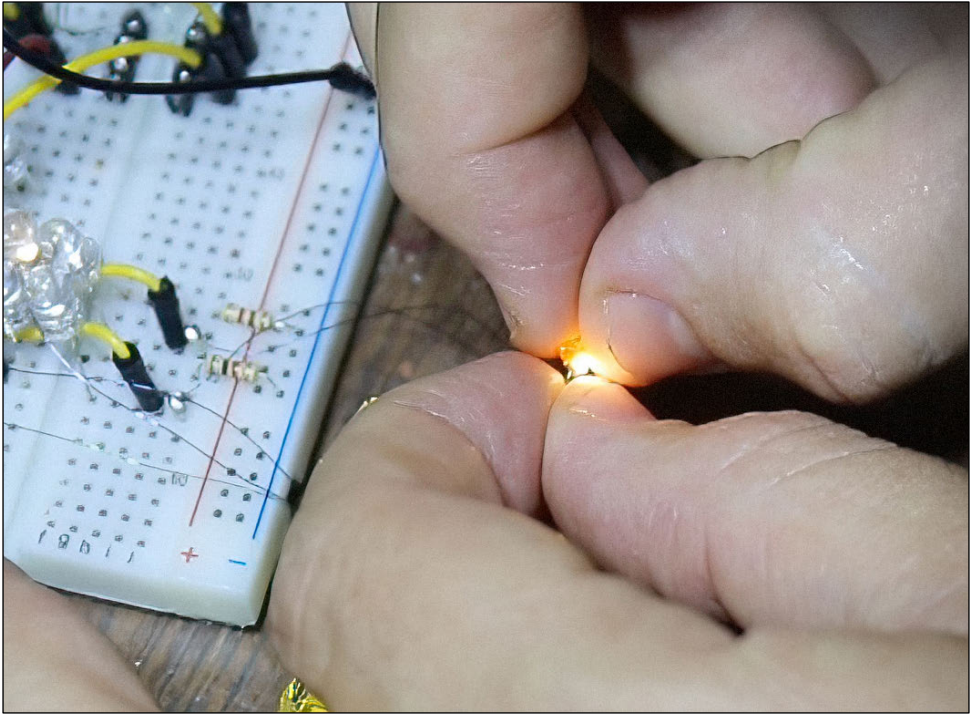


16. For the actual installation, James switched from the 3mm LEDs and axial resistors of the breadboard to 0402 SMD LEDs and SMD resistors. Here, he is testing the 0402 LEDs with the breadboard to determine which LED corresponds to each pin for proper sequence. He will mark each wire before soldering them to the pins of the AtTiny13a chip, which is just above and to the left of the locomotive cab in the photo.



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





17. James is fitting the beacon globe to the four-LED cluster. He began with an Athearn globe and used a 1/16" and a 5/64" drill bit to increase its cavity size to accommodate four 0402 LEDs. He used a no. 64 bit to drill a small dimple into the top of the cavity to accommodate the wire ends.



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

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18. Here we see another Athearn GP7u, now with its four-LED rotary beacon completed. A close look reveals that the rear quadrant is illuminated in this photo. For full effect, be sure to watch the What's Neat video on YouTube.

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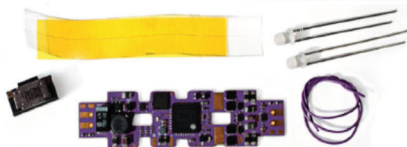
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Lights, sound, action!



Electrical
Impulses

Model Railroad Hobbyist | February 2021

NELSON BEAUDRY UPGRADES AN ATHEARN
DIESEL WITH DCC, SOUND, AND LED
LIGHTING ...



I'VE HAD THIS ATHEARN READY-TO-RUN CF7 LOCOMOTIVE ON the shelf for some time now. I purchased it at a swap meet, intending to paint it for my fictitious regional short line, the Kennebec Penobscot & Northern, based in Central Maine. Follow along as I show you how to add lights, sound, and improve the overall drive train of these models.

Because I model the modern era, I want to make sure all my motive power comes up to modern safety standards. This means all motive power must have ditch lights and warning lights where appropriate. Let's get started.

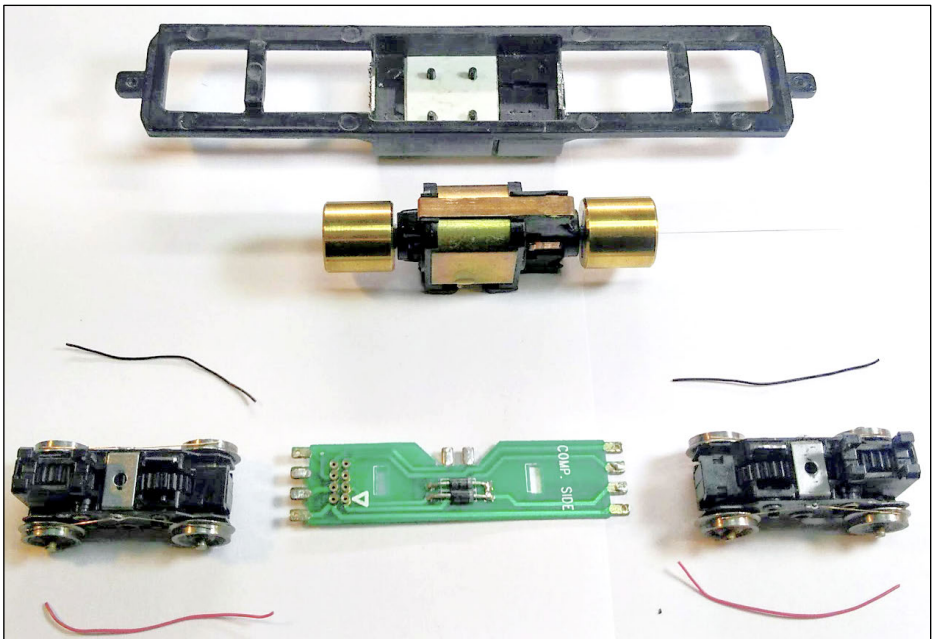
DISASSEMBLY

I begin with the basic frame of the model. I assume you already know how to take apart the model (generally just remove the coupler screws, pull out the coupler pockets, and remove the shell).

Ready-to-run Athearn units come DCC-ready with the frame already isolated from the motor – but I modified it a little – let me show you how I did it and why.

REMOUNTING THE MOTOR

This model uses the original Athearn rubber motor mounts. I found them to be stuck fast in the frame and I had to pry the motor out to remove it for DCC upgrades. Unfortunately, I pulled the original motor mount apart in the process.



1. The locomotive has been dismantled to its components, with the motor, trucks, and circuit board removed.





2. I drilled no. 43 holes through the rubber mounting lugs to accommodate screws.

I cut the remnants of the rubber pad mounts out of the frame, but decided to leave the rubber mounting lugs in the fuel tank holes. I drilled them out with a #43 drill bit to accommodate screws later on. This works well to provide some vibration and motor noise dampening [2].

Without the rubber mount, the motor would sit lower in the frame, which would take the motor shaft out of alignment with the gear towers. To compensate, I added 0.060" styrene shims to the bottom of the frame. This brought the motor mounting height back to that of the original rubber mounts [3].

I drilled through the shims with my no. 43 bit and test-fit four 1/4" #2-56 screws [4]. To attach the motor, we will need to tap the four holes on the bottom of the motor cradle[5]. The screws will provide a secure mount for the motor but provide easier access for service than the Athearn motor mounts.

We have a little more work to do on the motor before mounting it to the frame. Remove the copper clips on the top and bottom of the motor and solder an orange wire to one clip for the positive terminal, and a gray wire to the other for negative [6].



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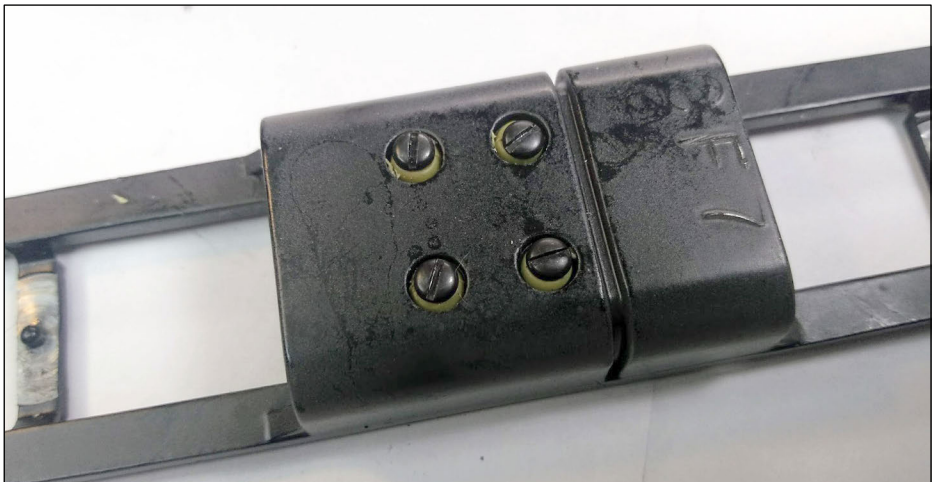
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LIGHT, SOUND, ACTION! | 4

With the wires added to the clips, we can add them back to the motor. The clip with the orange wire will go on top, and the clip with the gray wire will go on the bottom. With the clips wired and installed, the motor is ready for remounting to the frame [7].



3. I used two shims of 0.030" sheet styrene to bring the motor shaft into alignment with the gear towers.



4. Test fitting the screws to the frame.

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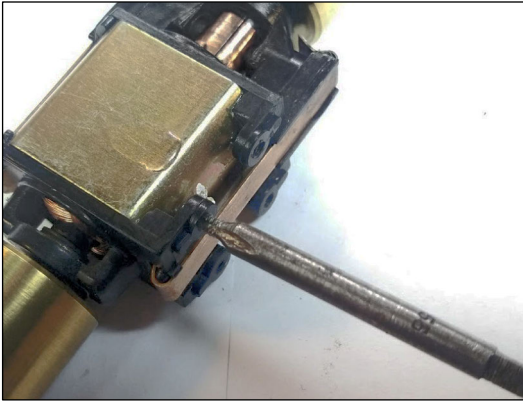
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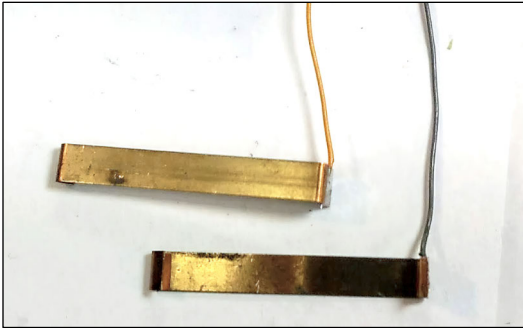
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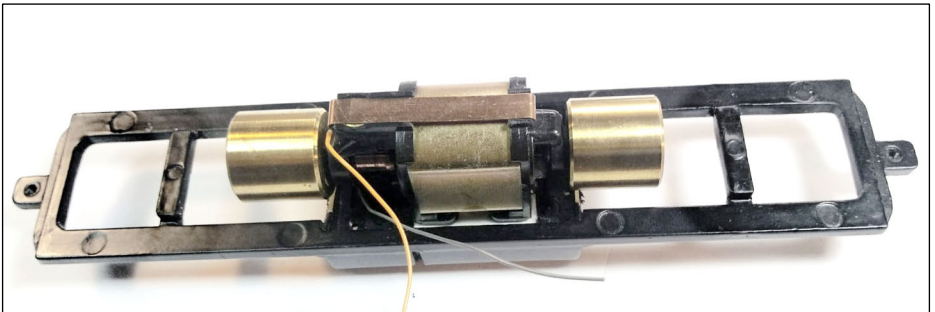
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5. I tapped holes in the motor cradle to accommodate mounting screws.



6. Orange and gray wires soldered to the motor.



7. The motor is installed on the frame with the clips and wire colors in proper orientation.

INSTALLING THE DECODER

With the motor secured to the frame, we can mount an OEM Athearn Genesis Tsunami II sound decoder to it. The Tsunami II decoder has two slots on the top for mounting pads on a Genesis motor, but the ready-to-run motor in the CF7 has none. The solution is to attach the decoder to the motor using tape.

I've gotten good results using masking tape to secure the decoder to the motor [8]. Using Kapton tape would normally be desirable, but we do not want the tape to cover up the solder pads. Masking tape can be cut into narrow strips easier than Kapton tape and has better adhesion.

The board is properly secured and all the solder pads are accessible. Now solder the orange wire to the M+ pad and the gray wire to the M-pad.



J. Fugate

ON MASKING TAPE FOR INSTALLS

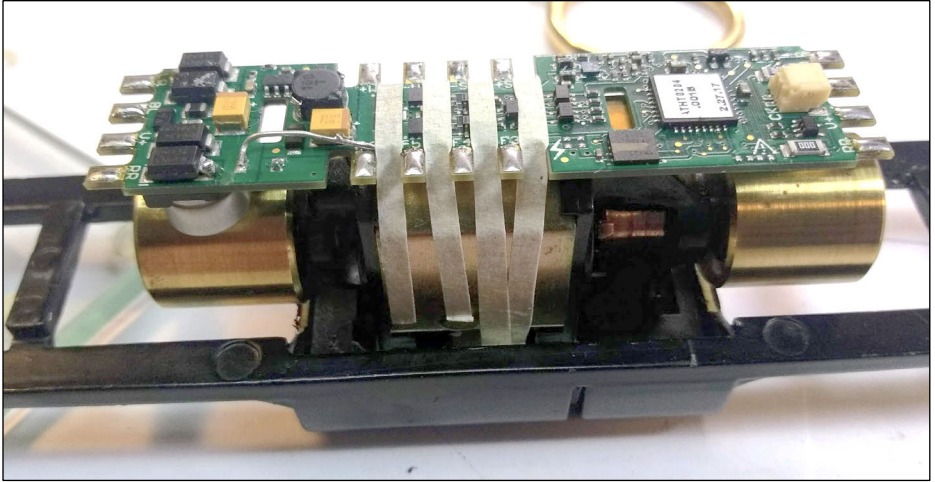
I've used masking tape myself in the past for the very same reason and it turned out to be a bad idea. Masking tape ages quickly on warm electronics and gets brittle in short order. Aged masking tape leaves a sticky gummy mess behind on the decoder and motor that's almost impossible to remove. Using double sided foam tape between the motor and the decoder board also works quite well.

Kapton tape is made for electronics, and it only costs a few dollars a roll. I now keep several rolls of various widths on hand. See the shopping list link at the end of this article for how to get Kapton tape. We're even sending the author a free roll so he can replace the masking tape in this model before it's too late!

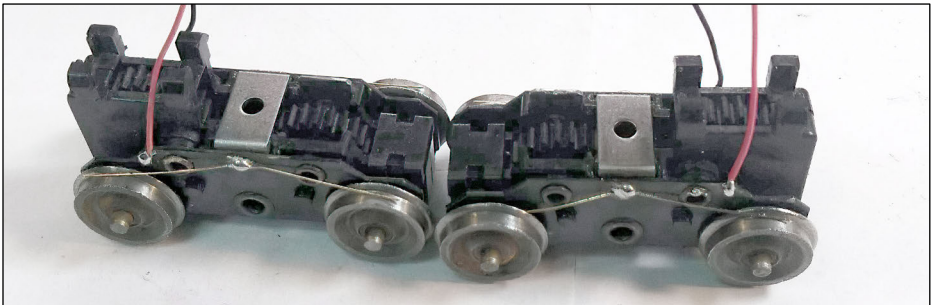


I made some significant modifications to the trucks to help ensure better power connectivity [9]. I cut the power feed towers off of the engineer's side and soldered wires to either side of the trucks' metal frame.

To further enhance power pickup, I made extra wheel wipers using .010" phosphor bronze wire. These should also act as a sort of suspension and help the wheels follow the track better.



8. The decoder is mounted to the motor with masking tape.



9. I added phosphor bronze wires to serve as wheel wipers to help provide more reliable power pickup and soldered feed wires to the truck frames.



J. Regier

BETTER WHEEL CONDUCTIVITY

Athearn Ready-to-run trucks are throwbacks to the old, reliable Blue Box standard. Power from the engineer's side rail passed through the truck bolster to the frame and the motor. Power from the rail on the conductor's side passed through a metal hook-like structure to an overhead metal bar that clipped to the motor.

Ready to Run units use the same truck design, but with the motor isolated from the frame. All power goes through a DCC-ready board mounted to the motor, typically with rivets, with engineer's-side power transferred from the frame to the decoder via a screw and a wire. A wire also replaces the metal bar.

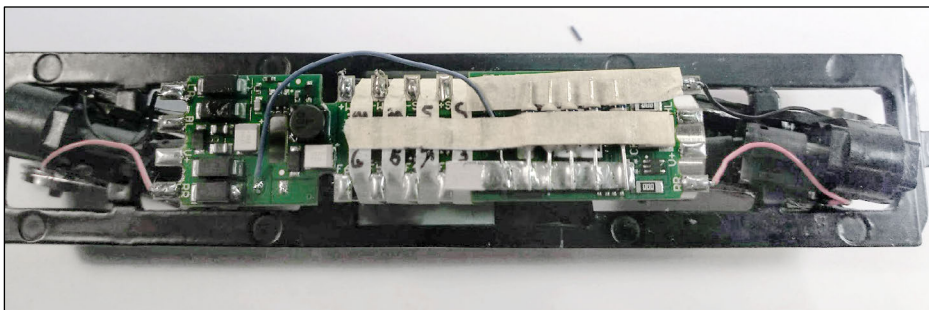
The wheels and the sides of the truck make a solid connection, with the power from each wheel transferred via a brass lug in constant contact with the wheels and the truck side. The point where power from the fireman's side transfers from the truck to the frame, by contrast, can be weak and problematic at times.

The author has addressed this issue by soldering wire leads to the sides of the truck tower frames, which bypasses the weakest link in the system. I have done this in many upgrades myself, and with noticeable improvement. This also permits you to remove the old metal hook portion of the truck tower, which can free-up interior space for speakers, cab interiors, and other opportunities without loss of conductivity.

I prefer not to add phosphor bronze wire wheel wipers to my locos. Wheel wipers may add drag to the wheels, making them harder to turn. I also worry they will cause wear and grooving in the nickel silver wheel plating over time.

Joe F note: I've added wipers to the loco wheels and have not noticed the issues James brings up, so best-practice opinions do vary here. ■

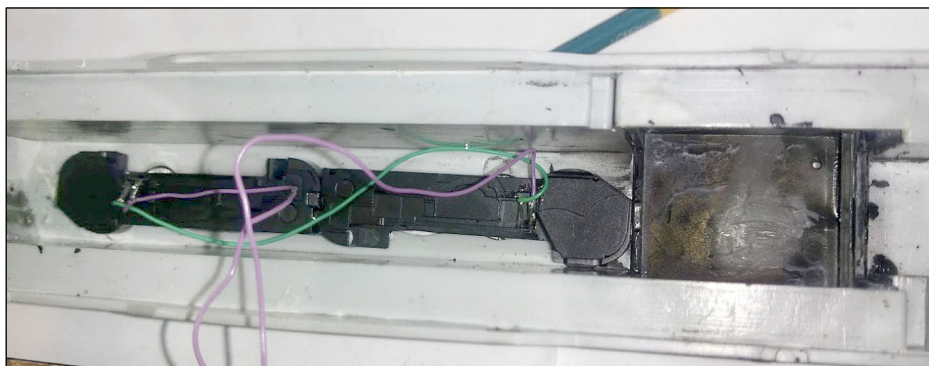




10. The trucks have been installed and their wires soldered to the decoder board.



11. I used two iPhone 4 speakers for this project.



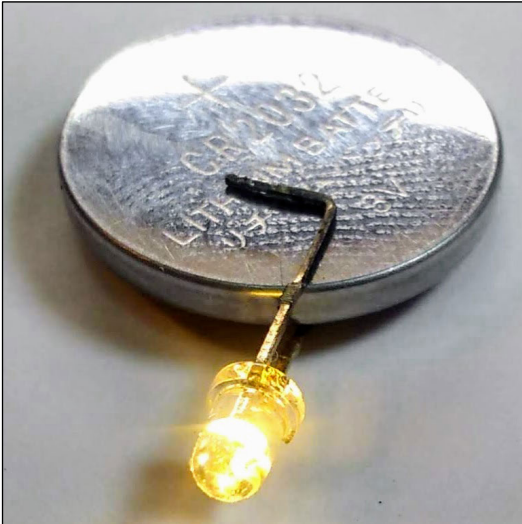
12. The speakers are wired in series and glued into the shell.

LIGHT, SOUND, ACTION! | 10

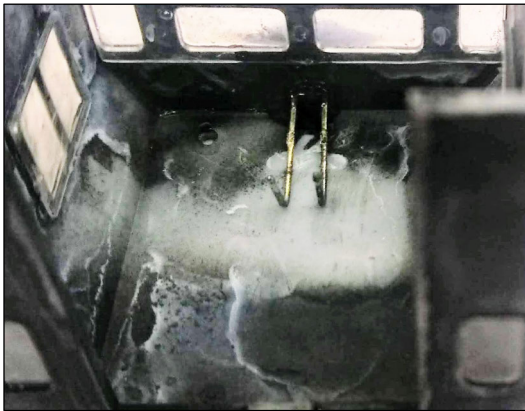
With the truck modifications complete, mount the trucks back into the frame and solder wires to the appropriate pads [9].

Now we can move on to speaker installation. I chose two iPhone 4 speakers. Wiring them in series gives us a total of 16 ohms and approximately two watts of power capacity.

I installed the speakers in the shell using a general-purpose adhesive, and soldered the speaker wires to the appropriate pads on the decoder [12]. I fit the shell onto the chassis and



13. A CR2032 button cell battery puts out 3V, which makes it a good LED test power source.



14. I mounted the 3mm LED into the headlight opening in the cab.



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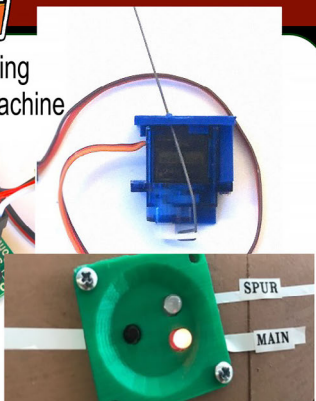
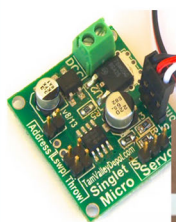
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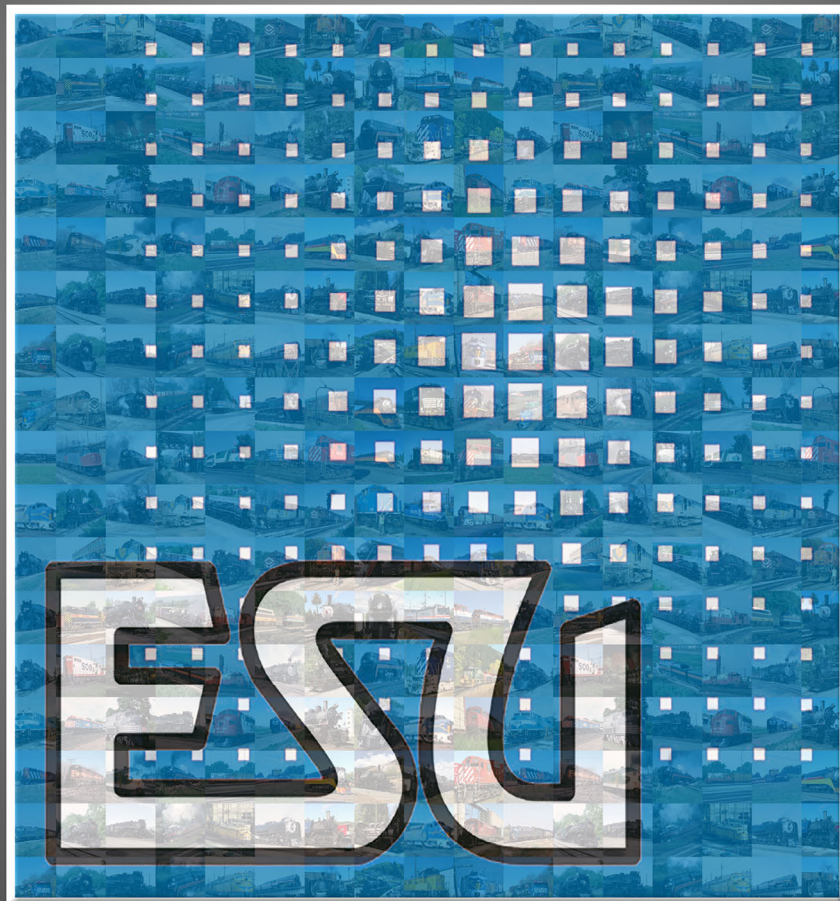


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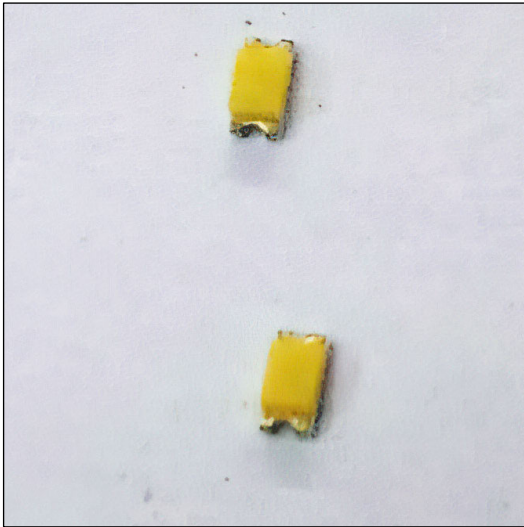
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performed a sound check. With a successful test, I de-soldered the speaker wires from the decoder and set the chassis aside for the light install.

Until recently, Athearn Ready to Run models came with 1.5 V micro incandescent bulbs, which are notorious for burning out quickly. I converted my CF7 lights to LED soon after I purchased it.

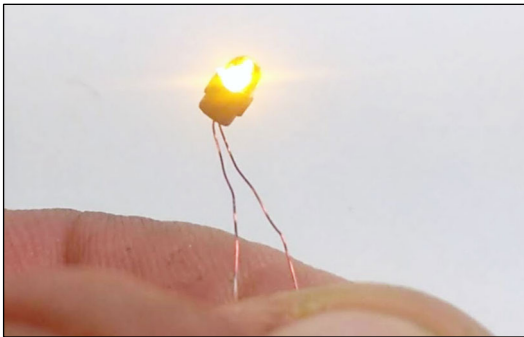
For the headlight, I used a 3mm warm white LED. I tested the LED with a CR2032 button cell battery [13]. After confirming that it worked, I mounted the LED into the headlight opening in the cab [14].



For the rest of the project, I used 0603 SMD LEDs, which have the advantage of being able to fit just about anywhere [15]. You can purchase 0603 LEDs already wired, but I like to solder my own wires to them. I prepare the LED

15. 0603 SMD LEDs are my preferred size for most projects.

16. Testing the 0603 LED in the rotary beacon housing.

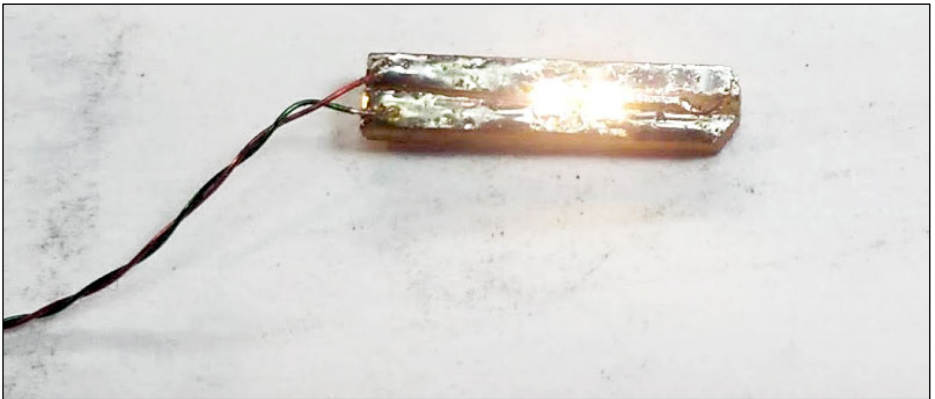


and wire sets in batches of four so that I have them as needed: enough to complete the step I'm on and to compensate for a goof.

Many short line switchers used beacons as warning lights for added visibility, so I thought my locomotive could use one, too. I happened to have a rotary beacon in my scrap pile, so I have no idea what brand it is. There are good ones available from Athearn and Details West, though.



17. The LED is mounted to the cab roof of the locomotive, on the engineer's side.



18. Test-firing the PCB LED assembly for the rear headlights. Note the groove I have etched down the middle of the PCB tie. I soldered the LED anodes to the top half and the cathodes to the bottom half.



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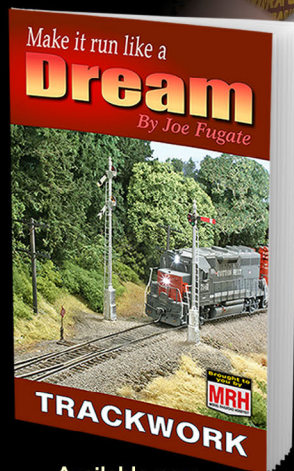
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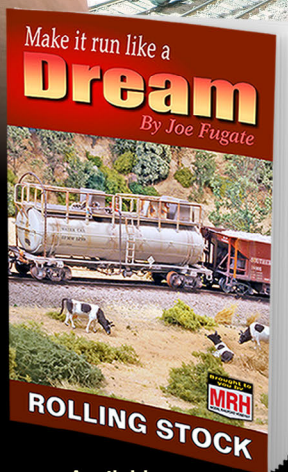
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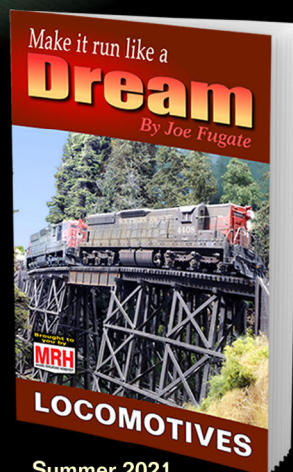
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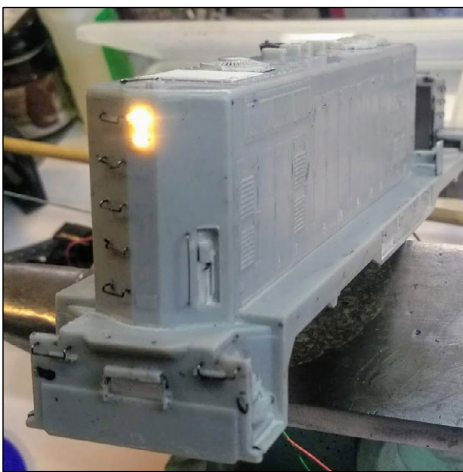
I wired an 0603 LED, placed it in the beacon dome, and gave it a test [16]. The beacon lit right up as expected, so I mounted it to the cab on the engineer's side [17].

One trick I have found for soldering LED headlight assemblies where you need two in close proximity for one function is to use a scrap piece of PCB tie [18] I cut a groove through the copper along the length of the tie scrap and soldered two LEDs in parallel, spaced to line up with the rear headlight lenses, with their electrodes to either side of the groove [19].

I want to put ditch lights on the front and rear of the locomotive, on the front and rear pilots, just beneath the anti-climbers. Drill 1/16" holes in the front and rear pilot where you want to place your ditch lights [20]. For housing, I used 3/32" brass tubing, cut to 1/8" segments, and secured to the locomotive with CA adhesive in alignment with the ditch light holes [21].

An important part of any locomotive lighting project is making the lenses. I scavenged an old Christmas tree for fiber optics and I used them to make the lenses [22].

To create the lenses, I cut the fiber optic to manageable length, mounted it into a pin vise, and held it close to my hot solder iron while rotating [23]. The nicely convex lenses were a nearly perfect fit for the ditch light housings. I secured them into place



19. I spaced the LEDs on the PCB tie so they lined-up perfectly with the locomotive's headlight lenses. The PCB tie made for easy mounting to the locomotive shell.

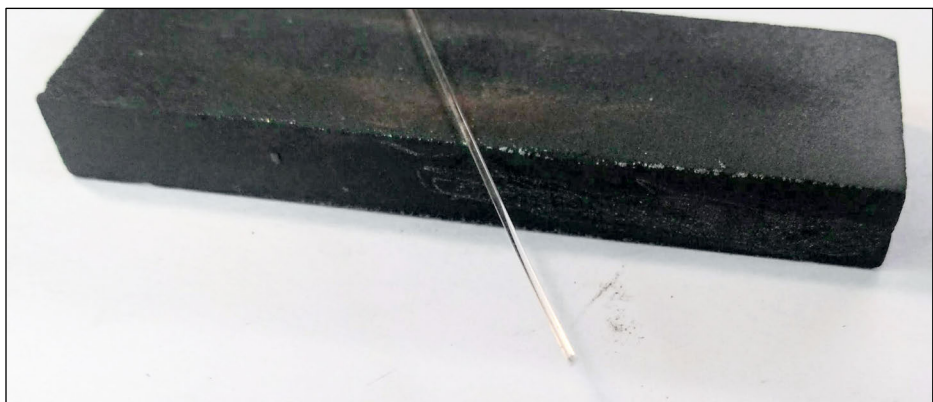




20. I drilled holes for the ditch lights in the pilots.



21. I used 3/32" brass tubing for the ditch light housings. Here they are shown secured with CA adhesive in the front pilot holes.



22. Fiber optics from an old Christmas tree can be recycled into locomotive lenses.



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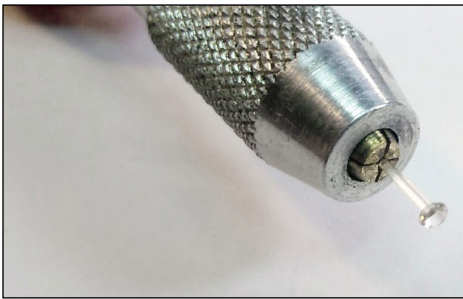
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with Aleene's Clear Gel Tacky Glue and allowed the adhesive to dry completely before proceeding [24].

Once the adhesive has dried for the lenses, you can proceed to install your LEDs behind them, using the same adhesive [25]. Once all LEDs are installed, set the shell aside to dry completely before proceeding.

After the glue has dried, you can separate all your wiring. Collating wires by function will make it easier to keep track of which wire goes where for the final installation to the board.

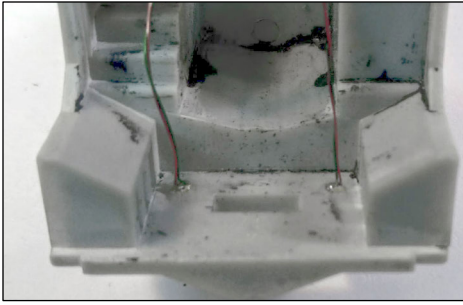
Decoders have one solder pad for each function output, but usually only one – maybe two – pads for the function common, or blue wire. Trying to attach several wires to one small pad is a recipe for a mess, especially since each function will also need an appropriate resistor to limit the current. I developed a method to organize this confusion using a PCB tie.



23. Holding fiber optics to a heat source while rotating them in a pin vise creates very convincing lenses.



24. Aleene's Clear Gel Tacky Glue is a good adhesive for mounting the ditch light lenses into their housings.



25. I pushed the LEDs into the ditchlight holes behind the lenses and secured them with Tacky Glue.

side of the pad, along with a blue wire that will eventually lead to the decoder's function common [27]. I solder the anode wires from the LEDs to the other side of the 680-ohm resistors, with one function per resistor.

Normally, the blue wire would attach to the function common pad on the decoder, but in this case, I am using an OEM Athearn Genesis decoder. The function common pads are limited to 1.5V on these OEM boards to accommodate the micro bulbs that Athearn used

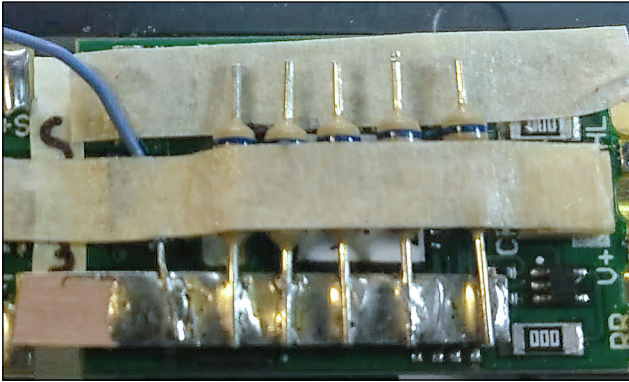
I clean the copper cladding on one side and remove the copper cladding completely from the other. The padding comes off easily with a buffer wheel or benchtop grinder. Removing the copper cladding on one side is important, because we do not want any loose conductors in the locomotive shell causing short circuits [26].

I solder five 680-ohm resistors and a blue wire to the copper



26. One side of the PCB board has been completely stripped of its copper to avoid conductivity on that side.





27. The PCB board with the resistors and blue function common wire attached. The anode wires from each LED function will attach to the other ends of the resistors. Note that the resistor leads are trimmed flush to the PC board on the one side and to about 1/8" on the other.



J. Regier

LED WIRING

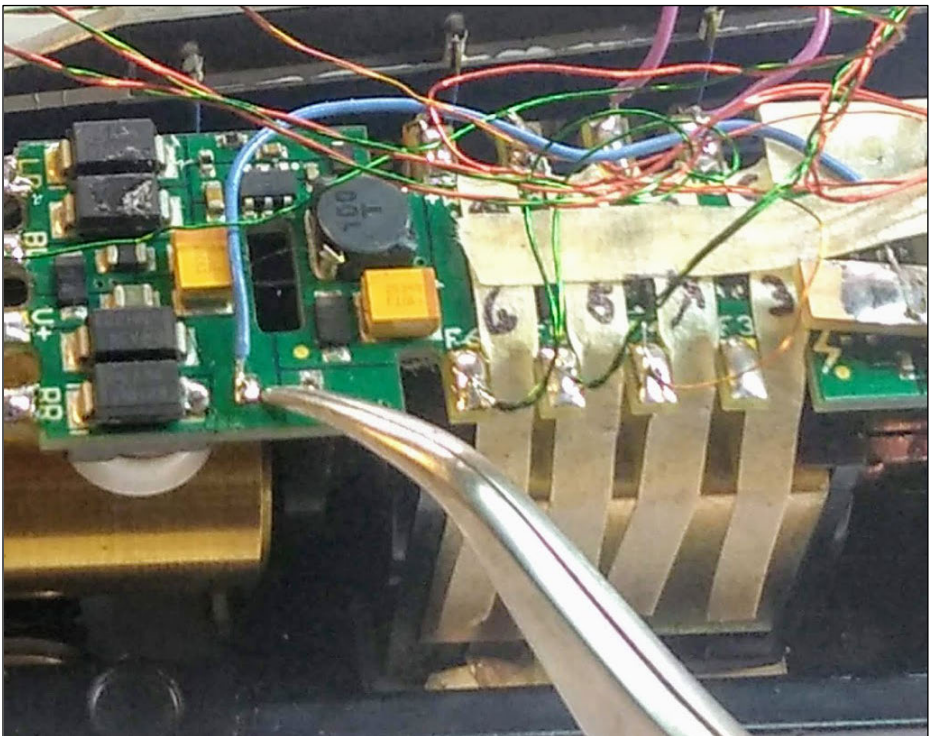
There is nothing magic about having your resistor wired to the Anode (+) or Cathode (-) of your LEDs or about having the resistors in one place on your locomotive. In my installs, I solder a resistor into the function common (+) line, an inch or two away from the LEDs of a given function – just enough wire between the LED and resistor to allow some play in installing the resistor. I splice the function common lines about the same distance away from the resistor.

Absolutely crucial to me: using shrink tubing or silicone conformal coating to isolate each and every solder joint, with the exception being the solder pads of the mother board, given they're fixed in place. Even brief accidental contact between an exposed function common wire or board, as the author uses, and another lighting function, speaker wire, motor, or track power terminal can fry a decoder. Whatever method you use, make sure to insulate all splices and in-line solder points.

until recently, but 1.5V is insufficient to power an LED. Fortunately, the board also has a 14V function common point, though it is only large enough to accommodate one wire [28].

All other function wires can go to their usual solder pads.

With the wiring all installed, we can put the shell back on the locomotive to test the light and sound functions. If everything is functioning normally, then the light and sound install is complete. In my case, I notice some undesirable light bleed around the ditch lights, which will be corrected in the paint shop [29, 30].



28. Make sure the blue function common goes to the 14V pad, not to the standard function common. All other function wires go to their respective function pads.



I hope you enjoyed reading this article and found it useful in your next installation of lights, sound, action!



29. Looks like everything is working correctly. The bleed-through on the ditch lights will be corrected once the shell painted. Black paint on the inside of the front and rear pilots will also help eliminate bleed-through.



30. 2612 is complete and ready to take the road. Check out the full light and sound effect as 2612 switches out a paper mill here: www.youtube.com/watch?v=-GHMwWSchak&feature=youtu.be.

NELSON BEAUDRY



Nelson has been a modeler most of his life building everything from airplanes, model rockets, and plastic models you name it! He is a marine mechanic by trade, but also had a long stint in hospital food service. He started as a utility person, and left with 17 years experience as a cook, to join Clark Marine as a fulltime parts manager. He has always had a background in the mechanical field, and was the top graduate of his senior VOTEC class in small engine repair. He has always enjoyed model trains because of the mechanical nature of the hobby, from fixing broken engines and cars to wiring layouts for other modelers. With the advances in DCC, it has been a natural progression to adopt this technology. In the same token, this also transfers to the electronic nature of today's modern marine engines. He is currently certified with Mercury Marine as a top level technician with 20 years experience in the marine field. Modeling helps keep his mind sharp in the off-season (winter), because when spring arrives, it's all hands-on-deck at the shop. In his off-time he enjoys motorcycling with his wife Tammy, and touring the coast of Maine. ■



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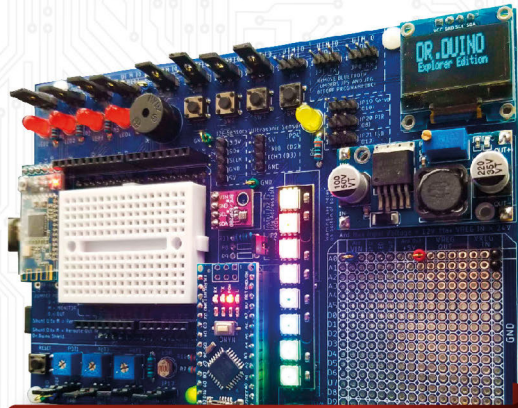
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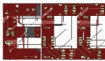
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THE Model Railroad Hobbyist's
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... in a post-Floquil world

By Joe Fugate PDF LANDSCAPE EDITION

MRH's Floquil / PollyScale Paint Equivalents Conversion Chart - 1

Floquil / PollyScale Color (approx.)	Model Number	Yulex / Mottolo	WOOOLux	Notes
Primer Gray	MM 4763	YWA F1505	16-12	
Engine Black	MM 4888	ML 20008 YWA F1.251	16-01	
Stream Power Black	MM 4950	YWA F1.657	16-44B	
City Black	MM 4793	YWA F1.621	16-44*	
Weathered (Chemical) Black	MM 4950	ML 20003 YWA F1.644	16-05	
Reflex Gray	MM 4887 MM 4941	YWA F1.045	16-04	
Reflex White	MM 4872	ML 20004 YWA F1.035	16-02	
Grass Black	MM 4883	ML 20002 YWA F1.025	16-03	
Caboose Red	MM 4828P MM 4831P	MM 4833 with 20% black pigment ML 20005 YWA F1.062	16-08	

*Indicates a close but not exact match. All WOOOLux paints are a sampling finish.
 Yulex Model and Color #s: Yulex and Mottolo Model numbers are the same as the original.
 Mottolo Model numbers: Reflex Gray is a shade lighter than the old PollyScale Reflex Gray.
 Yulex Model numbers: Caboose Red is a shade lighter than the old PollyScale Caboose Red.
 Color #8333 (top) and #8311 (bottom) are a close match to the old PollyScale colors. Add a few drops of black to get closer.

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MRH's Floquil / PollyScale Paint Equivalents Conversion Chart - 2

Floquil / PollyScale Color (approx.)	Model Number	Yulex / Mottolo	WOOOLux	Notes
Tuscan	MM 4050*	YWA F1.036	16-16	
Reflex Orange	MM 4882*	YWA F1.063	16-09	
Reflex Yellow	MM 4879	YWA F1.028	16-10	
Roof Brown	MM 4884	ML 20009 YWA F1.249	16-17B	
Railroad Teal Brown	MM 4885	ML 20005 YWA F1.644	16-49P* Close match... See ML 20004 for 16-04	
Rail Brown	MM 4708*	ML 20001 YWA F1.039	16-13	
Rust	MM 4825	ML 20003 YWA F1.037	16-10Z	
Concrete	MM 4876	YWA F1.047* YWA F1.032	16-11*	
Agate	MM 4875	ML 20007 YWA F1.043	16-09*	Close match... See ML 20004 for 16-04

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IT SEEMS LIKE ONLY A YEAR AGO THAT I WAS

frantically soldering feeder wires on the Orleans section of my layout in anticipation of getting that first train running. Alas, it's already been five-and-a-half years. Thankfully, I'm happy to say construction of the benchwork is 95 percent complete, yet I still feel overwhelmed at times with so much bare benchwork following completion of the central layout peninsula in 2017.

Despite my delusions of having a layout completed in 10 years, I can honestly say I'm making progress. While it doesn't seem steady, the periodic spurts of scenery and structure building have finally made a dent around the perimeter of the layout, with at least some form of basic scenery around the 28x32 foot room.

It is also satisfying that some of the more challenging scenes on my compressed version of CP Rail's Lyndonville and Newport Subdivisions in Vermont are starting to come together. Even better, my second attempt at recreating the inner bay crossing of Lake Memphremagog trestle is about complete. Now I can head down to my basement time machine and witness three or four RS-18s easing across the bay as they enter and exit Newport Yard, certainly one of the signature scenes from circa 1980 I wanted to recreate on the layout.

I mention the second attempt because my first attempt was more than 15 years ago. It had far too many compromises and not enough prototype fidelity. This time around, I spent more time designing the scene to be a better photo opportunity, and closer to the prototype.





1. A pair of geeps leads a northbound freight across the trestle.

But my first attempt was not for naught. The lessons learned were incorporated into the new trestle crossing and what I would call a successful, if uncommon, method for water crossings. Armed with my trestle and lakebed construction experience, I set out to redo that signature scene.

Hopefully the experience described here will inspire you to create your own lake scene, and the techniques will be helpful in scratchbuilding a wood pile trestle with plexiglass as a base, rather than a plywood surface. I built first trestle scene more than 15 years ago using these same techniques, but this time around I spent more time designing the area to get a prototypical height and a linear trestle, rather than compromising with an elevated curved trestle.

I have seen plexiglass used as a trestle base in magazine articles and a few museums, but it's not a common method. My experience with the first scene was that plexiglass provided a

natural reflective surface. With the addition of minimal ripples on the surface, it was perfect for creating that summer day reflection for railfanning.

This approach presents some challenges, but you'll be able to follow the steps and photos in this article to create your own scene. The most challenging aspect overall was blending the water backdrop into the surface of the plexiglass. I'd like to say my results were flawless, but they are good enough, at least for now.

PROTOTYPICAL INSPIRATION

Having photos of the prototype is a must to replicate any prototypical scene. With the intention of modeling at least some portion of CP Rail's operations in Vermont, I took a trip to Newport in 2004 to get as many photos of the trestle and infrastructure around Newport as I could.

Amazingly, much of what I wanted to model was still around, except most of the rail traffic and trains. Thankfully, traffic around Newport was still predictable, and friend and photographer Richard Deuso captured a beautiful photo of Central Maine and Quebec (CMQ) heading northbound out of Newport Yard and across the trestle [1]. It almost makes me wish I modeled the fall.

Beautiful photos aside, up-close detail shots are necessary to recreate the prototype. Photos I took back in 2004 show the general construction of the trestle. They illustrate how the steel beams are supported by the deck supports, and the bridge decking is laid upon the steel beams [2].

DESIGN AND CONSTRUCTION OF THE LAKE

CP Rail's yard at Newport is located about 1/4-mile south of downtown, and it crosses the inner bay of Lake Memphremagog to reach downtown. I had to selectively





2. (Clockwise from top right) View from the deck reveals that this line was once double-track; now unburdened bridge piers stand in the lake; detailing of the deck's railing and stanchions; closeup of the trestle structure supporting the active line reveals the bolts of the angle bracing.

compress the yard, the inner bay scene, and a small portion of downtown Newport on a wall that was only 28' long. I certainly could have used another four or five feet to give the yard approach better realism, but I separated the trestle from the yard with some low-lying trees and bushes to create a transition from the yard to the trestle scene.

When I built the benchwork extending north out of Newport Yard, I narrowed the plywood roadbed to the approximate width of the single track and roughed-out the edge of the lake. This gave me a clear starting point to cut the single-track roadbed out and insert the trestle once it was built.

I also had to know the dimensions of the plexiglass so I could cut the appropriate-size sheet. Since the plexiglass is transparent, it's easy to trace the edges of the lake and benchwork onto the sheet and set it aside for cutting. The sheets come with a clear protective film that can be pulled off once they are in place.

TRESTLE CONSTRUCTION

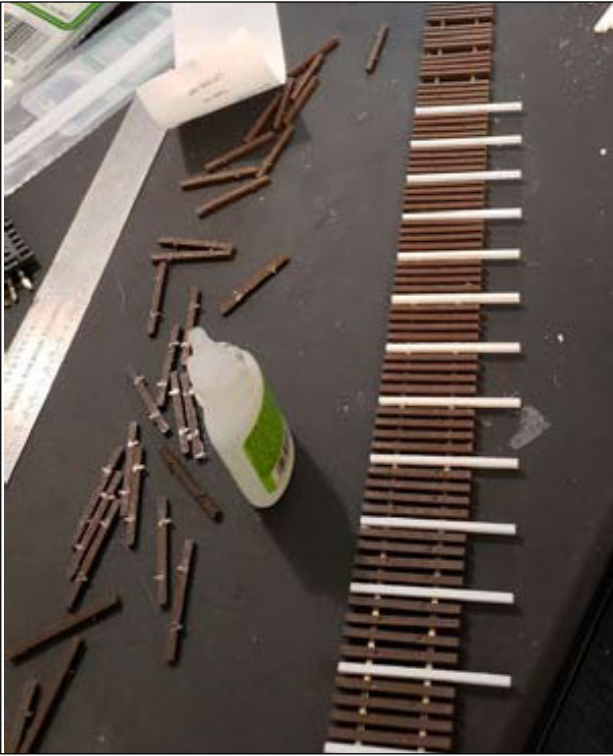
With the plexiglass sheet cut out, it was time to work on the trestle. I started with a piece of Micro Engineering bridge track measured to the correct length, typically at least a half inch longer than the water crossing on each end. This helps anchor the trestle and rail into the base on either end of the bridge.

Construction began by cutting out every fifth tie to add longer bridge timbers – 0.80" x 0.100" scale styrene strips scribed with 60-grit sandpaper – that would support the rest of the styrene deck and walkway [3]. After removing those ties, I went back and cut extra ties at three locations along the bridge to add decking for the water barrels.

Once I had replaced the ties with bridge timbers, I used Testors Model Master Cement to glue the 3/8" styrene I-beam girders to the bottom side of the ties [4]. I chose this based on the prototype photos I took in 2004, after the bridge had been rebuilt with steel beams. In reality, the prototype would have had comparable-size wooden beams in the 1980s, but I felt the steel beams didn't detract from the overall look of the bridge once it was painted.

I also wanted to make the trestle supports wide enough to represent that the bridge had been double-track many years prior. When I constructed the bridge piling supports, I made them wide enough for this [5].





3. With every fifth tie removed, I added longer bridge timbers to support the deck and walkway.



4. I used 3/8" styrene I-beams for the bridge's girders.





5. The width of the girders suggests that the bridge once supported double track.

MATERIAL OF CHOICE – MAKING STYRENE LOOK LIKE WOOD

My construction material of choice has always been styrene, even when I'm building structures that should represent wood. This may seem counter-intuitive, but for me it's just a level of comfort and familiarity with cutting and bonding, as well as the speed of assembly.

The drawback of using styrene compared to wood is, it's not as easy to stain and weather as wood. To overcome this challenge, I devised a method of pulling the strip styrene over a piece of 60-grit sandpaper several times before I cut it to give it wood



grain streaks. Once painted and weathered to bring out the details, the technique is pretty effective [6].

LAKEBED PREPARATION

Preparing of the lakebed is a four-step process. The first step after completion of the trestle was to establish the exact height of the plexiglass so the trestle would sit flat and level. If there's one critical aspect of the project, it's this step.

I spent extra time and care to get the height of the plexiglass correct by carefully measuring the banks around the lake. I made sure they were the same height as the trestle supports. Once I was sure it was close, I test-fitted the plexiglass and added some wood shims along the bank to level it where necessary [7].



6. 60-grit sandpaper creates a nice wood-grain effect on styrene.

Once I was satisfied that things were level, I measured the height from the lake bottom to the top of the bank. I then cut wood platforms and placed them strategically around the lakebed and in the center to support the plexiglass. The supports were placed so they would not be visible from normal viewing angles.

I spaced the supports such that they would prevent the plexiglass sagging but would not support any other weight. Once I was sure everything was measured, cut, and spaced properly, and that the plexiglass was sufficiently supported, I went ahead with painting everything gloss black, with dark blue highlights in the center of the lake [8].



7. Test-fitting the plexiglass to make sure the lake is level.



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The final step was to reinstall the plexiglass and place the bridge on top of it. I used groundcover and plaster to bury the edges of the plexiglass and transform the rough banks into finished scenes [9]. With the bridge in place, I just had to make a first revenue run [10].

MAKING THINGS GREEN

After completing the lakebed and installing the plexiglass, I let the banks and scenery set up before jumping into scenery. Only a day or two was necessary, but life often gets in the way of the hobby, so it was a few weeks before I had time to start finishing the scene.

The first thing to do was get a good covering of static grass everywhere to cover any imperfections around the banks. It



8. With supports in place, I painted the lake bottom gloss black with dark blue highlights.



was important to add the static grass before I removed the protective film from the plexiglass. I also added blue painter's tape around the edges to prevent paint from building-up on the film and making removal a challenge later [11].

After the base covering of static grass was applied, I removed the blue tape, and added shrubs and trees. I wanted to finish the banks as much as possible before removing the film [12].



9. The plexiglass is down and the bridge is being positioned.



10. Once the plexiglass was in place, I had to connect the bridge and make a first revenue run. Here we see an Alco S2 trundling across the bridge with two boxcars.



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INSTALLING THE BACKDROP

The final and perhaps most challenging step was installing the backdrop. Not only did the backdrop photo have to sit completely level on the surface of the plexiglass, I also needed to blend the plexiglass into the Masonite backdrop, and the backdrop photo into the lakebed. I'll be the first to admit that the results aren't perfect, but from three feet away, I'm happy



11. I masked the edges of the lake in preparation for static grass application.



12. Instant satisfaction! I removed the protective film from the plexiglass to reveal this stunning result. Although some of the supports can be seen through the glass, they will be hidden underneath the bridge.

enough to leave it as-is, and offer some advice on how to overcome the shortcomings.

I started by using clear silicone caulk to fill the 1/8" gap between the plexiglass and Masonite [13]. Once it had dried overnight, I carefully placed and then cut out the backdrop photo.

The backdrop itself is a series of photos I took in the summer of 2019 from the bridge while standing with some fishermen. I was sure to include the houses, the hills, and the water. My friend Mike Confalone stitched the series of photos together in Adobe Photoshop to make an eight-foot-long backdrop [14].

Studying the prototype photos and printed backdrop, I noted the houses along the lake appear to be a few inches above the surface of the lake (visually on the backdrop photo), so that's how I approached cutting the bottom of the backdrop. Once I was satisfied, I carefully slid the backdrop into place. I intentionally left a 1/8" gap between scenery around the lake and the Masonite backdrop to allow the photo to slide into place, level with the plexiglass surface.

When I was satisfied with the backdrop, I set it in place with blue tape folded-over on the back side. I've found this method provides the most forgiving and fixable backdrop adhesion.



13. The back of this scene is sealed with silicone caulk, ready for the backdrop photo.

The last step in the backdrop process was something I hadn't tried before – blending the backdrop photo into the surface of the plexiglass with a custom mix of bluish-gray paint. It took several tries to get the color right, but once I was satisfied, I hand-brushed a few test areas. I used an airbrush to carefully match the photo colors to the surface of the plexiglass and blend things, a little paint at a time.

Once done, I let things dry for an hour. I think the result is satisfactory but definitely could be done better applying the caulking between the photo and the plexiglass [15].



14. I shot the backdrop photos from the bridge, making sure I included elements of water, houses, and hill in each frame.



15. Despite its imperfections, the blend between backdrop and water surface looks pretty at 3 feet.



My advice to anyone trying a similar scene is, don't rush the airbrushing. Be sure to keep at least a half-inch of exposed lake on the backdrop, making the transition between lake and plexiglass a little easier. The important part is matching the paint right at the joint so that the reflection is crisp.

After reinstalling the trestle one last time, I prepared the scene for a coat of Envirotex resin sealer by placing blue painter's tape along the fascia edge to prevent a dam for the poured Envirotex. Once the Envirotex had poured, there would be no



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removing the trestle without a lot of damage, so I tested the conductivity of the rail joiners at either end of the trestle to prevent future dead spots.

My intention was to apply just enough resin to cause some waves, but not enough ripples to distort the water and reflective surface. Nothing is better than a calm sunny day for railfanning. I gave the resin a few days to dry, and then over the next few weeks I continued scenery beyond the ends of the trestle.

I finally could get out the camera for some photos of a CP Rail train #917 easing out of the yard [17]. Some advice for those trying to recreate a signature scene would be to set the track a little farther back, or you could extend the lake out a bit farther to make photographing easier without the fascia showing. In my case, space limitations didn't allow that. Still, the experience of trains easing across the trestle is still pretty neat, and it takes me back to the early 1980's on CP's Newport Subdivision.



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16. CP 8778 leads a trio of RS11s northbound out of the Newport Yard with train #917.

NEIL R. SCHOFIELD



Neil Schofield lives in Charlton, MA with his wife, three children, and the family dog. He works in Holyoke, MA as a Senior Project Manager for an environmental consulting firm.

This is Neil's third feature in *MRH*. Thanks to his father, Neil has been interested in trains since he was 6 or 7. His childhood memories include many railfan trips throughout the Northeast, along with fond memories of operating modern piggy-back cars on his father's steam-era layout.

Growing up, he was a self-proclaimed rivet-counter when it came to rolling stock and locomotives. Since layout building commenced, the rivet counting has diminished in favor of getting trains running, building scenery, and structures. He's now about two years into his third layout that is based on CP Rail operations in Vermont. He has already installed his Agway Feed Mill featured in the September 2014 *MRH* magazine, and he is hoping to present the layout in a future *MRH* article.

While he enjoys modeling CP's operations in Vermont, he also occasionally strays toward other prototype modeling, generally railroads found throughout the northeast.

When he's not working, attending one of his children's sporting events, or modeling, he enjoys exercising and watching Boston's sports teams. ■



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Conveying your layout story

Ops for the rest of us, Part 3



Model Railroad Hobbyist | February 2021

DOUG MATHESON DISCUSSES
HOW TO CONVEY A LAYOUT'S
STORY TO OPERATORS ...



FOR THE OPERATIONS LIGHT APPROACH, there will usually be a small crew – often only one train with either one person playing the combined role of an engineer/conductor or a two-person crew splitting these roles. There may be a second operator or pair of operators running a second train. To guide this role-playing in your world, you will need to provide an outline of what your railroad does.



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Most modelers have, through the very act of laying track and building models, established a background in terms of era and geography. A few have even gone so far as to create a fictional history for their roads. Even the most generic circle of track with a few sidings must have some story to tell if the “purposeful movement of goods/people” is to be simulated. This story should be simple enough that the visiting operator can grasp immediately what your railroad empire does.

This backstory provides the context for the role-playing – the operator knows from this if he is an engineer on a backwoods line in upstate NY in the 1920s or on a modern mainline unit coal train in the Powder River basin. In Part 2, we saw that Mike Hamer could describe his backstory in a few sentences – the 1950s in the fictional town of North Dover, New Hampshire on the Boston and Maine. Bruce Chandler took us to the rural countryside of Virginia/North Carolina pre-World War II on his imaginary Jackson and Burke narrow gauge.

EVERY TRAIN HAS A STORY

More important than the backstory, every train introduced into the role-play has a story. These stories should be kept as simple and straightforward as possible to make them easily understood by even the most casual of visiting operators enjoying your brand of model railroading. Bruce Chandler runs a pair of way freights daily and we journeyed with the westbound in Part 2. Mike Hamer operates a variety of trains but in Part 2, we looked in on the run of the Newsboy – a Boston-bound manifest carrying paper from the mills in Maine.

THE TRANSPORTATION PLAN

The amalgam of the story lines for all the trains is in essence the transportation plan of the railroad. It defines what trains run, when they run, and how they work together. The

transportation plan sets out the backdrop against which the role players in your simulation will interact with each other in a partly scripted but somewhat impromptu way. The normal approach is to develop the transportation plan globally first, and then define the role of each individual train.

Building a reasonable transportation plan is not easy. In fact, for larger layouts and the large crews that operate them in the heavyweight ops world, it is exceedingly difficult to develop a plan that balances car movements, track availability, and crew availability within the physical constraints of an ops session and most importantly, the abstract constraints of the owner's vision of his world. It is, fortunately, much less difficult in the ops light environment.

HOW IS IT DONE? – A PAIR OF EXAMPLES

Every model railroad reflects the unique desires and skills of its creator. For that reason, there is not a strict algorithm that will give you the final product. Let's look at two examples of a successful plan to see how a modeler can create one.

Example I – Mike Hamer's Boston & Maine

Continuing with Mike Hamer's HO version of the Boston & Maine, the singular focus of the layout is the activity in the town of North Dover, NH where the MEC met the B&M.

The B&M ran about 55 trains a day through the real town of Dover in the mid 1950s. Clearly, that is far more than anyone could model on a small layout, but it gave Mike the variety from which he could pick and choose the trains that most interested him.

Mike had a keen interest in operating several different kinds of trains, including:

1. A long manifest freight such as B&M N2, an inbound (headed toward Boston) freight known as The Newsboy because it carried significant newspaper.



2. Trains moving oil tank cars into Maine to supply the mills, and the reverse movement of empties out – an example would be the MEC train 390 dropping empty tanks for pickup by B&M (normally by an extra).

3. Passenger service including milk cars for the creamery in North Dover served by both MEC and by B&M.

4. Some local switching of industries in North Dover by a switcher stationed there.

On the layout, there is space for seven trains to be staged [2]. Trains leave staging and their crews are stars of their own show as their trains pass through North Dover, and do the work required there. Once work is complete, the train departs and returns to staging. A switcher located in North Dover performs local switching and interchange with through trains.

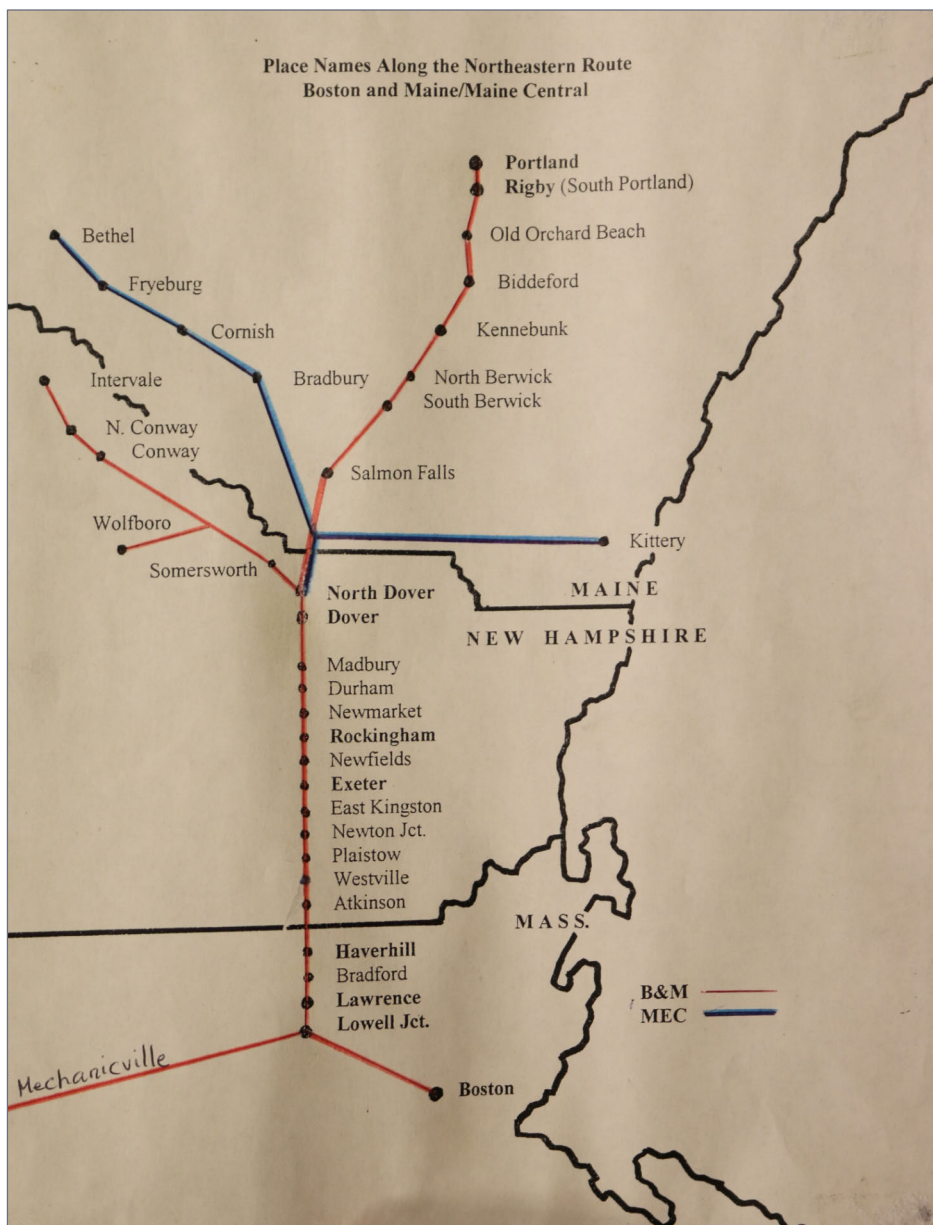
A judicious choice of staged trains guides the operation.

Experience has shown that a two-person crew takes roughly 20-30 minutes to operate any particular train. A three-hour operating session could handle six to ten trains, and if Mike wanted a longer session, he could simply include additional movements. The transportation plan for a typical three-hour ops session is communicated on a single sheet of paper.

Mike prepares the sequence of trains he desires for any particular session, freely interspersing local switching in North Dover with the parade of through trains. A typical sequence is shown in [3].

As befits a modest layout, Mike keeps his transportation plan simple. He does not use a fast clock, and he runs trains

1. (Top right) Mike created a map to show how his version of the B&M fits into New England. The town of North Dover is shown as an important junction of the B&M in red and MEC in blue. Note how Mike used artistic license to “imagineer” his own MEC line which dips slightly south of the border into New Hampshire where it meets the B&M at North Dover.



★★★★★
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2. Mike has room for seven staged trains in his uniquely designed staging area around the outside of his layout but concealed by scenery. Here is a portion of the staging with the concealing scenery visible on the left.

sequentially. The run of the next train in his plan does not occur until the preceding train has completed its run. Each train movement allows a two-person crew to play the role of engineer and conductor on a through train, and also play the role of engineer and conductor/brakeman on the switcher assigned to North Dover.

This scheme is flexible enough to accommodate a larger crew. If there are four operators, Mike has two crews of two – one crew relaxes in the crew lounge or kibitzes with the ops while the other crew operates before they alternate positions. The central operating area is just too tight – if Mike had additional space, the two crews could work simultaneously, one

Event	Action
1	First Rochester (B&M)
2	B&M manifest N2 (the Newsboy)
3	Local switching in North Dover
4	Conley Coal Local
5	MEC #11 The Kennebunk passenger train
6	MEC #390 (The Oilcan) Meets with B&M X6209 (RDC)
7	Local switching in North Dover
8	B&M North Turn
9	B&M manifest MP7 (outbound)
10	Return of First Rochester

3. Mike prepares for each operating session a brief outline of the trains he wishes to see run in a sequence such as the this one.

operating the North Dover switcher while the other crew handled the B&M and MEC trains on the main.

Example II – The author’s Ontario Midland

My own HO railroad, the Ontario Midland, contains only one town on a double-track loop. One end of this loop is staging out of sight behind a wall. Two areas in the single town of Crown Point are visible to operators:

1. The depot with four through tracks in front of it (reflecting my interest in passenger ops), plus two sidings.
2. An industrial area with several industry sidings that can be worked without blocking the main.



Crown point lineup

Arrivals

Departures

Train	Track	Time	Train	Track
ONR 48	4	12:00	CN 634	3
CN 57	2	12:10		
		12:15	ONR 48	4
OMR 31	1	12:20		
OMR 21	3	12:30		
CN 7	1	12:45		
CP 2	4	13:05	CN 7	1
CN 101	2	13:15	CP 2	4
OMR 72	1	13:20		
		13:30	CN 101	2
		13:40	OMR 32	3
		13:50	OMR 22	1
		14:00	OMR 73	4

4. A schedule of trains arriving and departing Crown Point gives the transportation plan of the author's Ontario Midland.

Chris Lyon created a video of the first ops session a few years ago, and that video can be seen at www.youtube.com/watch?v=BfhfK6Hd1MM. The video gives a clear indication of the modest amount of trackage in this passenger-oriented model.

The small fictitious town of Crown Point, situated imaginatively on the Canadian Shield on Georgian Bay ca. 1960, has a simple backstory – it has a Union Station served by CN, CP, ONR and its subsidiary, the Ontario Midland, for

passenger service. The OMR switches the industrial area, declining after the construction of the St Lawrence Seaway, once per day. Through freight traffic bypasses Crown Point otherwise.

The transportation plan follows readily. There is one train per day that arrives and switches the industries before retreating back to staging. There is a steady parade of passenger trains from four railroads at the depot, with a significant amount of passenger car switching. Each individual passenger train has its own story where a depot switch crew interacts with the crew running each passenger train in turn.

Again, the transportation plan is expressed on a single sheet of paper [4].

Although the lineup shows times, the layout has been run only twice according to the clock, and this is real time. No fast clock has been used. For all the other ops sessions, the trains were actually run sequentially, with the station switch crew indicating when they were ready for the next train to arrive.

A three-person ops group – one for industrial switching, one manning the depot switcher, and a third operating passenger trains – can enjoyably work a two-plus-hour session on this modest layout. However, I most often operate the layout by myself, either switching the industrial area or running the passenger trains sequentially.

MOVEMENT OF TRAINS - DISPATCHING

In an ops light environment, an oft-raised issue is the need for a dispatcher, and what form dispatching should take.

On the one hand, it is unlikely that a dispatcher is essential with a small crew. If there are only a few trains operating at any given time, establishing meets is straightforward. On the other hand, there are some who might prefer the role of dispatcher to taking the throttle.



The decision of whether to include of a dispatcher in the role-play is really up to YOU the layout owner. If you think it is important to portray that character, and your line is somewhat busy, by all means include the role.

We will return to dispatching possibilities with a more thorough discussion in Part 5.

SCHEDULES & FAST CLOCKS – ARE THEY REALLY NECESSARY?

Prototype railroads ran on a schedule. The stereotypical view of an engineer and conductor comparing their timepieces emphasizes this point. Heavyweight ops has always included the notion of a timetable and the creative use of a “fast clock” to show the passage of time and symbolically lengthen runs.

In the operations light environment, there are a limited number of trains moving at any one time. Hence, the modeler can dispense with the use of both a timetable/schedule and a fast clock. The simplification is based on running trains in a specified sequence where the time taken to complete one train’s run is irrelevant to the starting time of the next train.

In short, the transportation plan can be expressed as a sequence of trains, and neither a timetable/schedule nor a fast clock is essential, although may still be used if you desire the “typographical scenery.”

EACH TRAIN HAS A STORY

Once the overall transportation plan has defined what trains will run and when, the layout owner must communicate the story for each train to the crews in a simple manner.

Bruce Chandler does it verbally, simply telling the crew they have the westbound way freight. I provide the crew with a one-page document containing the story and the work to be done. Computerized switch lists generally provide a very

limited space for crew instructions, while car card/waybill operators often include a “train card” for this story.

THE TRAIN PROCEDURE SHEET

In the operations light environment, it helps to provide the crew with the story of their train, even if via a single page you reuse whenever the train is run. This document has its roots in the prototype’s merchandise and manifest train schedules (note that different railroads called these by different names) that give a description of the work each train did, and the schedule the train ran. Customers, shippers, sales staff, and operating departments used these prototype documents.

For the modeler, the document should include any information the crew will need to operate the train successfully. Here is an example from my own Ontario Midland:

OMR 31: OMR 31 originates in Belleville and connects at Crown Point with CN Train 7 *The National* en route to Winnipeg. OMR 31 carries a sleeper to be added to CN 7. It also carries express traffic for the west destined to depart Crown Point on CN 101.

This could be provided on a laminated card similar to what the car card/waybill folks do. If printed on regular paper, the back could contain other information an operator might need to reference. This could include a schematic or map of the layout, space for an operator-prepared switch list, or a listing of hand and whistle signals.



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DOUG MATHESON



Doug authored a chapter in the OpSIG (Operations Special Interest Group) publication, *A Compendium of Model Railroad Operations*.

Doug has been participating in ops sessions for decades. He has also presented NMRA clinics on ops, organized ops sessions for a number of owners of large model railroads, and served on a model railroad as a dispatcher using Timetable and Train Orders, and on another layout using the Occupancy Control System (Canada's version of Track Warrants). These all fit into the more heavyweight category of prototype-based operations.

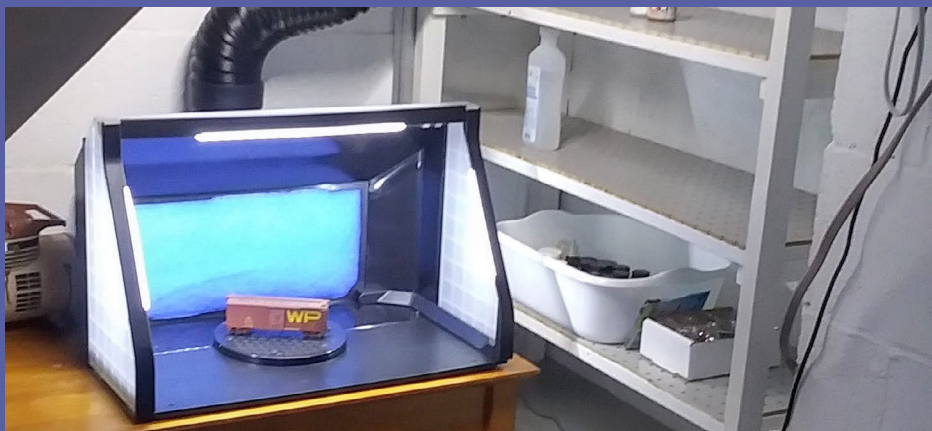
At the same time, Doug has built and operates a very modest HO scale layout. He has also long modeled in Fn3 in the garden, including running live steam.

Doug thanks Bruce Chandler for his help in allowing his Jackson and Burke RR to be used as an example and inspiration for this article. N scale modeler Mike Dawson provided insightful comments on operations in a scale where reporting marks are difficult to read. A big thanks also to a number of Doug's fellow members of the NMRA (Niagara Frontier – St Lawrence Division) who offered many suggestions and edits along the way. These include Alex Binkley, Mike Hamer, Chris Lyon, and Peter Nesbitt. In particular, Mike Hamer also allowed his Boston and Maine RR to serve as an example.

Besides operations, Doug's other railroading interests include the history of passenger travel by rail, and the historical development of signaling systems.

Doug retired from Canada's federal public service and lives in a rural area south of Ottawa, Ontario. ■

Developing a safe painting and weathering area



Model Railroad Hobbyist | February 2021

J.W. SNYDER CREATES A VENTILATED PAINTING STATION ON A BUDGET ...



FIGURING OUT A PLACE TO SAFELY DO PAINTING AND WEATHERING has been one of the challenges in working on the Tionesta and Kinzua Valley Railroad. My layout is a small HO timber and granite quarry operation set in the mid 1960s, so everything has to be severely weathered. That requires many techniques, mostly airbrushing, so finding a safe place I can ventilate well is a must.

As I was converting our split-level cottage's one-car garage into the layout room (now called "the lab"), I purposely set aside an area across the back for a workbench, toolboxes, and a parts inventory. At first, I thought I would do the painting and weathering in that area, but even with two strong fans and the sliding glass door open on a cool, low-humidity day, the fumes were too strong in the garage.



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I tried setting up under the carport, but that proved to be limited to good weather. Correct humidity, temperature, and air flow are all necessary for good, safe painting, and I needed to be able to paint year-round, despite the weather. I delayed the paint station idea, and continued on the layout and construction until I could come up with a better solution.

Viewing *MRH's* Trainmasters TV "Notch 8" video airbrushing series with Alan Houtz, several YouTube videos, and other resources convinced me I needed a good paint booth with proper external ventilation. I already had the airbrush and equipment, I just needed to find a space.

I remembered that our house's original owner had installed a gas dryer underneath the staircase in the utility room. I had removed the old dryer vent, plugged it, and intended to fill it in. Now it seemed like the perfect place and vent for a painting station.

I set about cleaning up and repairing the area. I sanded the underside of the stairs, caulked the brick wall as needed, and gave the whole area a coat of paint. A clean, dust-free area is a must for any paint booth.

A friend had saved for me some gray pegboard from a defunct convenience store. I put that to use with some re-purposed hardwood and some ½" plywood to build a shelving unit which I painted and installed in an indented area of the wall. This gave me a place to store my paints and stains.

A neighbor left a single-drawer homework table and chair at the curb for trash pickup. Its dimensions looked perfect to fit the space and provide a workbench for my painting booth and compressor, and its drawer would be excellent storage for my airbrushes' various heads, cups, and other parts. The table had a few scratches on the surface, but that didn't matter to me since the paint booth would be on top of it anyway.

A good painting booth requires ample light. I installed a bright LED light strip on the underside of the highest step. Combined with the LED strips on the paint booth itself, this would provide more than sufficient light.

“I wanted to make sure the paint fumes would get out, but I also wanted to prevent any unlawful varmints from getting in. I installed a caged, louvered hood on the exterior end of the vent.”

When the paint booth arrived, I assembled it. I connected the exhaust hose to the old dryer vent and tested it with rubbing alcohol fumes. It had an excellent draft.

I masked-off the interior of the booth by taping white cardstock to the sides. The white cardstock created an even brighter painting area and protected the walls of the paint booth. Even better, cleanup could be as simple as replacing the card stock.

I wanted to make sure the paint fumes would get out, but I also wanted to prevent any unlawful varmints from getting in. I installed a caged, louvered hood on the exterior end of the vent.

I hooked up my old, dependable Thomas piston air compressor with the rig, hose, single action gun, and holder. I set it on some thick felt pads to reduce vibration and noise. I connected the air compressor power with an on/off foot switch from a sewing machine another neighbor had tossed.

To complete the new space, I needed a wheeled office chair to sit in while doing my work. Unfortunately, no neighbors were disposing of office chairs, but I did obtain a slightly-used one from a thrift store.

With everything in place, it was time to try my new painting station. I sat down in the chair, bellied up to the booth, grabbed my paint-loaded gun, stepped on the switch, and sprayed some test strips. Aaaaah! Virtually no smell, bright work light, smooth flow, and I am safely painting again. The whole setup cost me only \$203.70, \$170 of which was the portable paint booth!



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J.W. SNYDER



Coming from a family of railroad heritage (his grandpa was a B&O engineer, his mom was a clerk for the AC&Y, and “Granpaps” had a large basement Lionel layout) J.W. was constantly exposed to both prototype and model railroading in his childhood. As life went on with various involvement in rail museums, restoration projects, writing, photography, and the opportunity to railfan both the big

stuff and train shows, he missed modeling.

Some years later, after receiving a beginner N scale train set for Christmas, he grabbed the throttle and went full-steam. With three layouts completed and lost in relocation, he finally settled on an HO short line, and the Tionesta & Kinzua Valley RR was born.

He continues working on his pike. Having a very small budget to work with, he invested in second-hand top-notch locomotives, rolling stock, electronics, and hardware, only buying new when he could not find it used. To convert the garage, and to build the benchwork he opted to repurpose construction wood and extruded foam, commercial track lighting, display material, and hardware from closed stores. During this time of pandemic and swings in the economy, he practices what most small prototype short lines do: home-shop, knock it together, repair in place, recycle, and repurpose. ■



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SAVVY MODELER *Online*



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Model Railroad Hobbyist | February 2021



Easily make realistic foam rocks

Youtube modeler *johns miniatures* shows the steps he takes to easily make realistic rocks from foam! John does not appear to be a model railroader, but his clever methods work perfectly well for model railroad scenery made from foam!

Don't just confine yourself to model railroaders when it comes to how-to videos. Cross-pollination with other model-making hobbyists can yield great new methods.



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FEBRUARY NEWS

column



Model Railroad Hobbyist | February 2021

RICHARD BALE AND JEFF SHULTZ

REPORT THE LATEST HOBBY
INDUSTRY NEWS ...



INDUSTRY NEWS

NMRA Cancels 2021 National Convention

The host committee of the 2021 national convention of National Model Railroad Association 2021, Rails By The Bay, has canceled the event that had been scheduled for the Santa Clara Marriott Hotel & Conference Center on July 4-11, 2021. The National Train Show, which is separately planned and operated, has also been canceled. Pursuant to current government orders in California and Santa Clara County, the convention committee has been unable to obtain commitments from bus companies, tour sites, private layout owners, and other key convention support services. A multi-day video virtual event—which will retain the name NMRA 2021 Rails By The Bay—is under development. More detailed information is expected to be released by April 2021. Information regarding registration refunds is available at registrar@nmra2021.com.

THE LATEST MODEL RAILROAD PRODUCTS, NEWS & EVENTS

MRHMAG.COM

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ScaleTrains.com has purchased MTH's HO and S scale tooling, including engineering drawings and products that were in development prior to MTH's owner deciding to retire. Tooling is already moving to the ScaleTrains.com factory and test shots are being made to certify that the tooling is complete. MTH products will have LokSound 5 DCC decoders and the same motors found in ScaleTrains.com products in the future. MTH dealers can contact ScaleTrains.com at retailers@scaletrains.com. MTH Service Centers will continue to service MTH products. For more information see the video at www.youtube.com/watch?v=moYQb1tCIVM.

Caboose Hobbies Ends 83 Year Run

Caboose Hobbies, the one-time model railroad retail giant in Denver, Colorado, has permanently shut its doors. Caboose Hobbies was established in Denver in 1938 by Glen Brazelton. His son Duane Miller took over in 1969 and built the family business into a world famous model railroad hobby store. After efforts to renew their lease at 500 S. Broadway failed, family members decided in 2016 that it was time to sell the business and retire. Kevin Ruble purchased Caboose Hobbies and reopened at 10800 W. Alameda Avenue in nearby Lakewood in February 2017 as Caboose. The new operation in Lakewood struggled to regain the service level and sales momentum of the original. Long-time Caboose customers complained about the lack of selection and poor service. Several said the store was the same in name only.

Walk-in trade slowed measurably due to COVID-19, prompting the store to temporarily close effective March 18, 2020. Although the real purpose was unclear, Ruble restructured the business as a 100 percent employee-owned public benefit corporation effective June 1, 2020. The announcement noted that among the expected changes was an increased emphasis on e-commerce. In conjunction with the change, Ruble announced that Chris Palomarez, former



brand manager at Athearn Trains, had joined the Caboose team as general manager.

In a recent announcement employee-owned Caboose stated that the retail storefront in Lakewood was permanently closed. Individuals with consignment items at Caboose were asked to contact the company at info@MyCaboose.com. The landmark Caboose Hobbies that Guinness Book of Records recognized as the world's largest model train store is now history.

US Address for Rapido

Canadian-based Rapido Trains has established a service center in the United States. In making the announcement, Rapido cautioned that customers must follow the instructions on the warranty page (rapidotrains.com/warranty) before sending anything to the service center. The address of the new US service center is: Rapido Trains Inc., P.O. Box 4142, Windsor Locks, CT 06096. Telephone (855) 572-6917.

Walthers has announced that the 2021 Walthers National Model Railroad Build Off (NMRBO) will begin on February 1st. A competition open to all ages, individuals and teams, the goal is to see who can create the most unique layout. There are multiple classes and categories with a top prize of \$3,000. More information can be found at trains.walthers.com/national-model-railroader-build-off-2021.

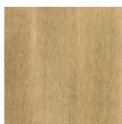
NEW PRODUCTS FOR ALL SCALES



Aged Barn Wood



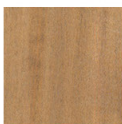
Burnt Sienna



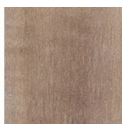
Raw Umber



Light Amber



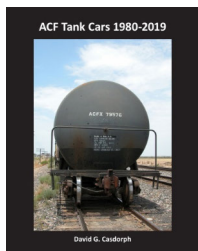
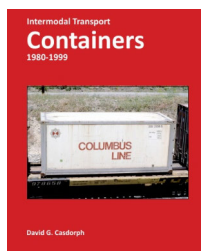
Medium Cherry Brown



Murky Brown

Bollinger Ederly Scale Trains has released a new product line, Vetro Solutions. Each 200ml bottle of weathering solution can be used on wood, cardstock, paper, plastic, plaster, hydrocal and other surfaces. Alcohol based, six different colors have

been released: Aged Barn Wood, Burnt Sienna, Raw UMBER, Light Amber, Medium Cherry Brown, and Murky Brown. There is also an option to buy all six for the price of five. For more information visit veterosolutions.com.



New titles authored by **David Casdorff** include *Intermodal Transport Containers 1980-1999*, and *ACF Tank Cars 1980-2019*. The intermodal book covers early ZIM containers, ISO Size-Type 2040s, Santa Fe's Containers, Han

Jin Containers, Container Transport International, and United States Lines containers in 12 tables and 221 photos with detailed captions. Casdorff's tank car book presents photos and historical details on both private and railroad owned tank cars in North America in 260 captioned in-service photos. The books are 8.5" x 11" format printed on 80 lb. coated paper. For additional information visit www.lulu.com/spotlight/glaciersurfer.



Iowa Scaled Engineering has introduced the Motorman, an automatic reversing train shuttle controller for both DC and DCC locomotives. Using TrainSpotter infrared proximity detectors at each end, the Motorman will continuously drive the train back and forth, automatically

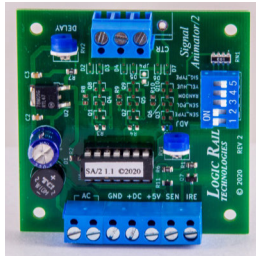
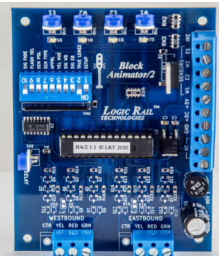
stopping and reversing at the end of track. With control of the speed, locomotive address, delay time, and many other settings, a fully customized experience can be created. For additional information including instructional videos visit www.iascaled.com/Motorman.



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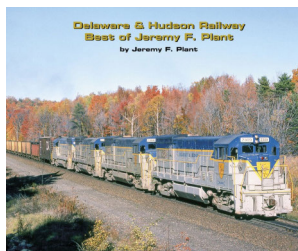
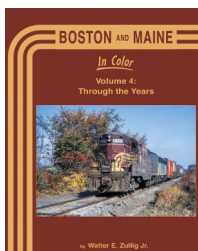
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Logic Rail Technologies has released the second generation of its Signal Animator (far left) that features a random mode (simulate phantom train traffic) and improved

infrared detection. The device animates a block signal using a single sensor (photocell or infrared components). When the sensor is covered the signal turns red. After the train clears the sensor the signal will change to yellow using a user-adjustable time delay on the circuit board. After another delay the signal returns to green.

Also new from Logic Rail Technologies is the second generation of Block Animator (above right). This circuit recreates near-prototypical signal behavior and controls two, 3-aspect independent signal heads with bi-directional detection. The new Block Animator/2 has a user-adjustable time delay, improved infrared detection, a flashing yellow aspect, and signal aspect fading to represent older prototype signals. For complete details visit www.logicrailtech.com.



New railroad books from **Morning Sun** include volume four of Walter E. Zullig's *Boston & Maine in Color*. Assembled from over 150 small lines, B&M traces its roots to the early

1830s. The book features the B&M's history and discusses the many improvements such as Hoosac Tunnel, Boston North Station terminal complex, East Deerfield Yard, and early dieselization. The principal routes are featured in striking color spanning the 1930s through the present.

Delaware & Hudson Railway Best of Jeremy F. Plant, is a new softcover book in which author/photographer Plant documents the New York's Capital District where he grew up. The book contains his favorite shots with all types of D&H diesel locomotives. Special attention is given to Alco PAs and Baldwin Sharks. For additional information contact a dealer or visit www.morningsunbooks.com.



Available for pre-order from **Train Control Systems (TCS)** is the UWT-50 Mini-Throttle. Featuring a knob controller (either potentiometer or encoder), 1.42" x 0.92" backlit LCD screen, two reprogrammable buttons on the face of the throttle, and two three-position pushbutton toggle switches on the sides of the unit, the UWT-50 is smaller but retains all the functions of the UWT-100 throttle. It

can be used over a WiFi connection to a JMRI server, Digitrax LNWI, or DCC command station with a built-in JMRI-compatible WiFi access point. Like the UWT-100, the UWT-50 will feature LCC compatibility and in-throttle consisting. Power comes from two AA-size batteries and it can use rechargables. For more information visit tcsdcc.com.

MULTIPLE SCALE PRODUCT NEWS



Woodland Scenics has announced that a new Built & Ready building is coming soon. Named *Records & Recruiting*, the building features printed interiors of a record shop, an Army Recruiting office, and upstairs



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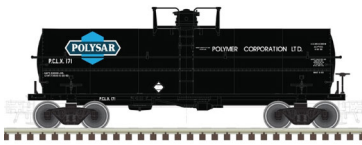
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apartments. Additional details such as crates, barrels and signage are included. Hand painted and weathered, the structure features pre-installed LED lighting made for use with the Just Plug® Lighting System. The structure will be offered in N, HO and O scales. For more information visit woodlandscenics.com.

O SCALE PRODUCT NEWS



Atlas O has scheduled a 4th quarter 2021 release for an 11,000 gallon tank car. The O scale model is based on cars built by American Car & Foundry primarily for transporting liquefied petroleum gas.



Decorating schemes will include UTLX-Atlantic, WRNX-Warren, NDX-Allied Chemical, UTLX-Atlantic Refining, CGTX-Dow Canada, UTLX-Smith Douglass, TWOX-Tidewater Associated, and PCLX-Polysar.



Also coming from Atlas O late this year is a PS 4427 cu. ft. covered hopper car. The model is based on a car with low-sides introduced by Pullman-Standard in the mid-1960s. Decorating schemes will include ADM, Peavey Company, Tabor & Company, Indiana Farm Bureau CO-OP, Scoular, Valley Mills, CMA, and Gold Kist.



The O scale model features opening hatches with full working latch assembly, separately-applied wire grab irons, a see-through roofwalk, and sprung diecast 100-ton roller-bearing trucks with rotating bearing caps. For additional information contact a dealer or visit www.atlaso.com.



Berkshire Valley Models has added several new items to its line of O detail parts. The 1:48 scale items

include pillow blocks with 1/32" and 1/16" holes. Additional new items include hose bibs, gears, and sprockets. For more information visit www.berkshirevalleymodels.com.

S SCALE PRODUCT NEWS



Centerline Products has announced a new S gauge rail cleaner chassis machined out of brass. Designed to accept an American Models 40' boxcar

body, the body is not included. The rail cleaner includes either scale trucks and couplers; HiRail trucks and couplers; or neither if the modeler prefers to install their own. Also included are a brass roller and 10 roller covers. For more information visit centerline-products.com.



Crescent Creek Models has released their first Signature Line kit in S scale, Last Chance Gas. Based on a Conoco station that stood in Peñasco, NM, the kit includes numerous white metal, laser cut and 3D printed details. The parts of the kit are laser cut, with the finished kit measuring

3.45" x 4.95", not including the pump island. Sign sheets are



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included with vintage advertising and signage for Conoco, Texaco, and Frijolene. For more information visit thundermesa.studio/crescent-creek-models.



Ohio, Western Maryland, and Akron Canton & Youngstown.



MTH has released an S scale version of a PS-1 coal hopper in eight road names including Norfolk & Western, Chesapeake & Ohio, Jersey Central, Reading, Lehigh Valley, Baltimore & Ohio, Western Maryland, and Akron Canton & Youngstown. The model features an ABS body, metal wheels and separate metal grab irons. For additional information contact a dealer or visit mthtrains.com.



Pre-size Model Specialties has released coil cover kits in S scale for use with

their Greenville Gondola kit #PS576. The prototype coil covers were built in 1987 and are still in use today. Made of high-quality resin, the kit includes separate parts and decals. For more information visit pre-size.com.

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**RUNNING
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FOWLER BOXCARS



R. Bale

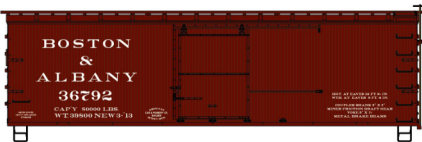
Canadian Pacific master car builder, W.E. Fowler, patented his single-sheathed boxcar in 1911. The Fowler design featured a steel underframe with single-sheathed wood sides and ends. There were three panels on each side of the door with diagonal steel braces applied only on the two inner side panels. Between 1912 and the early 1920s nearly 80,000 cars of Fowler design were manufactured by various North American car builders. Canadian versions of Fowler cars were sometimes called Dominion cars.

HO SCALE PRODUCT NEWS



for Chicago & North Western and shows a built date of November 1914.

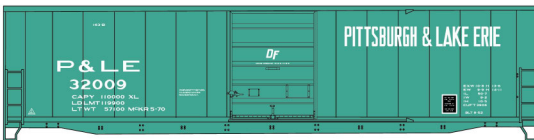
Accurail has released several new HO scale freight car kits including one for a 36' Fowler boxcar. The model is decorated



This 36' Boston & Albany double sheathed wood boxcar is based on a prototype built in 1913 by ACF. It has wood ends, a steel roof, and steel fishbelly underframe.



A Delaware & Hudson car is similar except it has steel ends. It was built in 1907 and displays a D&H Bridge Line herald.



This 50' Pittsburgh & Lake Erie welded steel boxcar has Superior sliding doors.

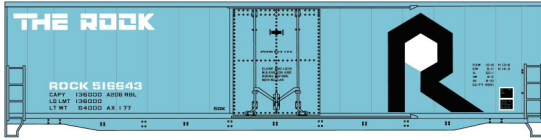


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Accurail's HO scale model is based on a prototype built in August 1952.



This Rock Island version of a 50' welded steel boxcar has plug doors.

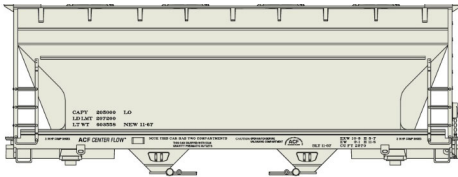


Accurail's HO scale kit for this 40' AAR steel boxcar is based on a prototype built in March 1942.



Among the newest HO scale kits from Accurail is a Pullman-Standard 4750 cu. ft. covered hopper decorated for Burlington Northern.

The model is available singly and in a 3-car set with different road numbers.



For modelers wanting to apply lessee or road name decals of their own choosing, Accurail is offering an ACF 2970 cu. ft. Center-Flow twin-bay covered hopper

painted and decorated with data only.



Accurail's HO scale kit for this 40' rib side automobile boxcar with offset double doors is based on a prototype built in December 1943.

Sometime later it was repainted in Milwaukee Road's post-1959 billboard lettering scheme. All Accurail HO scale kits include Accumate knuckle couplers and appropriate trucks with Delrin wheelsets. For additional information contact a dealer or visit www.accurail.com.



R. Bale

EMD FP45 LOCOMOTIVE

The EMD FP45 is a cowl version of an SDP45. It was produced beginning in 1967 at the request of ATSF which did not want its prestigious Super Chief, El Capitan and other name passenger trains pulled by freight hood-style locomotives. EMD designed a lightweight cowl body to cover the locomotive. The cowl provided sleeker looks, better aerodynamics at speed, and allowed the crew to enter the engine compartment for diagnostics and maintenance while underway. Santa Fe purchased nine of the locomotives, the Milwaukee Road bought five. Santa Fe's SDFP45 No. 96 was wrecked in 1994 on Cajon Pass. While ATSF No. 91 was sold to the Wisconsin Central in January 1995, the rest stayed in service until the BNSF merger in 1996. Milwaukee Road's FP45s were all sold for scrap.



Athearn has announced a December 2021 delivery date for

another production run of EMD FP45 diesel locomotives. The HO scale Genesis series model will be available in seven decorating schemes with numerous road-specific details. Santa Fe FP45s will have a Leslie horn, a combination clear and red nose-mounted Gyrallight and dynamic brakes.



Unique details on FP45s decorated in the premature SF

and SPSF Kodachrome schemes include an operating roof-mounted Stratolight, cab air conditioning unit and Sinclair ground plane antennas.



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BNSF road numbers 93 and 97 in Heritage II livery are

included in this release. Details include a K3LA horn, large and small antenna platforms, and a cab air conditioner. The safety lights between the number plates have been removed and plated over.



Completing this release are FP45 locomotives decorated for

Milwaukee Road, Western Pacific, Burlington Northern and Wisconsin Central.



Features on all Athearn's Genesis FP45s include full cab interior with see-through windows, flush mounted port

hole window glass, individual windshield wipers, walkway tread, lift rings, wire grab irons and LED lighting.



Chassis details include uncoupling levers, flexible

rubber MU and trainline hoses, detailed fuel tank with fuel fillers, fuel gauges, and breather pipes; and six-wheel Flexicoil-C sideframes with brake cylinders and sander lines.



Athearn has included an EMD SD70M-2



in its December 2021 production schedule. The HO scale Genesis 2.0 model will be available with road specific details for five railroads including Norfolk Southern. The NS model represents prototypes delivered in 2005-06 with ditch lights at the front and rear. An alternate PTC roof will be included with the model.



Three Florida East Coast road numbers will be available painted in the red, white and blue RailAmerica scheme.



Athearn's late 2021 production run will include SD70M-2 Genesis 2.0 models decorated for Providence & Worcester, Canadian National, and CN No. 8952 in the Grand Trunk Heritage scheme.



In addition to Athearn's usual attention to detail, special features on the Genesis 2.0 model include see-through pilot steps, operating marker lights, number boards and ground lights.



Athearn's FP45 and SD70M locomotive models will both be available for DCC operation with an onboard SoundTraxx Tsunami2 sound decoder. DC models will feature Quick Plug technology with a 21-pin NEM connector for installation of an aftermarket DCC decoder.

Athearn has included a group of Santa Fe waycars in its December 2021 production schedule. The HO scale Genesis



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Company. The run includes ATSF No. 999700, the only Santa Fe waycar to get the short-lived Kodachrome paint scheme.



The models will be available with DCC and lights, and with DCC, sound, and lights. Sounds include air horn or trainline air whistle as appropriate, clickety-clack with optional wheel flat spot sounds, brake set/release sounds including retainers and brake squeal, big hole emergency brake application sound, handbrake tie-down/release, adjustable flange squeal. Air, horn, and bell sounds are compatible with Soundtraxx locomotive sound decoders.

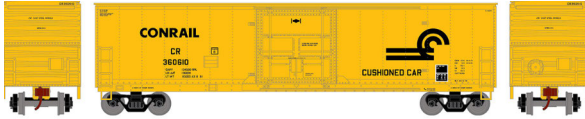


Santa Fe waycars stenciled TP&W represent eight cars the Toledo, Peoria & Western Railway leased from ATSF in the early 1980s. All versions of Athearn's ICC cabooses/waycar models feature interior seating, see-through end platforms and steps, flush window glazing, wire grab irons, axle generator details, uncoupling bars, trainline hoses, brake hoses, and full underframe brake detail.



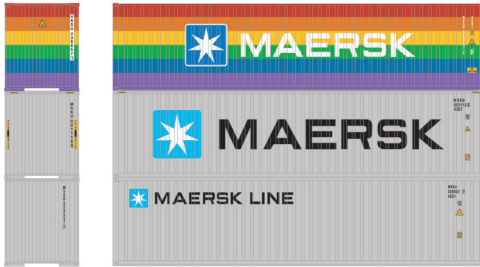
26' ore cars with removable loads are scheduled for release by Athearn in December 2021. Cars with low sides will be available for Canadian Pacific, Conrail, Ferromex, and Rio Tinto Group of Australia. A Union Pacific MOW car will come with a simulated ballast load; all other loads will simulate ore.

A Southern Pacific car based on an SP class G-100-1 with high sides will be included in this release. It will be the only model in this run with heavy-duty outside-clasp trucks. All versions of the HO scale model will be available singly and in 4-packs with different numbers.



Athearn's December 2021 schedule includes this 50' steel boxcar with a

Superior plug door. In addition to Conrail, road names will be Southern Pacific, Penn Central, FGE/Clinchfield, Norfolk & Western, and Canadian National.



New 40' high-cube containers decorated for MSC, MSC/Florens, Ocean Network Express, Cosco Shipping, Touax/MOL, NYK, and Maersk are due from Athearn next

December. The containers will come in 3-packs with a mix of different schemes.



R. Bale

FORD MODEL A

The Model A was the successor to Henry Ford's popular, but primitive, Model T. In a four-year production run from late 1927 to early 1931 more than 4.8 million Model A Fords were built. Starting at \$335 for a roadster, a total of 13 body styles were offered including a pickup truck that was adapted into countless specialized uses including a telephone service truck.



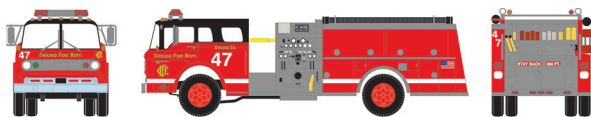
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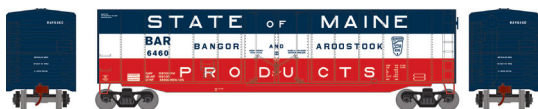
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Athearn has included a Ford Model A telephone truck in its December production. The 1:87 scale model will be available decorated for Bell Telephone, New England Telephone, New Jersey Bell, Pacific Bell, Bell of Pennsylvania, Wisconsin Bell, Southwestern Bell, Bell Telephone of Canada, and Illinois Bell Telephone.



A Ford C canopy cab pumper fire truck with rubber tires and molded cab interior will be available from Athearn in December. Community identification for the 1:87 scale vehicles will be Napa, Highspire, Perryville, City of Los Angeles, Washington DC, and Chicago.



Roundhouse products coming from Athearn next December include a 50' PS-1 boxcar fitted with a plug door. Road names for the HO scale ready-to-run model will be Canadian Pacific, Denver & Rio Grande Western, Southern Railway, Pennsylvania Railroad, Delaware & Hudson, and the iconic red, white and blue State of Maine scheme of the Bangor & Aroostook Railway.



On Athearn's January 2022 production schedule is a new run of the Genesis HO scale F89-F Bi-level auto rack. Featuring a die-cast underframe, Whitehead and Kales auto rack, customer installed bridge plates, and separately applied grab irons, the models also include coupler lift bars, trainline hoses, brake hoses and hardware. RP25 machined metal wheels and

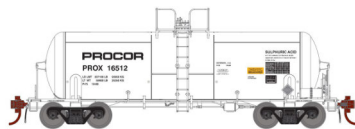
McHenry knuckle couplers are standard. Roadnames included in this run are Southern, New York Central, Chicago, Burlington & Quincy; Frisco, Illinois Central, and Northern Pacific.



For the January 2022 production schedule, Athearn's SD70ACe model has received an upgrade to the Genesis 2.0 level. Genesis 2.0 features include etched, see-through walkway steps, illuminated number boards, illuminated ground lights on the front trucks, illuminated marker lights (where applicable), and a redesigned underframe with more weight, dual cube speakers, and LED lighting that uses contacts between the frame and body to eliminate wires connecting the two.



The SD70ACe models also include a full cab interior, wire grab irons, coupler cut levers, flexible MU and trainline hoses, and many other details. The DC model is equipped with a 21-pin NEM connector and the DCC/Sound equipped models include a SoundTraxx Tsunami2 decoder. Roadnames and numbers in this release include Union Pacific Heritage units 1982 (Missouri Pacific), 1983 (Western Pacific), and 1988 (Katy); BNSF 8401, 8438, and 8597; Montana Rail Link 4400, 4401, 4403, and 4404, the locomotive decorated to honor essential workers; and Tacoma Rail 7001 and 7002.



Also on the January 2022 production schedule is the Genesis 13,000-gallon Acid Tank Car. Featuring both early and late body phases, the models include etched metal walkways, prototype specific end sills and brake systems, and full underframe detail. RP25 machined metal wheels and McHenry scale double-shelf couplers are standard. Roadnames in this run include UTLX - White, UTLX - White/Green, Grupo



Mexico – White, Grupo Mexico – Black (Primed for Grime), MDCX – Black, Procor, Kennecott Copper, and Chevron.



In the RTR line for January 2022, Athearn is producing another run of SD40T-2 locomotives in several

different road names and with roadnumber specific details. All of the models include photo-etched windshield wipers, welded ECAFB, separately applied air tanks, see-through dynamic brake fans, rubber MU and trainline hoses, and see-through radiator grilles with a new rear truck gearbox specific to the tunnel motor.

Roadnames for this run are Southern Pacific – 1990s era, Southern Pacific – “Roseville Repaints,” Southern Pacific – Daylight, Southern Pacific – As delivered 8489 class, Rio Grande, Wheeling & Lake Erie (both Rio Grande and UP patches), and Ohio Central. Also available is the upgraded SD40T-2 mechanism with the reversed rear truck.



Sound Equipped models feature SoundTraxx Econami DCC/Sound decoders and DC models are DCC ready with

21-pin NEM Quick Plug sockets. RP25 contour wheels, 5-pole motor with flywheels and McHenry scale knuckle couplers are standard on all models.



Also in RTR, Athearn will be producing a PS-2 2600 cu. ft. Covered Hopper in HO scale. The models feature a flush or overhanging roof per the prototype, RP25

contour machined metal wheels and McHenry scale double-shelf knuckle couplers.



In the Roundhouse line, Athearn is offering Bay Window Caboose in nine different roadnames with 10 different paint schemes. Featuring machined metal wheels in all-new Barber-Bettendorf Swing Motion caboose

trucks, the model will be produced for Pennsylvania, New York Central, Erie, Illinois Terminal, Nickel Plate Road, Northern Alberta Railway, Milwaukee Road, Frisco, and RJ Corman (two schemes).



The final announcement for the HO scale January 2022 production run is a Roundhouse 36' Old Time Boxcar. Equipped with 50-ton Archbar trucks

with 33" wheels and McHenry couplers, the models are representative of prototype paint schemes. Roadnames in this release include Cotton Belt, Santa Fe, New York Ontario & Western, Chesapeake & Ohio, Nickel Plate Road, and Missouri-Kansas-Texas.

Preorders for Athearn products on the January 2022 production schedule are due February 26, 2021. For additional information on Athearn and Roundhouse products contact a dealer or visit www.athearn.com.



Atlas has announced plans to release a new run of its EMD MP15DC late this year. The HO scale switch engine is based on a 1,500hp switcher EMD introduced in 1974 as a replacement the slightly shorter SW1500. The longer frame of the MP15DC provided room for increased fuel capacity and the use of Blomberg road trucks.



Road names will be FURX-First Union Rail, LTEX, Prairie Line, Missouri Pacific, Reading, Southern, Southern Pacific, and Norfolk Southern. Options on

Atlas's HO version include three different styles of hood (standard, hood with square air filter box, and hood with angled air filter box immediately ahead of the cab), exhaust stacks with or without muffler, sand box variations, and snow plow or standard pilot.



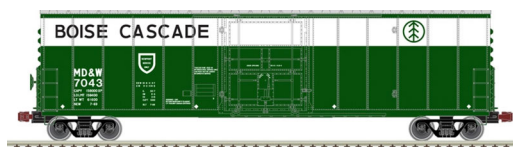
Details on the ready-to-run models include individual windshield wipers, metal grab irons, uncoupling levers, MU and train line hoses, snow plow pilot, etched metal radiator grilles, and see-through sill detail. Gold Series models include LokSound Select Sound decoders, Silver Series models include an NMRA 8-pin plug for a customer provided DCC decoder. Both Series locomotives will operate under DC power.



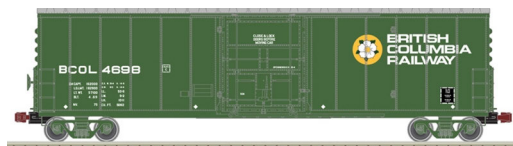
R. Bale

NEWSPRINT BOXCAR

In 1967, the National Steel Car Corporation of Hamilton, Ontario, created the first purpose-built cars for transporting newsprint between Canada and the US. To protect the large rolls of paper, which weighed up to 2,000 pounds each, the cars featured completely smooth interior surfaces including the doors. The newsprint rolls were normally stacked two high, requiring an internal height of more than 9' for clearance. The large door openings were fitted with either Youngstown lever-type flush plug doors or lever-less exterior post plug doors.



Features of the Master series ready-to-run model include realistic plug door replication, separately applied details, and Symington roller-bearing trucks.



Road names will be two Canadian National schemes, Canadian Pacific (Pine tree scheme), two Central Vermont schemes, MD&W-Boise Cascade, and BOCL-British Columbia Railway.

New HO scale freight cars coming from Atlas include a National Steel Car newsprint boxcar.

Road names will be two Canadian National schemes, Canadian Pacific (Pine tree scheme), two Central



quarter of 2021.

An HO scale version of a three compartment ACF 3560 cu. ft. Center-Flow covered hopper is coming from Atlas during the 4th



ACFX-Kerr-McGee, and Potash Corporation.

Decorating schemes for the Trainman series model will be ACFX CanCarb, Georgia Pacific, Chessie System C&O, CSX, Duluth Missabe & Iron Range,



popular prototype. Road names will be Iowa Northern Railway, Northern Southern, First Union Rail, Willamette & Pacific Railroad, BNSF, Canadian Pacific, TTX, and Union Pacific.

Several new paint schemes will be available for Atlas's next production run of the unique 73' center partition car. The Atlas HO scale Master series model is based on the 1986 version of the



tooled 286k heavy axle load trucks. Atlas recommends a 22" minimum track radius for the 73' cars. For additional information contact a dealer or visit <https://atlasrr.com>.

Noteworthy details include simulated ratchets, cable hooks, and tie-loops; see-through top chord holes, cable slots, wire grab irons, etched cross-over walks, detailed jack pads, and newly

Bachmann has introduced a Trackside Turnout Decoder that upgrades electrically operated HO scale turnouts to function in a DCC system. The circuit for each turnout is hidden inside a common trackside structure. Experienced modelers can solder hidden leads to their control circuit board. For plug-and-play applications,



connecting wires with appropriate terminals are provided that can be connected directly between E-Z Track turnouts and the circuit in the structure. A video explaining how the

Bachmann Trackside Turnout Decoder works is available for viewing at www.youtube.com/watch?v=VJu631IXVHE&feature=youtu.be.



Also new from Bachmann is an HO scale Amtrak Acela in a packaged Spectrum Series train set. The five unit set includes two locomotives (one is unpowered), a first class coach, a café car, a business class car, a 45" x 81" oval of nickel silver E-Z Track, a power

pack, and an analog speed controller. The passenger cars feature flush windows, illuminated interiors, and tilting chassis to travel smoothly around curves at high speed. The powered locomotive features a Digital Command Control motor and light decoder. An E-Z Command or other National Model Railroad Association-compliant digital control system is required for DCC operation.



Bachmann has announced two new roadnames for its very successful Siemens SC-

44 Charger passenger locomotive. The roadnames are Altamont Corridor Express (ACE) and North County Transit District Coaster. The SC-44 includes a TCS WOWSound DCC/Sound decoder with voice assist, separately applied windshield wipers, grab irons, and detail parts; marker lights, roof-mounted white and emergency red strobe lights; interior corridor lights, and directional headlights.

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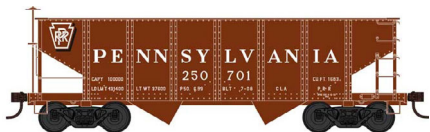


New for 2021 are fully assembled girder bridges, designed for use with Bachmann's *E-Z Track* system.

2.5" W x 9" L, they are available in four paint schemes: Pennsylvania RR, Union Pacific, Santa Fe, and a generic cartoon "Traffic? Next time take the train!" scheme. For additional information contact a dealer or visit www.bachmanntrains.com.



Bowser plans to release four new HO scale models in February including an all-Canadian GMD SD40-2 locomotive. For detailed information on this production run go to online.fliphtml5.com/buups/kxes/index.html#p=147.



Also coming from Bowser this month is a group of class GLa twin-bay coal hoppers. Details including all road names are available at online.fliphtml5.com/buups/hevq/index.html#p=127.



Information on Bowser's HO scale all-steel class N5, N5C, and N8 way cars is available at s3-us-west-2.amazonaws.com/mrhpub.com/2019-06-jun/online/index.html.



HO scale versions of Alco Century C628, C630, and C630M diesel locomotives are scheduled to be available from Bowser this month. For complete details on this release go to mrhpub.com/2017-06-jun/online/html5.

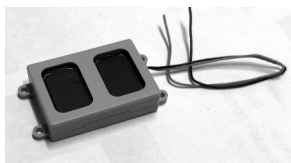
Bowser has also announced that a new low-height sugar cube speaker is now in stock. Measuring 17.5mm x 25.5mm x 6.7mm in



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size, it is significantly smaller than the standard 16.5 mm x 35.6 mm x 9.5 mm sugar cube speaker available from Bowser. This speaker will be used in Bowser's upcoming RS-3 model. For more information visit

www.bowser-trains.com.



R. Bale

N&W Y6B Steam Locomotive

The 2-8-8-2 steam locomotive was known as the workhorse of the Norfolk & Western. It was a powerful beast that readily handled heavy tonnage on the grades and curves of N&W's mountainous line.

Beginning with a USRA design, N&W built several versions of the 2-8-8-2 in its shops in Roanoke, Virginia. The final version, the Y6b, was completed in 1952. It had 58" drivers and roller bearings on each of its 12 axles. It developed nearly 170,000 lbs of tractive effort. By comparison, the Union Pacific's highly-regarded 4-8-8-4 Big Boy developed 135,375 pounds of TE. When the N&W ceased their mainline steam operations in the summer of 1959, 50 of the Y6bs were still in service in the coal fields.



Broadway Limited has released an HO scale model of a Norfolk & Western Y6b 2-8-8-2 steam locomotive. The superstructure and chassis of the HO scale model are both diecast metal.



The HO scale model is available

decorated in N&W's standard in-service scheme and in a blue fantasy scheme. Painted but unlettered versions are also available. The model comes with Paragon3 Sound & Operation System with Rolling Thunder that functions in both DC and DCC environments. BLI's Y6b will negotiate 18" radius track. For additional information contact a dealer or visit www.broadway-limited.com.



New 1:87 scale vehicles from **Classic Metal Works** include this 1950 Plymouth four-door sedan in Shore Green.



Also new is a green 1941-46 Chevrolet flatbed truck decorated for Railway Express Agency. For additional information contact a dealer or visit www.walthers.com.



InterMountain is selling a 4750 cu. ft. triple-bay rib side covered hopper in seven new road names,

including one with nine variations for the same road. The GNBC-Farmers "I Care" series car, shown above, is available in nine road numbers with each number displaying the name of a different Farmrail employee. Cars with a choice of six road



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numbers are available for PLMX-Grain Handling Corp, and PTLX-Pomeroy CO-OP Grain.



Additional road names in this run include PTLX-Farmers Elevator, NAHX-Goodseed Grain, USLX-

Evergreen Fish Hatchery, and Union Pacific with a three-color UP shield.



Features of the HO scale ready-to-run model include appropriate trucks with machined metal

wheelsets and etched metal roofwalks. For additional

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



In addition to being known for its popular couplers that have become a de facto industry standard, **Kadee** continues to release prototypically accurate freight car

models. The latest HO scale ready-to-run model is based on a 50-ton AAR twin-bay coal hopper with offset sides acquired by Reading in 1957. Features include scale grab irons, ladders, and brake rigging; Kadee metal knuckle couplers, and Kadee self-centering equalized trucks. For additional information contact a dealer or visit www.kadee.com.

Mine Mount Models has released a new product line of roofing materials. Currently available are four styles of shingles: 3-Tab Asphalt, Random & Straight Edge Shakes, and Curved edge shingles. Plans for the future include Rolled



Roofing, Standing Seam, and Corrugated, among others. All shingles are laser-cut from

.011" brown laserboard and need to be painted. PDFs with painting instructions and tips are available on the company website at minemountmodels.com.



Moloco has a new group of prototypically accurate HO scale PC&F 50' RBL insulated boxcars. Features shared on all road names

include 10' offset plug doors and shelf-style uncoupling levers. Spotting features on a car decorated for NIRX (Erie Lease) include a Miner brake wheel mounted high on the B end, no running board, and low mounted tack board. All of the other road names have the tack board mounted high on the end.



Two versions of a Western Pacific car are in this release with the principal difference being the running boards. Cars

numbered 60502 and 60513 have an Apex running board while cars numbered 60509 and 60514 have had the running board removed.



Metal running boards are also the noticeable difference in two Southern Pacific cars with car No. 697805 (left) being fitted



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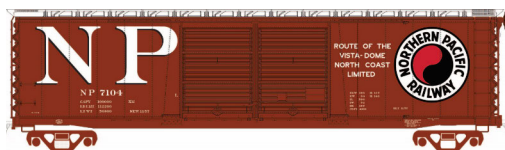
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with Apex brand running boards, crossover step and a hand brake platform. SP No. 697864 and an SSW car (below right) have US Gypsum running boards.

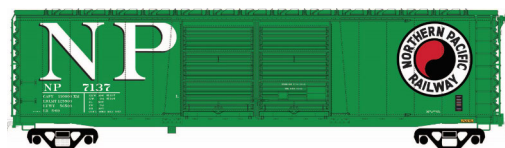


Moloco is booking reservations for Northern Pacific 50' class XM boxcars with a 15' opening filled by a pair of Youngstown sliding doors. The well-

researched HO scale models replicate plate B cars built in NP's Brainerd Shops beginning in 1956. Brainerd used numerous commercial components including Youngstown sides with their distinctive diagonal stiffening panels on either side of the door opening.



metallic brown with an 8' NPR Monad herald.



Decorating schemes for Moloco's new model include this 1957 as-delivered version in NP

Each design, including this 1969 repaint in Cascade Green, will be available in six numbers.



A 1972 Burlington Northern version with cut down end ladders will be available along with an undecorated kit.

Features included on Moloco's new model are an etched metal replica of Brainerd's unique running board design, rubber air hoses, metal corner stirrups, 50-ton trucks with metal

wheelsets, and Kadee Whisker couplers. Variations in detail include either Ajax, Ellcon-National, Equipco, Klasing or Universal hand brakes depending on the prototype car number being modeled. Delivery is planned for late in the 3rd quarter of this year. For additional details visit contact a dealer or visit www.molocotrains.com.



Monster Modelworks has announced the availability of a new kit in HO scale, The Brick Freight House.

Measuring 6.875" x 12.25" x

4.5", the kit includes turnbuckles and downspouts, laser-cut overhangs, concrete overlays, rooftop drains, brick corners, peel & stick windows and doors with glazing; and 3D engraved roll-up doors. For more information visit www.larkspurlaserart.com.



Piko has announced that they will be releasing a two-unit model of a Siemens Diesel Railcar decorated for the San Diego-area North County Transit District Sprinter service. Expected to be available

in August 2021, the trainset will be available in both 2-rail DC and DCC with sound versions, as well as HO scale 3-rail.



Also expected this summer is a US Army Transportation Corps Whitcomb 65 Ton (65-DE-19A) diesel locomotive. Produced during WWII, hundreds were shipped to Europe, where many

stayed to power European railroads over the next several decades. Some returned to the US and were sold to railroads

and companies in North America. The first run will only be the USATC European version and the Netherlands Rh 2000 NS III, which were purchased by the Dutch State Railways from the US Army. While this release will not have knuckle couplers and no buffers, Piko America has noted that it would be easy to modify the tooling for a US railroad compatible unit and they expect to see them in the future. For more information visit www.piko-america.com.



R. Bale

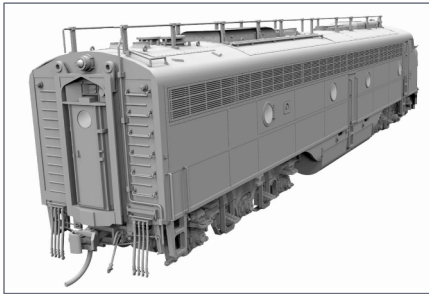
EMD E8 LOCOMOTIVE

The E8 was a 2,250hp diesel locomotive built for passenger service by General Motors Electro-Motive Division. A total of 450 E8A and 48 E8B units were built. Power came from two 12-cylinder 567 diesel engines each driving generators that supplied power to two traction motors on each six-wheel truck. In profile the front of the nose of E8 is less slanted than earlier EMD units. After passenger trains were canceled in 1970 on the Erie Lackawanna, the E8s were re-gearred and proved reliable in freight service until the early years of Conrail. Amtrak used E8's until the late 1970s. At 70'3" in length, an E8 is an impressive sight.



Development of an all-new HO scale EMD E8 is moving forward quickly at **Rapido**. The project includes numerous road-specific versions of both E8A and E8B diesel units. An Erie-Lackawanna version is shown in the 3D rendering. To ensure the elusive EMD nose was accurately replicated,

Rapido commissioned a 3D laser scan of a Union Pacific E8 at the Southern California Railway Museum, in Perris, CA. In addition to accurate nose and roof contours, Rapido reports that it is tooling four different porthole and side grille arrangements, and three different back ends. Variations in road-specific details include fan sizes, options in dynamic brakes and skirting, and seven different arrangements of lights, lift rings, and grab irons on the nose.



Road names on the initial production run will include Pennsylvania as shown in the 3D rendering of the end detail and train phone antenna. Additional road names will be Amtrak (Phase 1), Burlington, Illinois Central, New York Central (Cigar Band), Southern

(Crescent), Union Pacific, VIA Rail Canada, and three Canadian Pacific schemes. Both DC (DCC ready) and DCC sound units will be available. A video showing the introduction of Rapido's E8/E9 project is available at www.youtube.com/watch?v=jFyD4LRrjls&feature=youtu.be.



To mark the 50th anniversary of Amtrak, Rapido will offer a special

Limited-Edition model of Amtrak No. 4316, the first E8 that Amtrak painted in what would become a one-off paint scheme. The HO scale locomotive will be packaged in an engraved wood presentation box and include a unique enamel pin as well as a numbered certificate of authenticity signed by Rapido president Jason Shron and Amtrak's Matt Donnelly.

Rapido is booking advanced reservations for an HO scale Pennsylvania Railroad GLa class coal hopper. Introduced in





1904, PRR eventually owned nearly 30,000 of the GLa coal hoppers with more than 7,000 still in interchange service in 1960. Thousands more

were owned by railroads other than PRR.



Rapido's newly-tooled HO scale version features full interior rivet and bracing details, wire grab irons, narrow semi-scale draft gear box, Kadee couplers, and PRR 12D-F8 trucks with machined metal wheelsets. In addition to

two PRR paint schemes (Circle and Shadow Keystone), road names on the initial production run will be New York, Ontario & Western; Berwind, Cambria & Indiana, Canadian National, Lehigh Valley, and Westmoreland Coal. An undecorated car will also be available.



Rapido shared photos of pre-production models nearing final development. They include an Alco PA and a Canadian Pacific D1-4-6-0 steam locomotive.



The models shown are both early samples and details are subject to change. For additional information on all Rapido

products contact a dealer or visit www.rapidotrains.com.



Resin Car Works has released a limited edition kit for an HO scale Illinois Central modified AAR 40' steel boxcar with a 10' 4" interior height. During a two year period beginning

in 1939, the Illinois Central acquired 5,000 of the AAR boxcars. The first 3,000 of these cars had square corner-post ends and are the focus of RCW's latest kit.

The kit consists of a one-piece car body and assorted wire sizes and grabs irons. Commercial parts include Plano Models etched ladders, Yarmouth Model Works etched roof walk and supports, A-Line stirrups, a Tichy AB brake set and Ajax hand brake hardware, and Precision Design Company decals. Tahoe Model Works trucks that are very close to those on the prototype are included. Couplers are not included in the kit. For additional information on this limited edition kit visit resincarworks.com/kits.htm.



ScaleTrains.com plans to make the first release of GE ES44 diesel locomotives in early March. Both Operator and upscale Rivet Counter versions of the HO scale

locomotive are in this initial release. Leading the Rivet Counter group is BNSF locomotive No. 6078, uniquely decorated to mark the 25th Anniversary of the merger of Burlington Northern and the Santa Fe Railway.



Additional road names for Rivet Counter models include units equipped



R. Bale

GE ES44 LOCOMOTIVE

General Electric introduced its GEVo series of modern diesel locomotives in 2002. The first two units were the ES44DC and ES44AC. The ES44C4 followed a few years later. The GEVo series was designed to replace earlier AC4400CW and Dash 9-44CW units, while complying with new emission standards imposed by the Environmental Protection Agency (EPA). The EPA established allowable emission levels, or tiers, based on a locomotive's date of manufacture. Tier 2 took effect in 2005 followed by Tier 3 in 2010. Although EPA Tier 4 standards went into effect in 2015, ES44s continue to be built. This is due to a complicated government formula that allows sharing and redistribution of emission credits between GE and the operating railroad. The external appearance of ES44 locomotives is similar to the AC4400CW with the most significant visual difference being the larger radiator wing structure on the back end of the locomotive. The thicker radiators and related equipment work to cool the exhaust, which reduces emissions. The ES44 has become the best-selling diesel locomotive of all time.

with GE high-adhesion trucks decorated for KCS and Canadian National.



The feature-laden models include deck mounted LED ditch lights, walkway lights and ground lights on the

left side of the locomotive. The CN model also has ditch lights on the rear deck and red DPU marker lights.

The ES44 will also be available decorated for Norfolk Southern (Horsehead scheme), BNSF (Heritage III scheme with C4 A-1-A trucks), and four CSX liveries with GE steerable trucks. In



in addition to YN3, the CSX units will be available decorated in a 2019-era First Responder scheme (above) honoring the Pride in Service initiative.

Additional CSX schemes in this project honor Law Enforcement and Armed Forces.



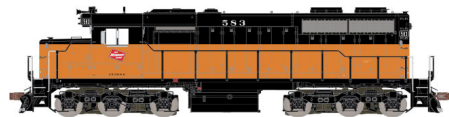
The economy priced Operator series GE ES44 utilizes the same motor and drivetrain as the Rivet

Counter series, however, all units will have the same cab and long hood configuration and the body will be predrilled for the modeler to install grab irons, uncoupling levers, and hoses. The needed parts may be purchased in a separate detail kit.



Road names will be BNSF Heritage III scheme, Canadian National, CSX YN3, Kansas City Southern,

and Norfolk Southern Horsehead scheme. The Operator series ES44 will be available for DC/DCC operation with a 21-pin connector or with ESU LokSound 5 DCC and sound pre-installed at the factory.



ScaleTrains.com announced on the Amherst Virtual Railway Hobby Show livestream that their second

Museum Quality HO scale locomotive will be the EMD SD39. Developed by EMD specifically for Milwaukee Road in 1969, only 10 SD39s were built. Designed to serve on branchlines with light rail and bridges, they eventually ended up in Chile on the Fepasa.

Each road number will have details specific to that locomotive and numerous LEDs. Roadnames and paint schemes the model



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will be available in are Fepasa, Soo Line (Bandit), Wisconsin Central, and Milwaukee Road.



Also announced during the Amherst Virtual Railway Hobby Show, ScaleTrains.com's

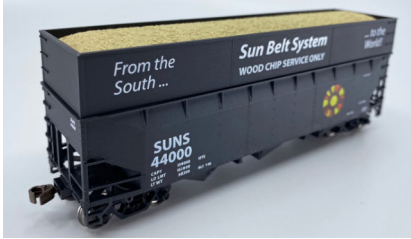
second Kit Classics model will be the CB&Q Havelock Shops 52'6" Gondola. Appropriate for the late 1960s to late 1980s, the kit is easy to assemble with a small Phillips screwdriver, and features interior floor detail, cast stirrup steps, end ladders, grab irons, underbody, and brake systems. Roadnames in the first run are Soo Line, Norfolk & Western, Conrail, Chicago & North Western, Chicago, Burlington & Quincy; and Burlington Northern. The models will be equipped with 33" machined metal wheels in Barber S-2 trucks featuring raised lettering and foundry data. Body mounted semi-scale Type E knuckle couplers are included. For additional information visit www.scaletrains.com.



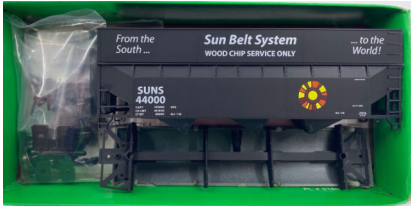
Southbound Modelworks & Decal Company is selling a craftsman style resin kit for an HO scale Seaboard Air Line class V-9 and V-10 ventilated boxcar. The HO scale craftsman kit accurately replicates a prototype

built in 1923. In addition to a regular sliding door, the cars were built with alternate screen doors and end vents that allowed air to circulate, lessening the chance of spoilage in transit. Although it was not an official designation, rail fans and modelers nicknamed the unique cars 'watermelon cars' because they were designed specifically for transporting fresh fruit, including watermelons, that could be moved without refrigeration. The SM&D kit is an upgrade of a product

originally developed by WrightTrak. The SM&D version includes resin castings for the car, wire for brake rigging, ladders, decals, and instructions. Couplers and trucks are not included. For additional information visit www.sbmwdco.com.



Patrick Harris is selling an HO scale kit for a 4400 cu. ft. wood chip car rebuilt from a 70-ton triple-bay coal hopper with offset sides. Produced by Bowser, the freelance car is decorated for Sun Belt System, a fictional railroad running from Alexandria, Louisiana, to the Atlantic Coast.



The model is available in four road numbers. For additional information, including ordering instructions, contact Patrick at seaboardcoast@hotmail.com.



Tangent Scale Models has completed another release of its prototypically accurate HO scale model of a 52'6" 70-ton gondola. The model accurately replicates cars produced by Bethlehem Steel from 1937 until 1957. Road

names include two Baltimore & Ohio schemes; the 1940 Capitol Dome version (above) and a 1957 repaint displaying a large B&O.



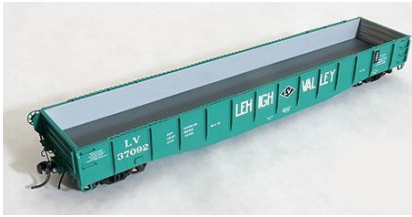
Additional schemes include Central of Pennsylvania, and Central Railroad of New Jersey with both schemes displaying the Lady Liberty herald.



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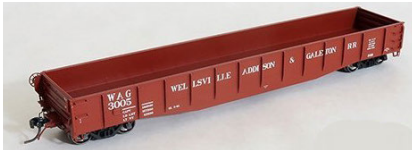
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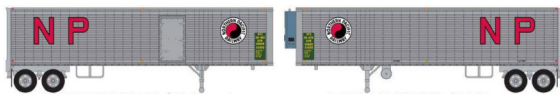
1980-era Western Maryland gondola.

Gondolas decorated for Lehigh Valley are available in the 1970 green scheme as well as in a 1973 repaint with a gray body and black lettering. Completing this release is a WAG car in a 1961 decorating scheme and a



Dreadnaught drop ends. Handbrake variants include Universal, Ajax, or Equipco. All versions feature wire grab irons and uncoupling lift bars, separate air hoses, Kadee couplers, and 70-ton ASF A-3 Ride-Control trucks with 33" machined metal wheels. For additional information visit www.tangentscalemodels.com.

Variations in detail depending on the road name and number include steel or wood decks, Duryea or conventional end sill detail, and straight corrugated or



Trainworx has announced preorders for 40' corrugated dry and refrigerated

trailers in HO scale. Roadnames for this run are Rio Grande Motorway, Santa Fe, Chesapeake and Ohio; Southern Pacific, Northern Pacific, Kansas City Southern, and Fruit Growers Express. Preorders are due February 28, 2021 for delivery in 4th quarter 2021. For more information visit intermountain-railway.com.

Walthers plans to release a new production run of GP9 road switchers next month. The Walthers Mainline series model is based on GP9 Phase II locomotives built by EMD in the late 1950s. The economy priced HO scale model uses the same drive system as Walthers upscale Proto series. Road names



include SP and SPSF pre-merger Kodachrome schemes, BNSF, and NdeM National Railways of Mexico.



Additional road names in this production run include New York Central, Grand Trunk Western, Union Pacific, Kansas City

Southern, and Soo Line. Drill starter points are molded into the body to assist hobbyists wishing to add grab irons from Walthers GP9 diesel detail kit (sold separately). The models will be available with ESU Sound for DCC and DC layouts. Standard DC versions will have a 21-pin plug to simplify installation of an aftermarket decoder.



A new HO scale International wide-vision steel caboose is available now from Walthers. The Mainline model features a

Stanray diagonal panel roof and Barber Swingmaster roller-bearing trucks with 33" machined metal wheelsets.



Road names are Great Northern, Maine Central, Northern Pacific, Boston & Maine, Norfolk & Western, and Norfolk Southern.

Walthers offers a caboose detail kit which is sold separately. To assist in installation of the detail kit, drill starter points for grab irons are molded into the caboose body.



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Walthers is offering a 34' 100-ton twin-bay hopper in seven road names including Southern Pacific. The HO scale model represents prototypes built in the 1970s.



Additional road names include Golden West, Norfolk Southern, Western Pacific with a Union Pacific herald, Wisconsin Central, and two schemes for Southern Railway. The

HO scale ready-to-run model comes with appropriate trucks with 36" machined metal wheelsets



Walthers has set an April release date for a group of HO scale metal buildings, including a pole barn. In addition to the big double-door barn, the kit includes a large shed, a single-car garage, and a small shed.

Details in the various buildings include separate doors and windows, nonworking lights, electric meter, a propane tank, and dry hydrants.



Walthers has released an HO scale chain link fence. The SceneMaster kit includes 24 fence posts,

six pieces of wire mesh that measure 1" x 2.375", and two gates and gate posts. For additional information contact a dealer or visit www.walthers.com.

N SCALE PRODUCT NEWS



Athearn plans to release an N scale model of an EMD FP45 in

December 2021. The cowl-style version of an SDP45 (see the sidebar in HO report) will be available for Santa Fe, Milwaukee Road, Western Pacific, BNSF, and SF-SP Kodachrome scheme.



The ready-to-run N scale model features a painted cab

interior with control stand, see-through windows and flush mounted portal windows; non-skid end walkways, LED headlight, and Flexicoil-C truck sideframes with high brake cylinders.



Additional N scale motive power coming

from Athearn next December is an EMD F45 decorated for Burlington Northern and Wisconsin Central. The BN locomotive is based on a group of 12 units ordered by GN prior to the BN merger but delivered by EMD in BN Cascade green.



Wisconsin Central purchased three F45s from Santa

Fe in 1995. Both Burlington Northern and Wisconsin Central versions of the F45 are included in the December 2021 release. Athearn's N scale FP45 and F45 models will be available for DC and DCC with a SoundTraxx Tsunami2 sound decoder.

A Ford C canopy cab pumper fire truck with rubber tires and molded cab interior is coming from Athearn in December. Community identification for the 1:160 scale vehicles will be



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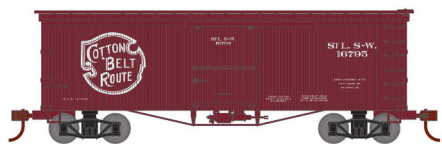


Napa, Highspire, Perryville, City of Los Angeles, Washington DC, and Chicago.



New N scale 40' high-cube containers are also due next

December. They will come in 3-packs decorated for Ocean Network Express, Cosco Shipping, MSC/Florens, Touax/MOL, MSC, NYK, and Maersk.



For the January 2022 production run, Athearn has announced an N scale 36' Old Time Boxcar. The models are equipped with molded truss

rods with turnbuckles and a separately applied brake wheel. Roadnames in this release include Cotton Belt, Santa Fe, New York Ontario & Western, Chesapeake & Ohio, Nickel Plate Road, and Missouri-Kansas-Texas.



Also in the January 2022 production run are Bay Window Caboose in nine roadnames and ten paint schemes. Roadnames available

in this run are Pennsylvania, New York Central, Erie, Illinois Terminal, Nickel Plate Road, Milwaukee Road, Frisco, and two RJ Corman schemes. The models are equipped with details like an antenna, marker lights, smoke jack, and vent, as well as an axle-mounted generator where appropriate.



The final release in the January 2022 production run is an N scale PS-2 2600 cu ft covered hopper. Featuring etched metal roofwalks and factory installed wire roofwalk

grab irons, the model includes a flush or overhanging roof and round or trough hatches per the prototype. Roadnames in this

release are Grand Trunk Western, Louisville & Nashville, Missouri-Kansas-Texas, Norfolk & Western, Northern Pacific, and Union Pacific.

Preorders for Athearn products on the January 2022 production schedule are due February 26, 2021. For additional information on Athearn and Roundhouse products contact a dealer or visit www.athearn.com.



R. Bale

ALCO RS-2 LOCOMOTIVE

In 1946, while still producing its successful RS-1 switch engine, Alco introduced the RS-2 road switcher. The RS-2 featured a new diesel prime mover that increased the horsepower from 1,000 to 1,500, all housed in a stylized rounded body. Even the radiator fan was given a round housing. All considered cutting-edge styling for that immediate postwar period. Alco and Canadian counterpart, Montreal Locomotive Works, successfully built over 370 of these versatile locomotives for railroads large and small.



4th quarter 2021 release include Chicago & North Western, Maine Central, Lehigh Valley, Canadian Pacific, Sothern

Atlas and its dealers are booking advance reservations for a new production run of an N scale Alco RS-2 locomotive. Road names scheduled for the 4th quarter 2021 release include Chicago & North Western, Maine Central, Lehigh Valley, Canadian Pacific, Sothern Railway, and Union Pacific.



Features of the DC locomotive include dual flywheels and directional LED lighting.



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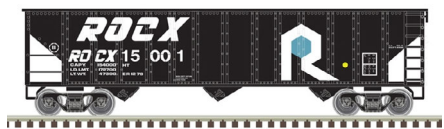
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series model is based on a prototype with pronounced fishbelly side sills.



Road names will be DLRX GE Railcar, CSX, Indiana Harbor Belt, Norfolk Southern, and Inland Steel.



A Trainman series 90-ton triple-bay coal hopper completes the list of new N scale models coming from

Atlas during the 4th quarter of 2021. Road names on the affordable model will be Burlington Northern, Canadian National, Conrail, Pittsburgh & Shawmut, Rock Island, Union Pacific, Norfolk Southern, Chessie System C&O, Reading Blue Mountain & Northern, and Denver & Rio Grande Western.



For additional information contact a dealer or visit www.atlasrr.com.



R. Bale

GP38 AND GP40 ROAD SWITCHERS

EMD introduced a line of locomotives in 1966 powered by its new 16-cylinder 645-series prime mover. The four-axle locomotive with a rating of 3,000 hp was christened GP40. Between 1966 and 1971 EMD produced more than 1,100 GP40s. Concurrent with the introduction of the GP40, a non-turbocharged version built on the same chassis and using the same body was introduced as the 2,000 hp GP38. It also carried a considerably lower price. More than 700 GP38s were delivered during the seven years it was catalogued by EMD.



New N scale motive power from **Bachmann** includes an EMD GP40. Road names for GP40s with a dynamic brake blister in this release are Union Pacific, BNSF, CP Rail, Norfolk Southern, and CSX.



Bachmann N scale GP40 diesel locomotives without dynamic brakes are available decorated for Boston & Maine, Santa Fe, and Union Pacific.



All versions are available for standard DC operation or DCC sound equipped with an Econami Sound Value package.



Bachmann has released an N scale version of a New York Central 4-6-4 Hudson

steam locomotive. Two road numbers each will be available in Gothic and Roman style lettering. The N scale DCC locomotive comes with a factory installed Econami sound value package

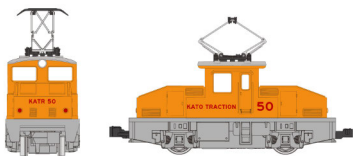


dual-mode NMRA-compliant decoder. For additional information contact a dealer or visit www.bachmanntrains.com.



Eastern Seaboard Models has shared this photo of a pilot model of a Pennsylvania Railroad class G32b gondola currently under development.

The N scale model is based on a prototype car PRR rebuilt in the mid-1960s. Many the rugged cars continued in service into the Conrail era. Availability of the ESM model is planned for late March. For additional information visit www.esmc.com.



KatoUSA plans to introduce a line of small, affordable, N scale mini-trains later this year. Identified as Kato's Pocket Line, the initial product will be a four-wheel electric locomotive of Japanese origin decorated in a North American style of bright orange. The model will have Kato knuckle couplers and an adjustable metal pantograph. The DC-only model will be powered by Kato's coreless motor.



Kato has released N scale versions of EMD SD70M diesel locomotives in four road names. The models feature flat, non-flared, radiators.



Two road numbers each are available for Norfolk Southern, Union Pacific, CSX, and Southern Pacific.



The N scale models come with a five-pole KATO motor with dual brass flywheels, directional headlights and illuminated number boards.



Kato has added individual Canadian National F7A and F7B locomotives to its previously announced run of the EMD F7 diesel units. Individual CN F7A diesels are available as well as

F7A-F7B two-unit sets. F7s decorated for Great Northern, Northern Pacific, Santa Fe (both Warbonnet and Yellow Bonnet schemes), continue to be available.



Kato has added Union Pacific and BNSF Swoosh models to the next production run of its N scale GE ES44 GEVO locomotives. The N scale models are based on a prototype with a 12-cylinder

prime mover with a redesigned dual-fan heat exchanger, which gives the locomotive its distinct flared radiator.



Features of the N scale model include directional headlights, illuminated number boards, and working ditch lights. Two road numbers will be available for each road name.

All of Kato's N scale SD70M, F7, and ES44 locomotives mentioned in this report will be available for DC and DCC operation. Standard DC models will accommodate a drop-in Digitrax DN163K1C or Train Control Systems K1D4-NC aftermarket decoders. DCC versions will be available with factory installed Digitrax DCC. Factory installed ESU LokSound



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DCC will be available on special order through participating dealers. For additional information contact a dealer or visit www.katousa.com.



New N scale models available now from **Micro-Trains** include a 78' heavyweight coach with paired windows. The ready-to-run model is available decorated for Chesapeake & Ohio with six-wheel trucks. A Denver & Rio Grande Western version of the coach is also available. It is painted Pullman green and rides on four-wheel trucks.



A Denver & Rio Grande Western version of the coach is also available. It is painted Pullman green and rides on four-wheel trucks.



This Soo Line model represents a 50' RBL boxcar with an 8' plug door. The N scale model is updated with no running boards, short

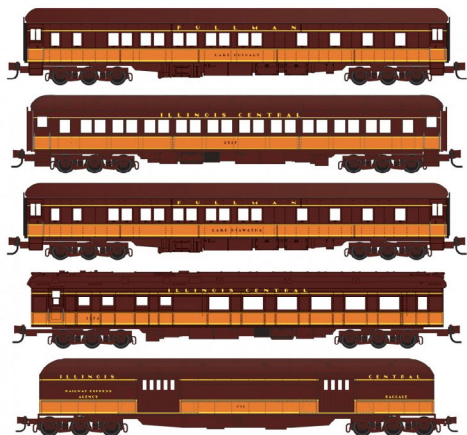
ladders and roller-bearing trucks.



Micro-Trains version of a twin-bay coal hopper, with offset sides and Bettendorf-type solid-bearing trucks, is based on a 33' ACF prototype built in 1948 for Southern

Railway. The N scale model comes with a simulated coal load.





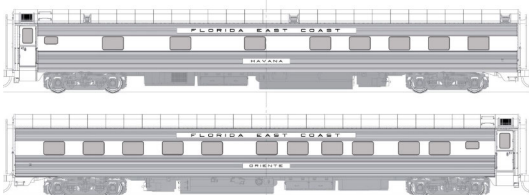
Micro-Trains dealers are booking reservations for a five-car set of Illinois Central heavyweight passenger cars. The set includes a baggage car, coach, two 10-1-2 sleepers, and a diner. Availability is planned for June 2021. Contact a dealer for additional information on all Micro-Trains models.



RailSmith has launched an N scale project to produce a 1947 version of Northern Pacific's elegant North Coast Limited. The long-range project begins with Pullman-Standard lightweight coaches and EMD F units decorated in NP's Streamliner colors. The handsome green design was also known as the Pine Tree paint scheme.



Motive power options, produced under commission by Broadway Limited, will consist of F5A, F5A-F3B, and F5A-F3B-F5A sets.



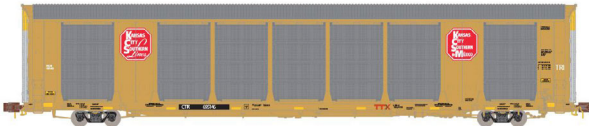
RailSmith has also announced that the Florida East Coast sleeper cars Havana and Oriente are open for orders. Part of RailSmith's Florida Special, both cars wore an all-silver scheme.





Also announced open for orders as part of the Florida Special are the Pennsylvania sleeper cars Bucks County and Chester County.

According to the Pennsylvania Technical & Historical Society the cars were delivered with Royal Purple lettering boards and were used on the ACL Florida Special and Champions trains. For additional information visit lowellsmith.net.



ScaleTrains.com announced during the Amherst Virtual Railway Hobby Show that they

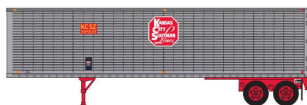
would be producing an N scale Rivet Counter model of the Greenbrier/Gunderson Multi-Max Autorack. One of the most modern autoracks in prototype service, the Multi-Max began service in 2014 with several thousand produced. Since this is a Rivet Counter product models will feature roadname and number specific details, with ScaleTrains.com producing four body variations, three ladder styles, two types of end doors, three end sill configurations, two different upper and lower side panels mountings, and many other detail variations. Roadnames in the first run are KCS/yellow/CTTX, KCS/white/CTTX, Kansas City Southern/yellow/TTGX, Union Pacific/Building America/TTGX, Norfolk Southern/Horsehead/TTGX, Canadian Pacific/Soo, Canadian Pacific/Beaver logo/TTGX, CSX/Boxcar logo/TTGX, CSX/Boxcar logo/CTTX, Canadian National/red logo/TTGX, Canadian National/white logo/CTTX, BNSF/orange/TTGX, BNSF/orange/CTTX, and BNSF/white. More info at ScaleTrains.com.



Summit USA has released an N scale kit for a Rural Shamrock Gas Station & Convenience Store.

Representing a modern gas station with convenience store, the kit includes all

building parts, vending machines, pumps and signs. Milled in white styrene plastic with clear acrylic window glazing, the kit comes with both self-adhesive and water slide decals. The finished size of the model is 3.625" x 3" x 1.5". For more information visit summit-customcuts.com.



Trainworx has announced preorders for 40' corrugated

refrigerated and dry trailers in N scale. Names to be produced are Northern Pacific, Kansas City Southern, Fruit Growers Express, Ferrocarril del Pacifico, Sonora-Baja California, and unlettered. Preorders are due February 28, 2021 for delivery in 4th quarter 2021. For more information visit intermountain-railway.com.

NEW DECALS, SIGNS AND FINISHING PRODUCTS



Bill Mosteller of **Great Decals** has released several new water slide decals including S and HO scale sets for the New York Central Rail Diesel Cars. The distinctive red, black, and white safety end striping was added to the NYC Budd cars after 1960. Penn Central applied these same stripes to post-merger New Haven Budd cars.



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A new HO scale lettering set is available for Washington and Old Dominion diesels. The dulux gold set is suitable for lettering Whitcomb 65- and 75-ton, and GE 44- and 70-ton diesels. Road names, revised heralds, and a full set of road numbers are included.

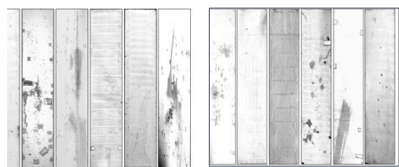
Decals with white lettering for The Virginian Railway's composite hoppers are again available in HO scale from Great Decals. The reissued set includes the herald, road name, road numbers sized for both the sides and ends, and dimensional and end data for the Virginian class H-8A hoppers.

Also new are N scale decals for lettering Ludington & Northern No. 16 and Michigan Southern/Kendallville Terminal No.16 SW8 diesel locomotives.



Great Decals has reissued its HO scale gold decal sheet for Virginian passenger cars. The sheet provides material to decorate up to six cars including

road numbers, car names, special car designations, and stripes. Material for predecessor roads Tidewater, Deepwater, White Oak, and Piney River & Paint Creek is included. For additional information visit www.greatdecals.com.



ZYX Creative is selling water slide decals for trailer and container roofs that are based on actual photographs of weathered roofs. Hobbyists can apply

patches, stains, spots, grime, sealer, skin lines, scratches and other marks individually or as a full group. The decals work on all surfaces but the appearance is especially effective on silver or white roofs. Five different sets are available with eight unique roofs in each set.

For additional information visit www.zyxcreative.com/product-category/decals/trailer-roofs.

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BRIEFLY NOTED AT PRESS TIME ...

JL Innovative Design has purchased Durango Press, and Railway Express Miniatures. Relocating manufacturing equipment and consolidating operations in Carrolton, NY, is almost completed. Products are expected to be released under their original brand names soon. For additional information visit www.jlinnovative.com.

The **National Model Railroad Association** has announced corrected dates for the 2022 national convention. The confirmed dates are August 7 through 14, 2022, at St. Louis.

National Scale Car has released a mini kit to convert an HO scale Tichy war emergency gondola into a Grand Trunk Western version as built by Pressed Steel Car with three-rib fixed ends. Details are available at nationalscalecar.com.

Showcase Miniatures has released several structural details suitable for DPM and similar HO scale buildings. The items include a dormer extension, exterior stairs, a roof top stair access, and two sizes of roof water tanks. More information is available at www.showcaseminiatures.net.

Tangent Scale Models has released its highly-rated HO scale PS-2CD covered hopper modified to replicate Pullman-Standard production during 1973-1975. Modifications from earlier versions include open-hole side posts and changes to the brake system. Road names on the updated cars are Santa Fe, MNS, Ralston-Jefferson, Cooper Grain, PTLX-Far-Mar, KCS, and Michigan Elevator ... ■



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FEBRUARY

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

Ongoing

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 www.facebook.com/newtracksmodeling 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/nmragroup 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 and manufacturers. For more information visit groups.io/g/NNG.



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February-March 2021

ONLINE, Facebook & YouTube, February 27, NMRAX, organized by Gordy Robinson, Martyn Jenkins, Gert Muller, and Jordan Kramer. See www.facebook.com/groups/nmragroup for more information.

ONLINE, Facebook & YouTube, March 27, NMRAX, organized by Gordy Robinson, Martyn Jenkins, Gert Muller, and Jordan Kramer. See www.facebook.com/groups/nmragroup for more information.

ARIZONA, PHOENIX, February 20th, Winter Cactus Swap Meet, sponsored by the Grand Canyon Model Railroaders. North Phoenix Baptist Church, 5757 N. Central Ave. For more information visit www.arizonamodeltrains.com/cactus.shtml.

ARIZONA, PHOENIX, March 20, Adobe Mountain Desert Railroad Swap Meet, sponsored by Sahuaro Central. Adobe Mountain Desert Railroad Park, 22822 N 43rd Ave. For more information visit www.arizonamodeltrains.com/am.shtml.

FLORIDA, MELBOURNE, March 6, 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.

FLORIDA, SARASOTA/BRADENTON, February 27-28, 43rd Annual Train Show, Bradenton Area Convention Center, 1 Haben Blvd, Palmetto, FL. Contact David Fontaine for more information at 941-685-2221 or david.f.34205@yahoo.com.

Future 2021-2022 by location

NEW ZEALAND, DUNEDIN, May 8-9, Dunedin Model Train Show. Taieri Bowling Club, 12 Wickliffe Street, Mosgiel. For more information email dunedinmodeltrainshow@gmail.com.

CALIFORNIA, IRVINE, September 8-11, Pacific Southwest Region/NMRA Convention.

CALIFORNIA, SANTA CLARA, Cancelled – July 4-11, 2021, Rails By the Bay, 2021 NMRA National Convention and National Train Show. Santa Clara Marriott Hotel. Efforts are underway to present the convention as a virtual convention online in. For more information visit www.nmra2021.com.

COLORADO, COLORADO SPRINGS, May 22, TECO Model Train Outdoor Swap Meet. Chapel Hills Mall, 1710 Briargate Blvd. For more information visit www.tecoshow.org.

FLORIDA, MELBOURNE, June 5, 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 schultzspacecoastrains.com.

FLORIDA, TALLAHASSEE, June 26-27, 30th Annual Tallahassee Model Railroad Show and Sale, sponsored by Big Bend Model Railroad Association, 441 Paul Russell Rd. For more information visit www.facebook.com/events/745873359647741.

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

INDIANA, FRANKLIN, May 15, Franklin Train Show, presented by the Central Indiana Division of the NMRA. Johnson County Fairgrounds. For more information visit www.cidnmra.org/services.

MISSOURI, IMPERIAL, May 15 10am - 3pm, After The Storm Train Show, Meramec Elks Hall, 1515 Miller Road, For more information contact Steve Mantia at 314-369-3949.

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

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



PENNSYLVANIA, KUTZTOWN, May 15, July 17, August 28, all 2021. Renningers Model Train Meet, 740 Noble Street. For more information see renningers.net/events/model-train-meet. ■



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