

# Model Railroad Hobbyist magazine™

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Edition

October 2012

HAVING FUN WITH TRAINS

- How to do simple weathering
- Kitbash a large industry office
- Modeling log car debris
- Narrow Gauge Convention report

... plus lots more, inside!



## The Allagash gets a Quarry, part 2





**Front Cover:** Mike Confalone continues another of his “scenery modeling outside the box” projects this month with the quarry scene he started last issue. Mike specializes in clever, unusual modeling techniques, with very effective results.

ISSN 2152-7423

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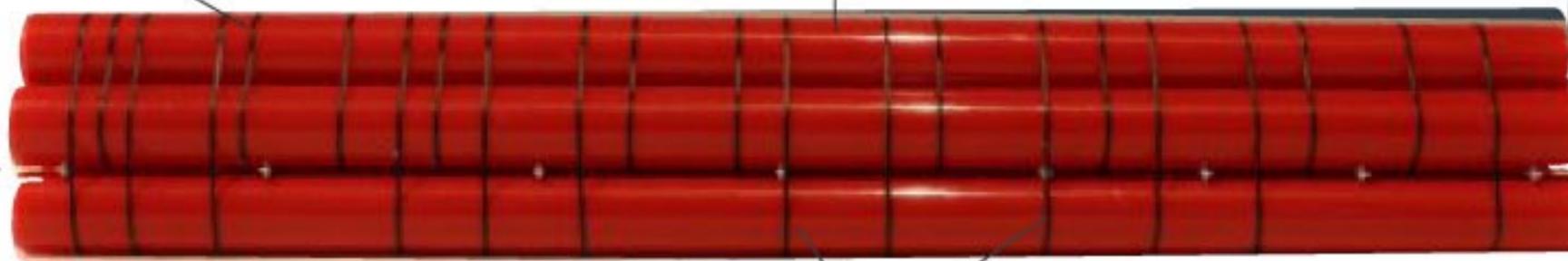
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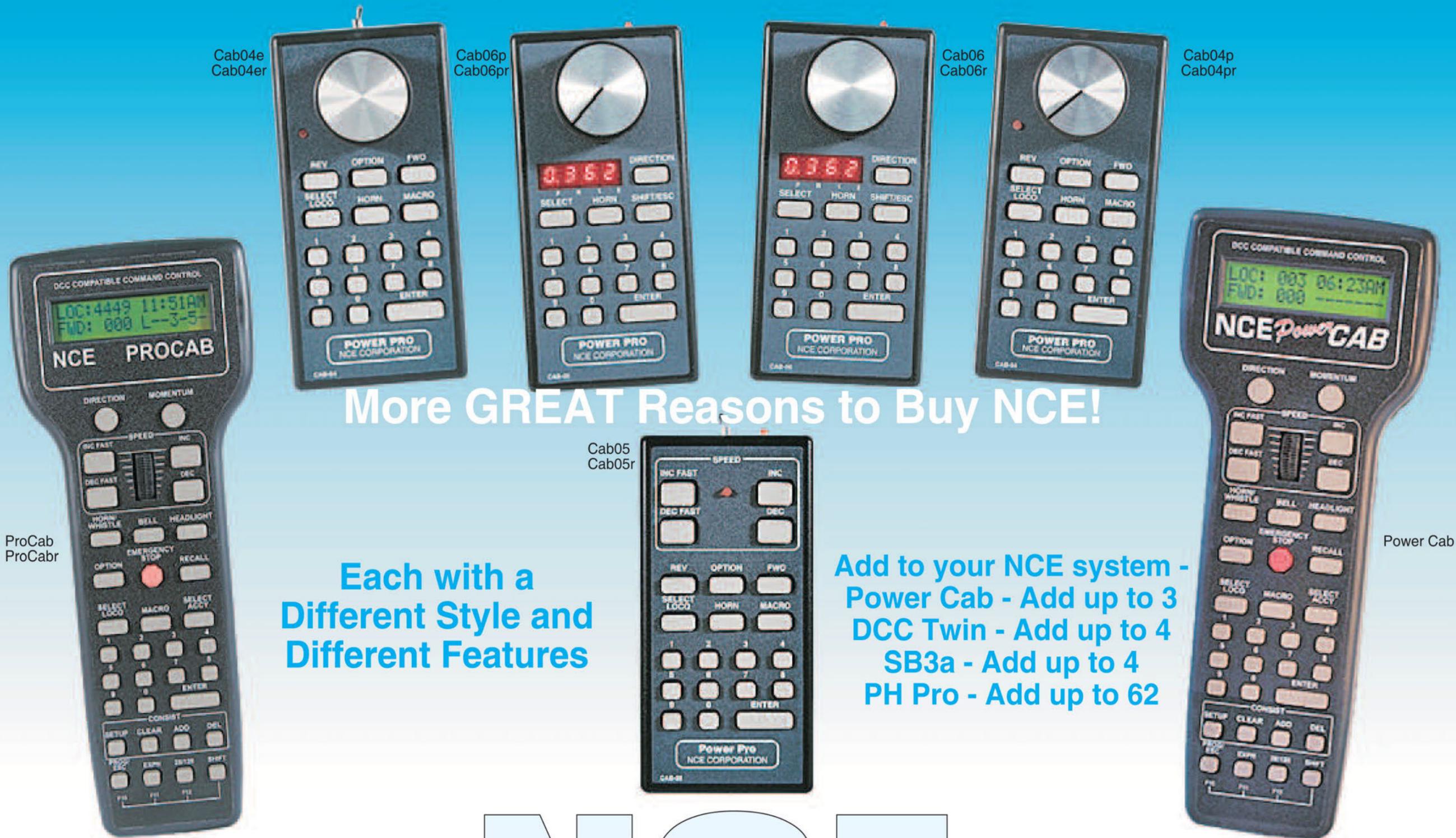


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# Main Features



**59 Allagash gets a quarry, part 2**  
Big scenery in a small space  
*by Mike Confalone*



**88 Seattle National Narrow Gauge report**  
MRH Exclusive photo / video summary  
*by MRH Staff*



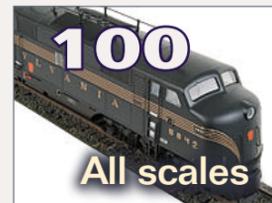
**70 The \$1 N scale refinery office**  
Recession-proof modeling tips  
*by Phillip L Hoffman*



**98 MRH Product showcase**  
Exceptional products photo gallery  
*by the MRH Staff*



**76 Log car bark debris**  
Car shop - one evening project  
*by Joe Brugger*



**100 October Model Railroading News**  
MRH News and events  
*by Richard Bale and Jeff Shultz*



**78 Simple weathering with Oils**  
Quick and easy car weathering tricks  
*by Dirk P. Reynolds*

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## Other Features

**8 Innovation in the hobby**  
Publisher's musings *by Joe Fugate*

**57 Hobby Marketplace**  
Vendor ads

**11 MRH Staff Notes**  
Looking back at Seattle, and more ...

**120 Derailments**  
Humor?

**18 MRH Q - A - T**  
Questions, Answers and Tips

## Columns

**24 Peninsula construction!**  
Up the Creek  
*by Charlie Comstock*

**33 DCC system comparison, part 2**  
DCC Impulses  
*by Bruce Petrarca*

**45 The right time**  
Getting Real  
*by Marty McGuirk*

**52 Launching a new column**  
What's neat this week  
*by Ken Patterson*

**118 The problem of an empty space**  
Reverse Running  
*by Joe Fugate*

**15 Subscriber-only extras**  
Bonus downloads

# RAPIDO

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## PUBLISHER'S EDITORIAL: Innovation in the hobby

Musings from MRH's founder

### About the Publisher



**Joe Fugate** is the featured expert in many [Model-Trains-Video.com](#) videos, and he's also the founder and publisher of **Model Railroad Hobbyist Magazine**.

To learn more about Joe, [click here](#).



**A** lot has changed since I started my HO Siskiyou Line layout in 1991.

While walking around the vendor room at the Seattle National Narrow Gauge convention last month, I was reflecting on all the great innovations in the hobby that have come along.

DCC was just starting when I began my layout. At the NG convention, we now have two vendors offering the first practical battery-powered system for O, S and HO: [Northwest Shortline](#) and [MRH Sponsor TAM Valley Depot](#).

If I were starting over with my basement sized pike, I'd be very tempted to sidestep the need for all my layout wiring and just go with battery-powered locos right from the start.

Another innovation is [Nano Oil](#). I had a chat with Phil Floyd (the ShayFixer) and he demonstrated an Sn3 brass Shay for me that he had lubricated with Nano Oil. The loco's amp draw had dropped from 300 milliamps to a mere 8 millamps! Wow.

I attended [Laurie McLean's](#) clinic on animation and his work is nothing short of amazing. Developments in

ultra micro-motors and LED electronics make this kind of animation a real possibility today. And of course, our own Athearn Crane animation cover story back in August further illustrates how far the hobby has come.

Rapid prototyping or "3D printing" is just starting to affect the hobby. I talked to at least one hobby vendor who is now using 3D modeling to produce complex parts affordably.

If you don't know what 3D printing is, check out this thread on the MRH website: [mrhmag.com/node/9237](http://mrhmag.com/node/9237).

[Archer Transfers](#) had a table in the vendor room at the NG convention. These decals, along with similar products from [MRH Sponsor Micro-Mark](#), revolutionizes kitbashing and scratchbuilding.

Putting rivets or other low-relief details like louvers or weld seams on your models is now as easy as applying decals.

This takes modeling in styrene to the same level as building in brass! I love working with styrene because it makes such crisp detail and it's easy to glue and form into all kinds of shapes.

These are just a few of the hobby innovations to come along in the last few years. It's truly a great time to be a model railroader!

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- Must design an operating layout or module (continuous running optional).
- Include a shopping list not exceeding \$500 - must cover benchwork, roadbed, track, wiring, control system, rolling stock, locos, structures, and scenery.
- Common items listed for sale on the web like eBay or Yahoo train yard sale okay.
- Thinking outside the box encouraged.

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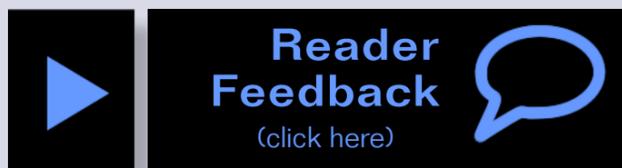
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Notes from the

**MRH STAFF**

Looking back at Seattle, MRH Gen 2 update ...



Looking back at Seattle

The 2012 Seattle National Narrow Gauge Convention is now history. Those of us from the MRH Staff who attended had a great time, and we saw lots of layouts, talked to lots of vendors, and took lots of photos!

If you want to get a feel for the convention through our photos (and video), then go check out the Narrow Gauge Convention report later in this issue.

Les Halmos, our Advertising Manager and Modular Adventure columnist attended the convention, and could be seen shooting photos and video with his iPad. Here's Les in action at one of the layouts:



Daniel Nava, our new Advertising Assistant, also joined the fun this time in Seattle. Here's a shot of Daniel appreciating Paul Scoles layout:



Finally, MRH Publisher Joe Fugate seemed to be everywhere with his iPhone, snapping photos of everything in sight. We caught Joe with his iPhone framing a shot on one of the layout tours:

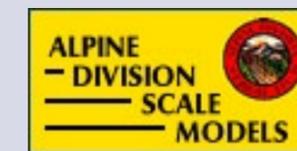


The National Narrow Gauge Convention has never disappointed us: the vendors are excellent, the models are superb, the clinics cover engaging topics, and the layouts are some of the best you'll find anywhere. We always come away from this event with the itch to go do some serious model railroading!

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We have a new sponsoring advertiser!

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with us in the past, and now they're back! Alpine produces a number of kits that are relatively easy to build and are something of a staple in the hobby. They also have some nice detail parts. Finally, they sell a very nice handheld DC throttle. Make sure to [contact them](#) and say thanks for coming back as an MRH sponsor!

Hobby Marketplace ([page 57 this issue](#)): Remember to visit our MRH

Your rating: **September 2012 MRH Ratings**  
Your rating: 5 (votes)

The five top-rated articles in the [September 2012](#) issue of MRH are:

- 4.7 Getting Real - Detail from photos
- 4.6 Allagash gets a quarry, p1
- 4.4 DCC Impulses - System comparison, p1
- 4.3 Scratch build a steam loco, p4
- 4.1 MRH Questions, Answers, and Tips
- Issue overall: 4.2

**Please rate the articles!**

Click the reader feedback button on each article and select the star rating you think each article deserves. **Thank you!**

Hobby Marketplace, which houses our economy ads. New smaller, non-sponsoring advertisers appear there as well.

## September's GP40 boo-boo

Well, it was bound to happen sooner or later, we suppose: a big boo-boo on an MRH cover. Ironically, none of the staff caught it, either.

What we're talking about is the dynamic brake hatch on the Athearn Blue Box GP40 diesel by Richard Napper in the last issue:



Not only are we red-faced about missing this detail, so was Richard Napper (oops). Richard since sent us photos of his Frisco GP40 with the dynamic brake hatch put on the correct way:



So how could we have missed something this fundamental? First, we're all human – who of us hasn't missed something rather obvious at one time or another? A classic example is some significant change in your spouse's attire that completely got past you. Ever get in the dog house over failing to notice *that* one?

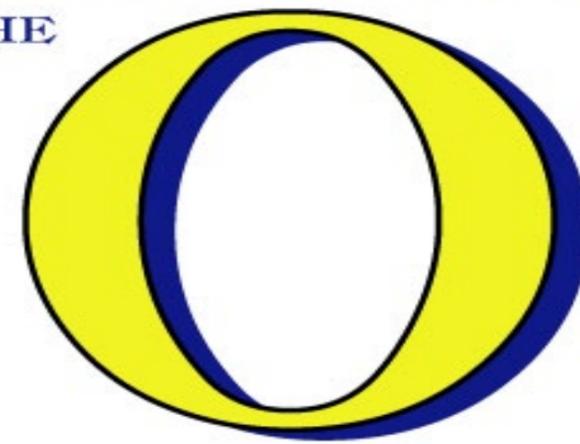
Our staff spends a lot of energy looking for grammatical errors and stupid typos or formatting mistakes in every issue. We even miss some of those now and then, no matter how many eyes look at an issue.

Chalk it up to one of those silly mistakes that we'll all laugh about once the embarrassment subsides. But we're in good company, because all of the magazines have stories of

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derailed trains on the cover, as well as staff practical jokes (like space aliens in the cab) that accidentally made it into print.

Now we've had our big oops story we can tell and all roll our eyes about.

### MRH Gen 2 update

We expect to have a demo version of MRH Gen 2 sometime in November for you to try. We also expect to make a short video summarizing the changes and some of our rationale behind why we see the need to change.

A big reason for the change is what's happening to how people connect to the Internet and consume web

content. Smartphones (like iPhones and Android phones) are out selling every other device that connects to the internet, including desktop computers and laptops.

In fact, 25% of smartphone users surveyed say their phone is all they use to connect to the Internet.

And then there are tablets like the iPad, the Kindle Fire, the Google Nexus, and now the new Nook HD. MRH currently looks pretty good on tablets, but there are a few tweaks we could stand to make.

But it's really the smartphones we don't want to overlook. Smartphones are always on, always connected, and

more than any other device (including tablets), they're the device most people always have with them.

One firm that produces content for tablets decided to make a version that would work well on a smartphone's small screen. As a result, their readership jumped 341% in three months!

Here's one statistic that may surprise you: the fastest growing age group getting smartphones. It's age 55 and older, a core model railroading demographic group!

Finally, there are our own growth-tracking statistics. MRH has grown 31% year-over-year from 2011 to 2012, and the two largest device

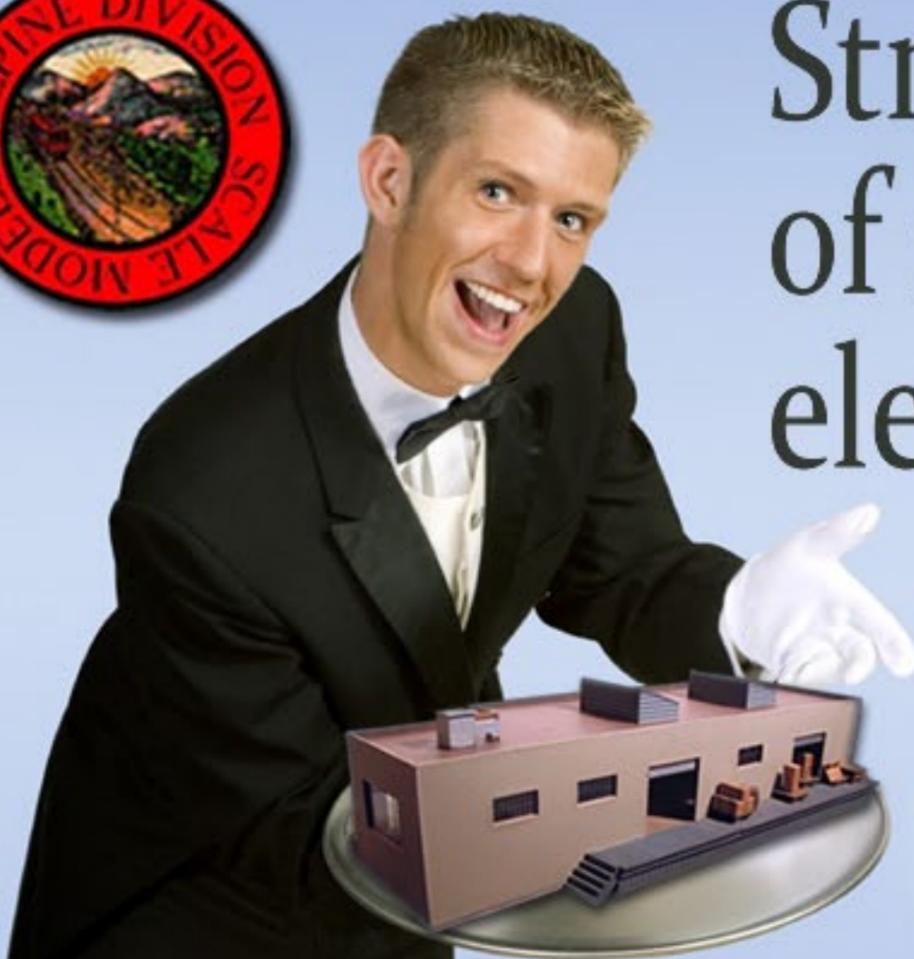
categories where much of this new growth has occurred are tablets and smartphones.

So it makes sense we should make adjustments in our format so it displays better on smaller mobile device screens.

We know we must not hurt the computer and laptop screen experience either, so we've come up with a method of getting what we believe is the best of both worlds.

Stay tuned! You'll be able to get your hands on a sample of the new Gen 2 format soon! We believe you will find it to be the cleanest, easiest-to-read MRH format yet.

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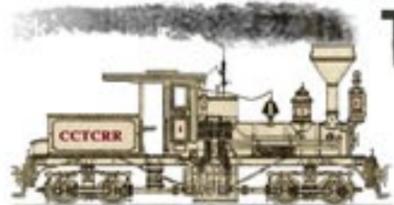
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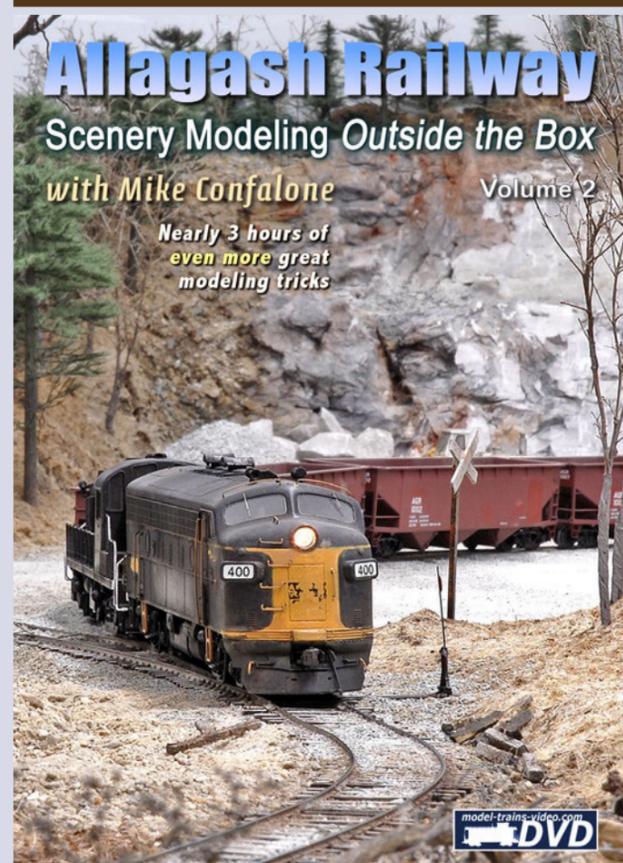


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### New Mike Confalone video



Last issue we announced Volume 2 of Mike Confalone's "Scenery Modeling Outside the Box" series was coming on September 24th.

We had a reality attack and realized we couldn't prepare for and attend the National Narrow Gauge Convention, build a nice report from the convention for the October issue when we got back, and produce the Mike Confalone video from the raw footage as well.

As a result, we've moved the Confalone Volume 2 video release to October 15th. Mike's done his usual amazing job of showing you some scenery techniques you're not going to get anywhere else on any video,

so we think most modelers will want both Volume 1 and Volume 2 as a must-have addition to their modeling techniques library.

### In this issue

Speaking of Mike Confalone, in this issue, part 2 of his quarry article continues, with him getting into how he blended the exposed rock of the quarry into the rest of his scenery. Plus Mike demonstrates how things can change as you go along by explaining the change in course he did after he had his harshest critic, his wife, look at the progress. Finally, Mike ends up by explaining how he makes the wonderful pines in his scenes.

New author Phillip Hoffman shows how he transformed a department store junk box find into a great N scale large industry office. Phillip provides some great tips for getting the most out of your modeling dollar in his "Recession-proof modeling" article.

MRH staffer Joe Brugger delivers a useful one-evening project in this issue by showing how you can easily use common materials and methods to make some realistic debris-laden log cars.

The simple-but-effective article line-up this issue continues with Dirk Reynolds' step-by-step of his quick but effective car weathering tricks with oil paints and a some simple



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airbrush magic. To top it off (pun intended), Dirk also shows how to build a nice coal load for the hopper car he just weathered.

Of course, there are 10 full pages of photo (and video) coverage of the just completed National Narrow Gauge Convention in Seattle. The material includes some superb layouts, so we think you're in for a treat!

In columns this issue, Charlie Comstock is back with another Up the Creek report on the progress he's making as he adds the peninsula to his Bear Creek & South Jackson layout.

Bruce Petrarca continues his review of two leading DCC systems on the market: Digitrax and NCE. Bruce's review is more than mere theory; he's giving an in-depth user's perspective on these two systems. It's a level of review you won't find anywhere else, by one of the hobby's leading experts on all things DCC.

Marty McGuirk's Getting Real shows how he used Microsoft Excel and some key milestones in his prototype inspiration to zero in on the right era to model. Marty's insight will help you refine your own era choices.

There's lots more in this issue, including Ken Patterson's new column, What's Neat this Week. We hope you enjoy the October issue of MRH!



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October 2012

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The event features real life railroads and scale model railroads, historical societies, travel agencies, art shows, flea market dealers, importers, manufacturers and photographers. You have to see it to believe it!



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# MRH

## Questions, Answers and Tips



### QUESTIONS AND ANSWERS

**Q. When building a yard, how wide should be the track spacing? What about mainlines?**

**A.** What years are you modeling? The railroads have increased their track spacing over the years, for better accessibility and greater safety.

When Ray Lerner posed the question, he said he tried 2" spacing on HO scale mainline tracks and experimented with 89' freight cars to set his curves at 2-1/2" spacing.

Steam-era yard tracks in North America could be as close as 12 feet apart, and main lines were frequently at 13 feet. Track built since the 1940s will have often 15 feet or so spacing on the main track. Any "new"

construction must be a minimum of 15' track centers.

Union Pacific uses 20' track centers on new construction, and Burlington Northern Santa Fe is using 30' track centers in some cases. If track workers are on an adjacent track that is spaced less than 25 feet away, federal regulations require trains passing the workers to reduce speed. If the tracks are 25 feet or more apart, there are no speed restrictions.

Some modelers prefer to work to prototype specs. But modelers also like to save space where they can, and strictly following prototype practices is not always efficient. Some modelers select wider-than-prototypical spacings to reduce the number of derailments caused by fat fingers handling small cars.



**1: The Willamette Model Railroad Club chose a 2" spacing (14-1/2 scale feet) for Lebanon Yard on its 1979-era HO scale layout. Coupling and uncoupling, as well as reading car numbers, are done as the switch crews pull and push cars along the classification tracks.**

Don Andrews says, "You are right-on with 2" mainline spacing. That is fairly standard in HO. Curve spacing is determined in actual conditions with your intended rolling stock, exactly as you have done. I tried yard spacing of 1-3/4" and 1-7/8". It looks OK, but both are too narrow for my fingers. I settled on 1-7/8", knowing that any re-railing or adding rolling stock to the layout has to be done on the yard lead or drill track."

Can you establish safe clearances on curves without tacking down track and pushing cars around? Sure. NMRA Standard S-8 shows how center spacing on curves will

vary according to the type and era of equipment run, and radius.

For instance, it shows 2-1/2" minimum centers for 32" radius when using the most modern equipment with its larger clearance profiles and greater lengths. For older, smaller equipment operating on 18" radius, it recommends 2-3/16". If you run broad minimum-radius curves, the centers can become 2-3/8" on a 40" curve for large modern equipment like autotracks or Trailer Train flats.

The NMRA chart of suggested spacings for various length equipment on a variety of scales and curves is found at [nmra.org/standards/sandrp/s-8.html](http://nmra.org/standards/sandrp/s-8.html).

Thanks to Jurgen Kleylein, Paul R, Kevin Rowbotham, Scarpia, Jim Bernier, MILW199, dave1905, Don Andrews, and Ken Rickman. The complete discussion is in the MRH Forum at [model-railroad-hobbyist.com/node/8258](http://model-railroad-hobbyist.com/node/8258).

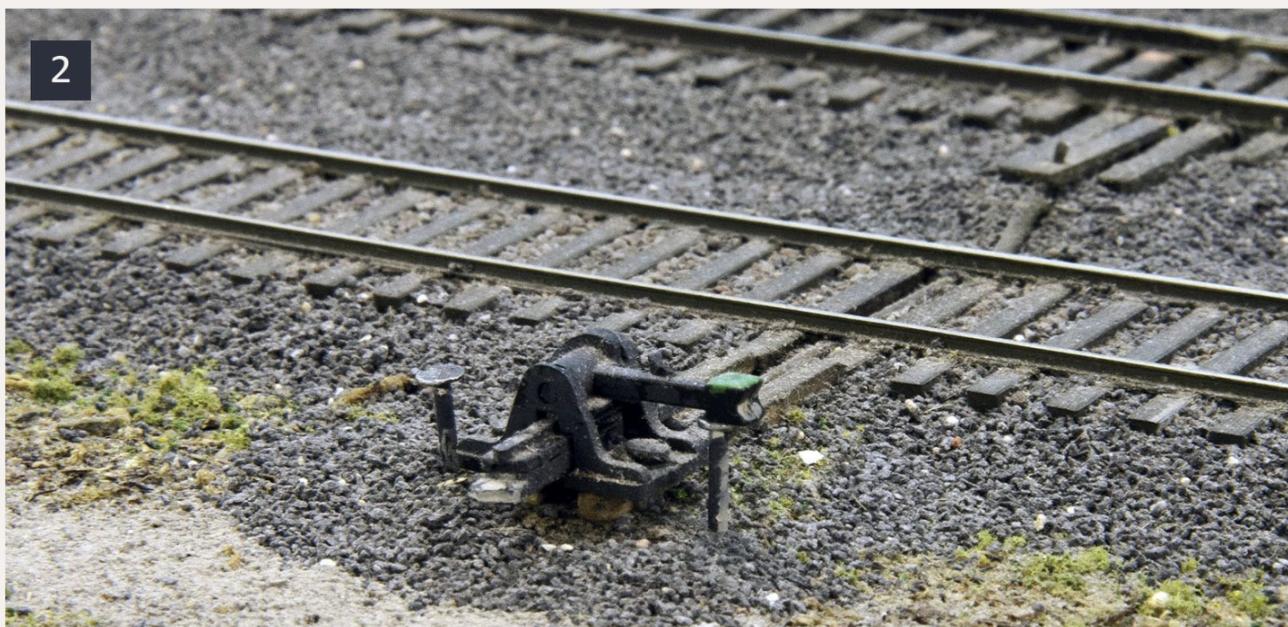
– MRH

**Q. I want to mount a Caboose Industries ground throw onto a Walthers Code 83 turnout. On the throw bar, there is a small vertical hole and a bump with a horizontal hole on either side of the rails. The ground throw has a horizontal bar with a vertical pin protruding down. If I remove the bump with the horizontal hole and enlarge the vertical hole on the throw bar, it looks like I can mount the ground throw directly on the two long ties that surround the throw bar. Is this a good thing to do? – Doug Maddox**

**A.** Terry Roberts answered: “I enlarge the hole in the throw bar to match the diameter of the pin. However, the ties next to the throw bar do not align well with the holes in the ground throw. I shim the bottom of the ground throw with what I have available (usually stripwood) to match the ties.”

“Trim the pin on the ground throw so it does not drag on the roadbed, and set everything to the middle of the throw. With the ground as a template, drill holes the size of the Atlas track nails and press nails in place to hold the ground throw in place; then test operation.

“Be sure the ground throw you use is compatible with the amount of throw needed for the turnout to operator properly. I normally use hand-laid turnouts with a minimum throw, so I use the sprung ground throws.



2: Caboose Industries ground throws are very reliable when installed following the package directions. This throw has a remote linkage to control a track often obscured by other traffic.

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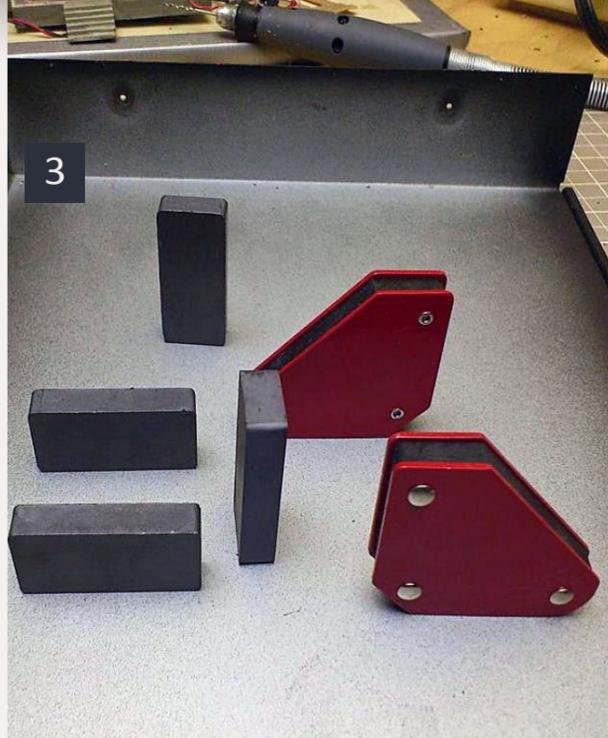
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"After everything is aligned and working, apply a very small amount of white glue around the edges will keep things aligned and yet easily modified if necessary."

Caboose Industries is at [cabooseind.com](http://cabooseind.com) with a listing of available products and a FAQ. Five different throw ranges are available, from .135" to .290", with the size of the ground throw increasing as well. The ground throws are available with and without internal springs.

Doug said he wanted the ground throw securely fastened to the base of the turnout, so he glued a piece of thin flat styrene to the bottom of the two ties next to the head ties, then glued two strips of styrene to the base of the ground throw so it fit snugly



3: Kevin Rowbotham used a discarded sheet metal electronics chassis, and magnets sold to welders, to create his magnetic gluing jig for structures and car kits. (Kevin Rowbotham photo).

over the long headblock ties. The flat styrene keeps the pin from snagging on anything underneath.

— MRH

**Q. How do I keep the corners of a laser-cut wood house kit at right angles?**

**A.** There are several ways to do this. Coffman clamps, at [coffmaneng.com/rightclamp/2011rc-order.cfm](http://coffmaneng.com/rightclamp/2011rc-order.cfm), are very efficient and come in a variety of sizes. Because they are precision tools, they aren't throwaway cheapies, either. The clamps are brass, with soft foam inside of the jaws. They work well with resin, wood, styrene, plaster and other materials.

But if you only have one building to do, or only one corner, there are other ways. Micro-Mark sells machined

metal blocks with 90-degree angles, as well as a magnetic clamping jig. You can rig up your own jig, as did Kevin Rowbotham, by salvaging an electronics chassis with folded-up sides, and buying welders' magnets.

MC Fujiwara and others use Lego blocks to brace corners during assembly. Be aware that knock-off copies of Legos aren't as precisely square and angular as bona fide Legos. Lego also has flat plates available, so you could easily build your own right-angle corner jig with the kids' leftover toys. Be careful with solvents around the plastic bricks.

If worse comes to worst, you can clothespin the walls to the inside of a cardboard kit box to hold them while

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4: MC Fujiwara and others use Lego blocks to brace corners during assembly,

glue sets up, but kit boxes aren't precision-calibrated at 90 degrees.

– MRH

**Q. I want to wire my layout for DCC. It consists of inner and outer loops of Kato Unitrack, in N scale, and I have an NCE Power Cab. The original plan shows the use of insulated Unijoiners on one of the turnouts. Is this still needed with DCC? Do I need to do anything special with the wiring of the turnouts so there are no dead spots?**

**A.** Yes, DCC (Digital Command Control) requires the same gapping and isolation as any DC (Direct current) model railroad. The only change is in the control systems. The requirements include gaps behind live frogs to prevent a short circuit when a route is switched.

There's a good graphical presentation

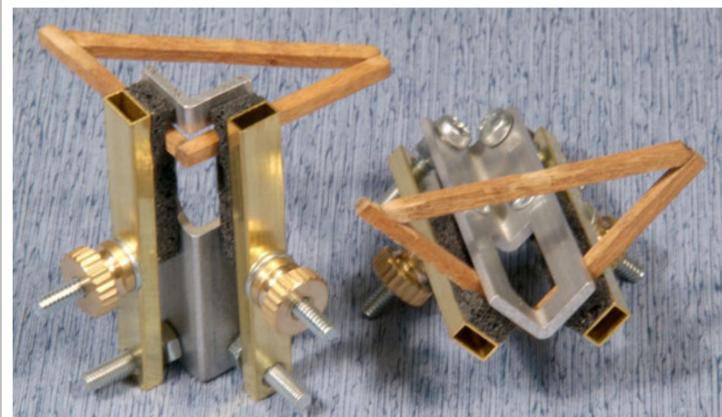
at [proto87.com/turnout-wiring-for-DCC.html](http://proto87.com/turnout-wiring-for-DCC.html).

Searching online didn't turn up much else in the way of clear, basic wiring instructions. The best is [wiringfordcc.com/switches\\_kato.htm](http://wiringfordcc.com/switches_kato.htm) but it can get kind of involved. Maybe some readers can use the comment tab at the bottom of the column to add some suggestions.

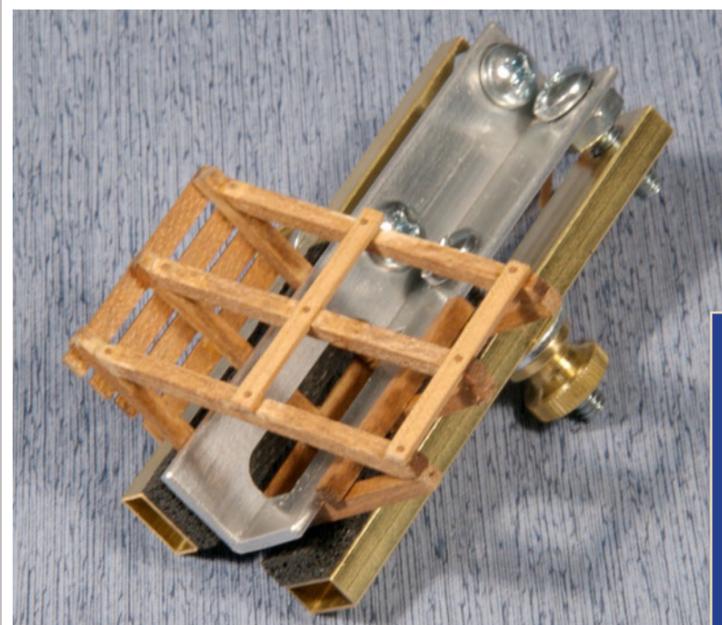
There are a couple of good paperback magazine-size books on wiring for DCC. "DCC Made Easy" is by Lionel Strang, and can be found in hobby stores or at [amazon.com/Dcc-Made-Easy-Railroad-Railroader/dp/0890246165](http://amazon.com/Dcc-Made-Easy-Railroad-Railroader/dp/0890246165).

Mike Polsgrove's "Basic Wiring for Your Model Railroad" is still available in stores, or at [amazon.com/](http://amazon.com/)

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Especially for a simple layout, it doesn't hurt to sketch out each rail segment and pencil-check them for continuity and short circuits.

– MRH

**Q. How far apart do I need to keep the power and throttle buses for my NCE DCC system to eliminate interference? I don't have radio so the throttle bus will run right along the front of the benchwork. If I keep the power bus about a foot or so away is that sufficient, or should I go for more?**

**A.** DCC systems are designed to tolerate some really creative installations. Problems usually show up only on large layouts, or on sectional/modular setups that might involve sections built by many different people. If you don't bundle all of your wires together, you will probably be OK.

Interference can affect the

performance of the throttle, so if you get missed commands or erratic performance, it's worth inspecting your wiring.

Look at [ncedcc.com/pdf/Sysman07.pdf](http://ncedcc.com/pdf/Sysman07.pdf) on page 17. If the cab bus is at the front of the benchwork and the power bus is at the back you should be fine unless your benchwork is less than 6" deep. Increasing the distance decreases the chance of interference. Use short track feeders and follow your system manufacturer's recommendations on wire sizes. Twisting the power bus about three turns in every foot will also help. All of this is a matter of taking care in installation and doesn't add any expense.

– MRH

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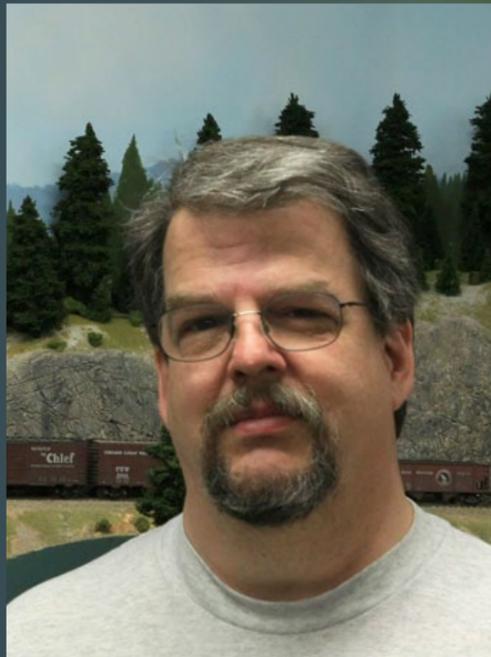


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**Charlie Comstock** is a  
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## UP THE CREEK: Peninsula Construction!

A regular report on the construction of a 1950s-something layout

Progress continues, slowly, in the main staging area and layout wiring...

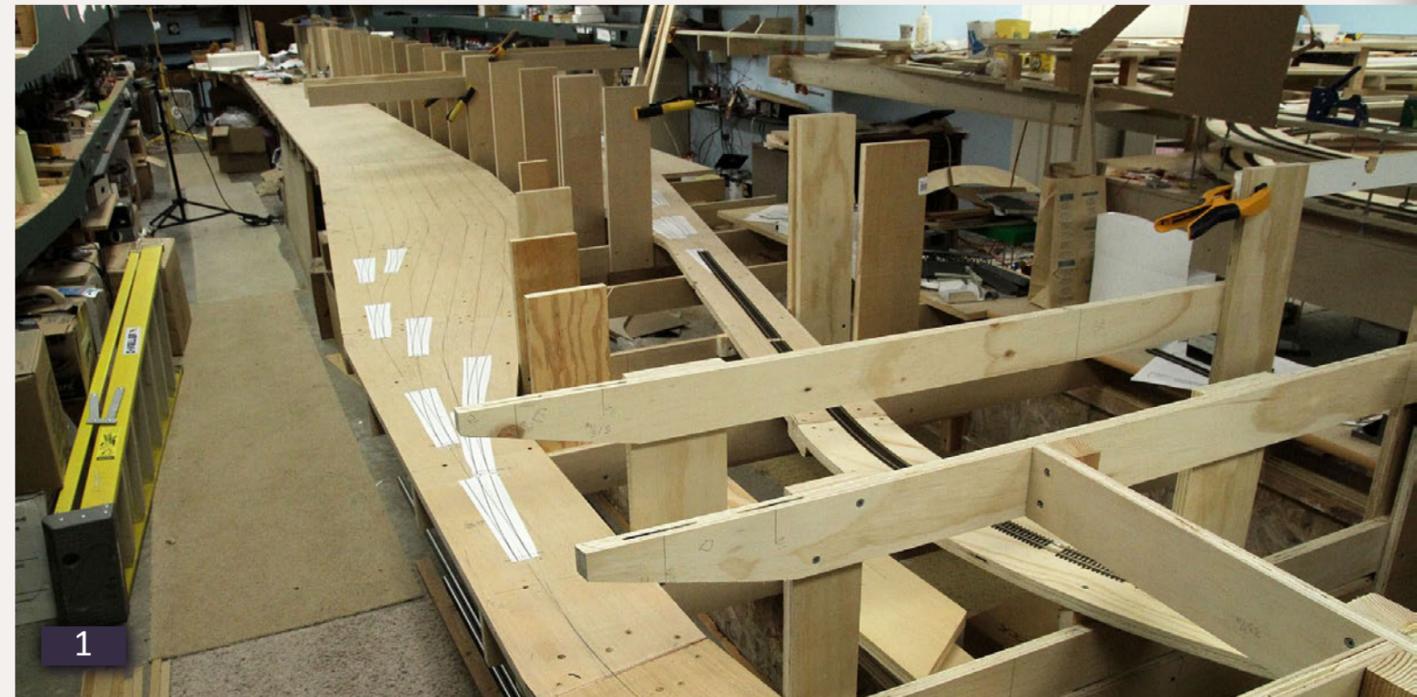
**T**he summer doldrums took their toll in my basement and if my construction progress was racing a glacier, I'm pretty sure the glacier would have won.

However, I've started working on the layout again. The goal is simple – get the BC&SJ back in running condition. To accomplish this I have a list of tasks that have to get done:

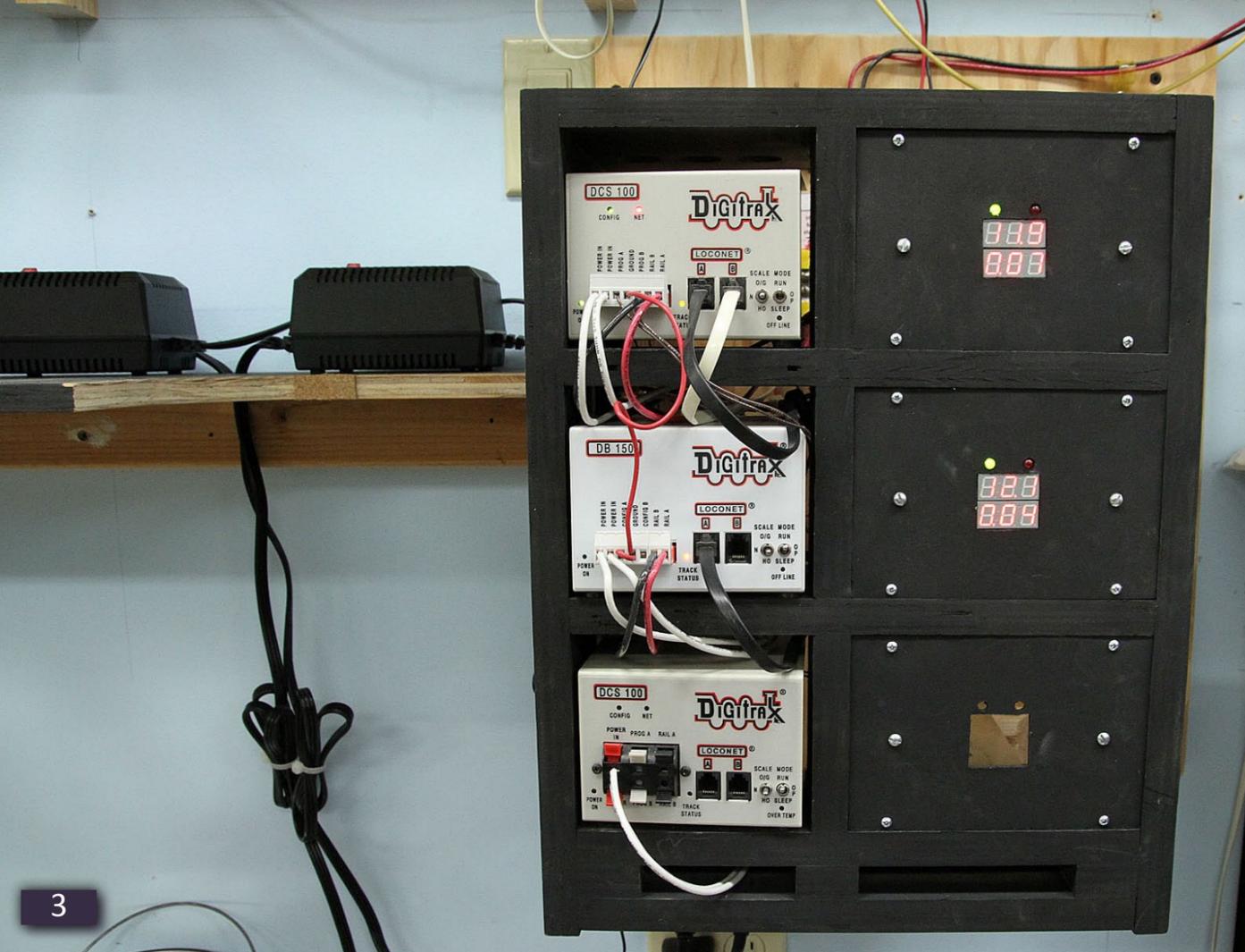
- The "A" side yard in lower deck staging has to be operational – meaning the entry yard throat is installed, a bajillion pieces of flex track installed (a 30' yard 9 tracks wide will make your track vendor smile when he sees you!). The tracks require feeders connected to bus wires, and the Tortoises need

**1. The bare A-side lower deck staging yard, unadorned except for paper turnout templates and some track center lines.**

**2. A coat of paint and eight #8 turnouts transform the entry throat to A-side staging into something looking more railroad. Tortoise installation is partially complete and the first train has negotiated a handful of turnouts to back into the yard.**



 **Reader Feedback**  
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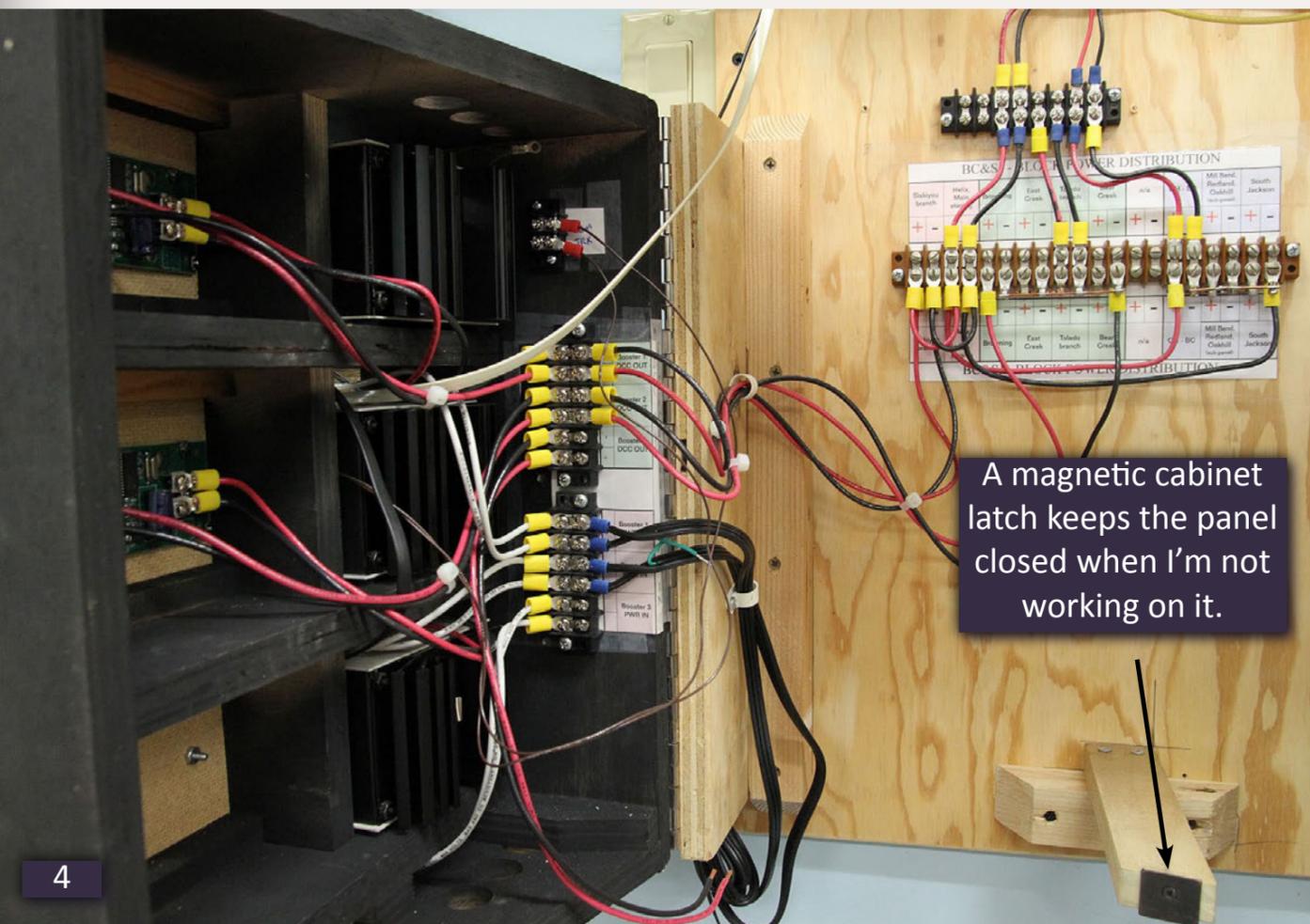


3

3. The front of the DCC booster rack. I built it from 3/4" plywood and 1/8" Masonite. There's room for three Digitrax command stations or boosters along with DCC Specialties RRampmeters to keep me informed how hard the boosters are working

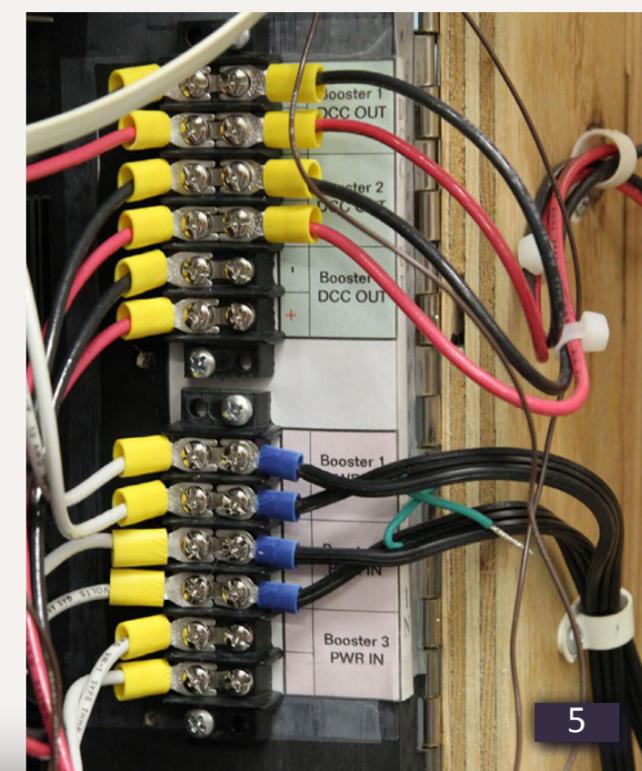
4. The left side of the booster rack has a piano hinge permitting the front to swing open giving good access to the wiring behind it. I've already changed my mind about the wiring on the tan barrier strip. Ugh!

5. It's impossible to have too many labels on your wiring. I used a computer and inkjet printer to produce the labels shown. They were attached with clear packing tape before barrier strips were screwed in place on top of them.



4

A magnetic cabinet latch keeps the panel closed when I'm not working on it.



5

- some form of control.
- The junction at the top of the helix needs to be wired for (double-reversing sections) track power and more Tortoise control.
- South Jackson yard needs to be re-constituted. The original, scrap-box yard was temporary and had to go when the benchwork connecting the peninsula to the wall was built. Lots more turnouts and wiring.
- A power distribution center was needed with power busses running to distribution centers around the layout.

Once all that happens we can get back to the regular monthly op sessions. Shouldn't be too much work, should it? Yeah, right...

### Power Distribution

Previously my DCC boosters sat on a shelf. This didn't look good (wires running all over the place) and there was limited air circulation behind them.

I decided to build a booster cabinet to hold them (figures 3 to 5). It could hold up to three boosters and I used DCC Specialties RRampmeters to monitor their outputs. A piano hinge allowed opening the rack, avoiding the problem of inaccessible wiring. I painted it with an aerosol can of cheap black primer and then installed the components.

Several holes above and below where the booster heat sinks project beyond the back edges of the shelves they sit on provide access to cooling air. I hope.



6

The booster power supplies occupy the shelf next to the rack (figure 3) but the shelf makes a good sounding board – there’s just enough audible buzz/hum to be annoying. I’m very hum averse so they’ll be needing to move.

## Lower Deck Staging

The main staging area on the peninsula’s lower level is a mammoth construction project. Two yards, A-side and B-side, are connected end to end. Staging and the double track helix are configured as a giant reverse loop.

**6. The A-side yard. The telephoto lens makes it look shorter than it is. That’s a lot of track! Also a lot of rail joiners and track nails. The turntable is waiting for a home on the upper deck.**

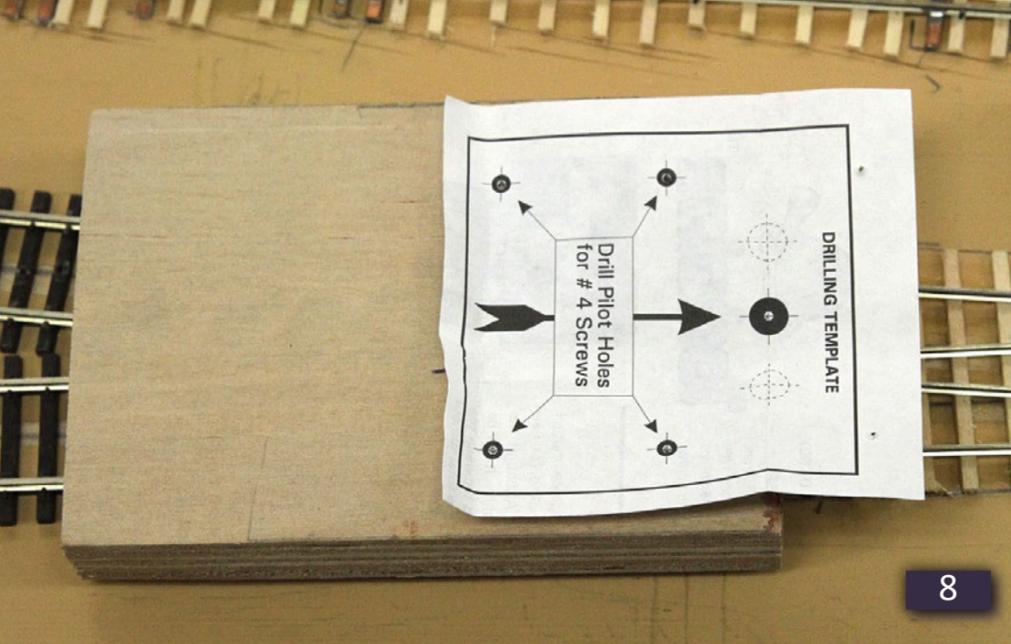
**7. The B-side yard is paper templates and track center lines for now. Other tasks are higher priority for getting back to op sessions.**

The A-side yard has nine tracks with the longest about 30’ in length. The B-side yard isn’t quite as long but there are 10 tracks. The two yards and the two-lap, double track helix will consume close to two 100-piece boxes of flex track.

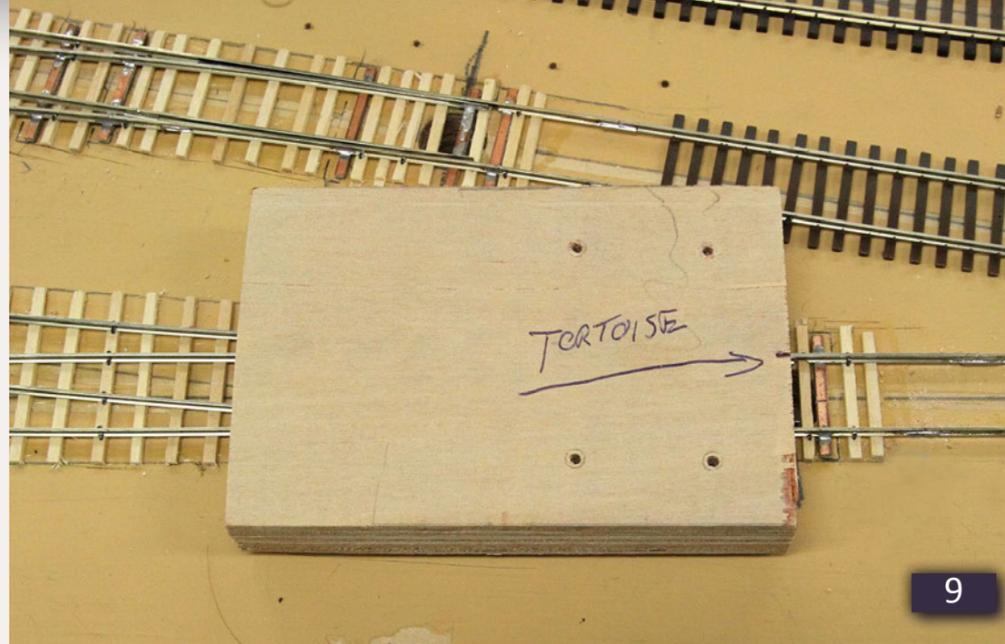
So far the A-side yard is stub ended. When the staging is complete, trains descending the helix from the main deck will appear around the curve at the far end of figure 6. They’ll traverse the yard coming toward the camera, loop around the end of the peninsula



7



8



9

8. A Tortoise mounting hole paper template positioned on a block of plywood I used for the jig. I marked the hole locations, then used a drill press to bore vertical guide holes in the plywood.

9. The finished jig with the track center marked. Position the arrow over the center of a turnout's throw bar, hold it firmly in place, and drill mounting holes all the way through the roadbed.

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then enter the B-side yard in figure 7 heading away from the camera. Trains departing staging will disappear at the far end of the B-side yard, climb the outer helix track, and appear on the main level of the layout.

## Turnouts and Jigs

With 16 turnouts needed in the A-side yard and another 18 in the B-side yard I thought it worthwhile to invest in Fast Tracks turnout assembly and point filing jigs. I'm still getting the hang of using them – the first jig-built turnouts often need tweaking near the points to keep gauge and point clearance balanced. I also started filling the frogs with solder, otherwise my code 88 (semi-scale) wheels drop into the gap at the frog point.

With the turnouts installed, I needed to install Tortoise machines. I made a jig by placing the Tortoise template on a piece of plywood, using a center-punch to mark where the holes go, then drilled them using my drill press (to keep them vertical). I hold the template block on top of the turnout, lining up the center line on the jig with the track. Then I drill mounting holes through the roadbed from the top. Much easier than crawling around under the benchwork.

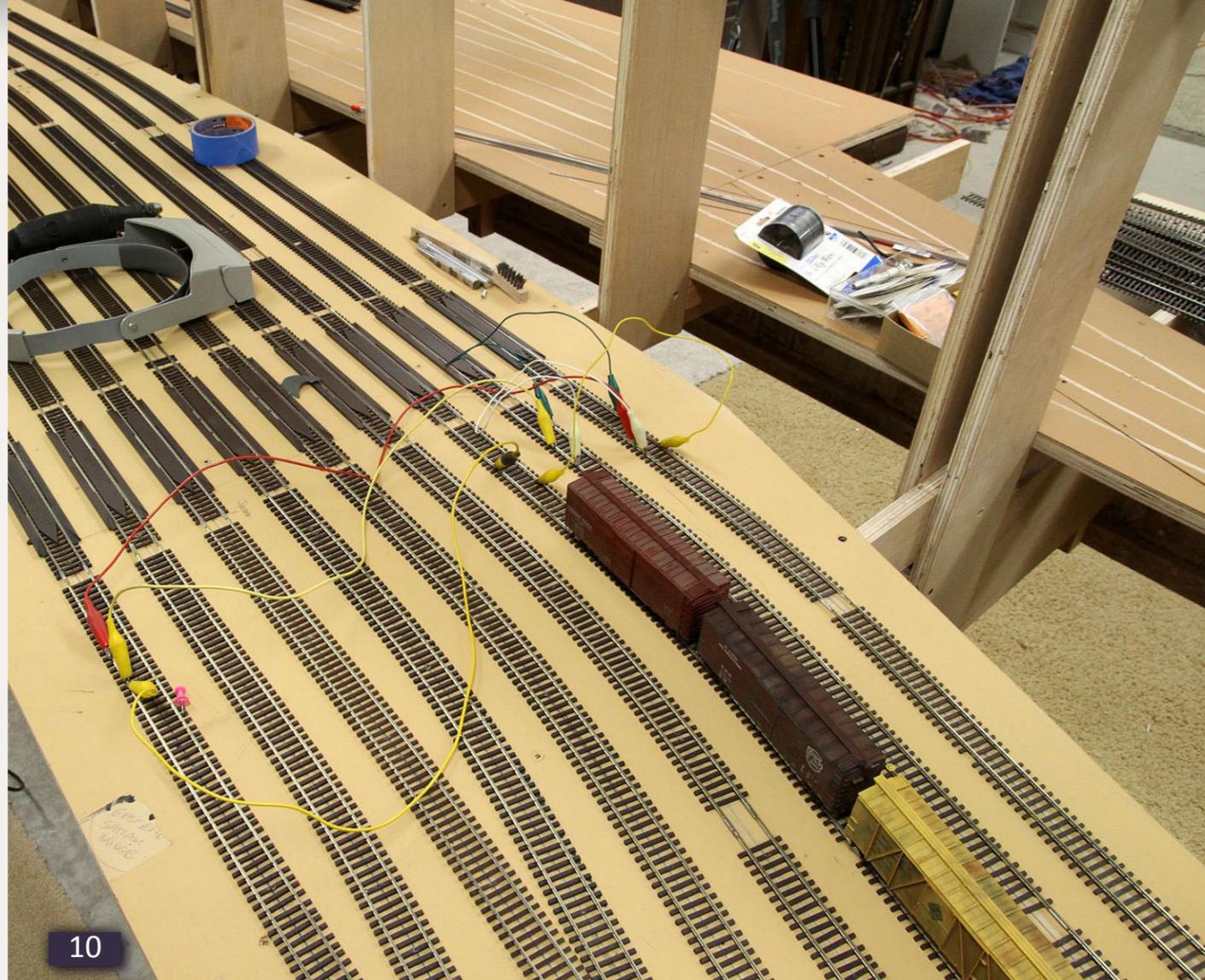
## Clip Lead Power

With the Tortoises in place I wanted to see if trains could make it through the throat. At this point there were no feeder wires in the yard, so I resorted to clip leads to power up a few tracks at a time (figure 10).

## 10. Clip leads provide power to test run a short train through the yard throat. Several short circuits showed up and were fixed.

Of course the first thing that happened when I applied power was a short circuit. I spent 30 minutes with a file cleaning up gaps in the turnout's PC ties or in a couple of places where I'd forgotten them, making new gaps.

I also needed to make some adjustments at the points end of some turnouts. Problems I encountered included insufficient point gap, malformed points, curved stock rail without sufficient curve and a throw bar that needed replacement. But after that I was able to run my little test train in and out of the yard throat! Hurray, it's starting to come together!



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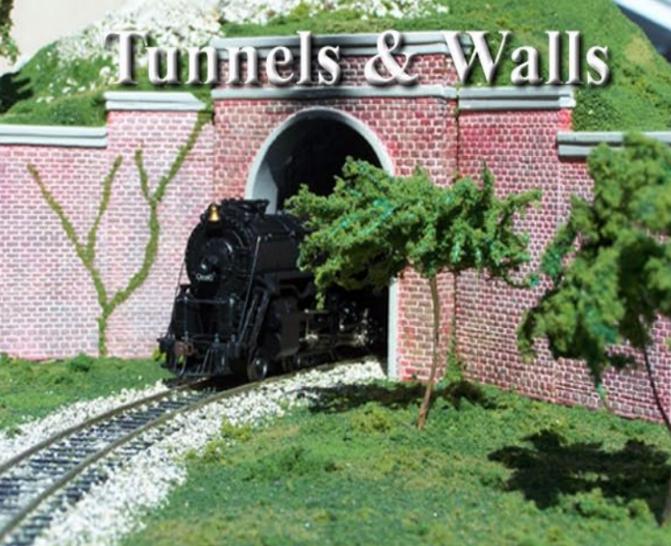


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11

11. The first train gingerly picks its way through the newly laid staging yard turnouts. I used all #8 turnouts in case I should ever acquire some brass 4-8-8-4 or 4-10-2 locos that need less restrictive curves.

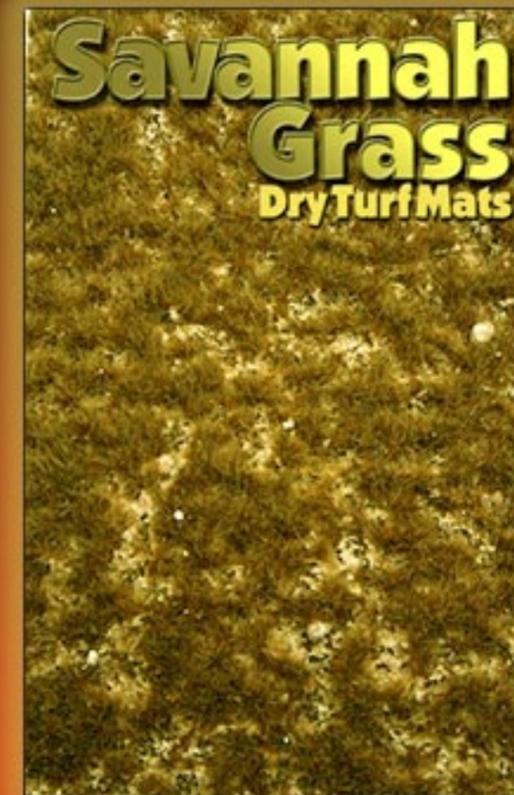
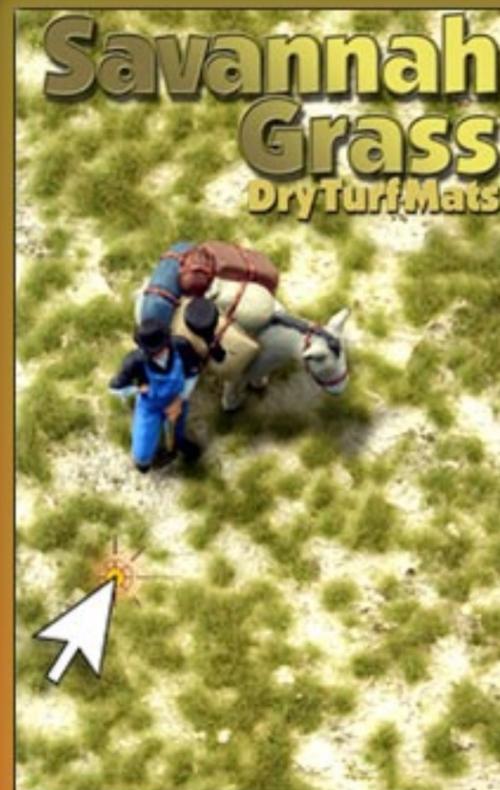
### Feeders and Bus Wires

You'll notice some blue tape in figure 11. I used it to mark feeder wire holes. Speaking of feeder wires, it was time to string bus wires under the yard and drop a ton of feeders. Lucky for me, both Jim Barta and Joe Brugger came to that work night. All holes got drilled and individual bus wires for each yard track were strung under the roadbed.

Why a separate bus wire for each track instead of one for all tracks? Using one

bus wire was tempting – easier to install and 9x less wire, but by installing individual wires I'll be able to turn off any tracks not being used, cutting down on noise from idling sound-equipped locos, preventing locos in staging from "creeping", and if I signal the layout I'll be able to provide track occupancy detection for each of the tracks.

I'll need to add temporary control panels for the Tortoises until I get the electronic, push-button-control panels and electronics built. In the meanwhile,

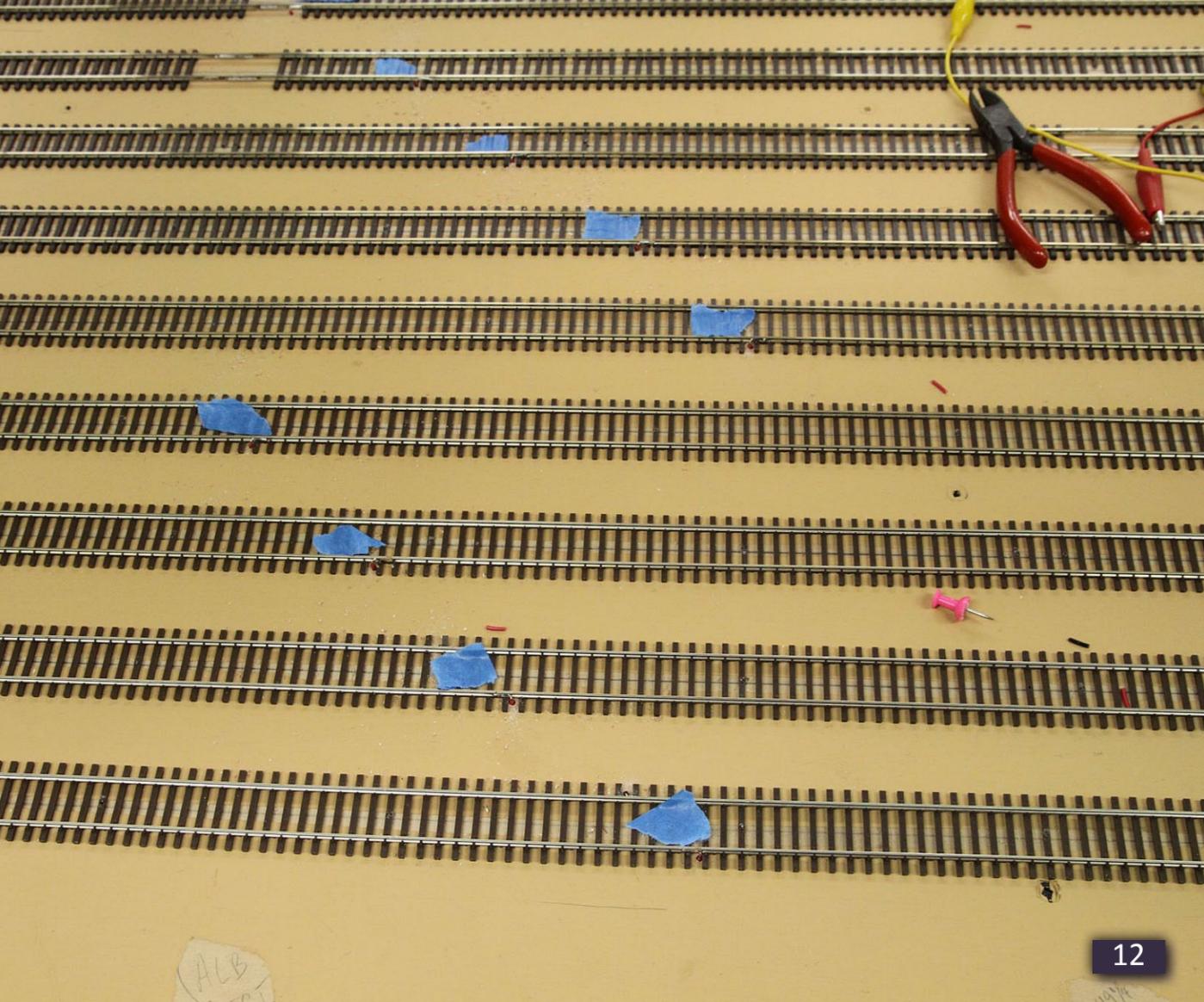


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12

12. I solder two pieces of flex track together and connect the 6' sections to each other with unsoldered rail joiners. Each 6' section gets its own feeder wires. I mark feeder wire locations with blue tape.

throwing a switch involves reaching under the layout and gently prodding a Tortoise to its other position.

### South Jackson yard

The original South Jackson yard got removed when I connected the peninsula to the wall, it needs to be replaced before op sessions can begin again. I have basic benchwork in place so far.

If you're like me, finalizing track design works best in full size. I use

3rd Planit to verify the configuration I have in mind will fit in the available space. But when it comes to final track placement, it seems that frequently I see a better way (or ways!) when the benchwork is in place and I can position pieces of track, turnouts, and structures in situ.

Figure 13 shows this process at the east end of South Jackson. It's a bit cramped here with several industries, a five-track yard and a desperate need

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13

### 13. Track work experiment in the new, emerging South Jackson yard.

to maximize the length of the too-short yard tracks.

There's lots more work to be done, but progress continues. ✓

A backdrop will get installed just behind the bridge and brick building. I find it's easier to set the distance between buildings and track and judge the space needed by highways and roads when working in full size.

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### 14. Here's the old, scrap-box version of the South Jackson yard.



14

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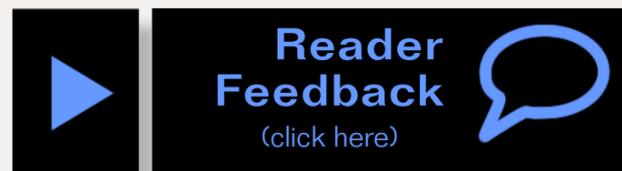


**Bruce Petrarca** is a well-known expert on all things DCC.

[Click here](#) to learn more about Bruce.

# DCC Impulses: DCC System Comparison Part 2

## DCC Systems from a User's Perspective



More about what's really inside DCC systems ...

Last month ([model-railroad-hobbyist.com/magazine/mrh-2012-09-sep/dcc\\_impulses](http://model-railroad-hobbyist.com/magazine/mrh-2012-09-sep/dcc_impulses))

I started analyzing the difference between Digitrax and NCE systems from my perspective.

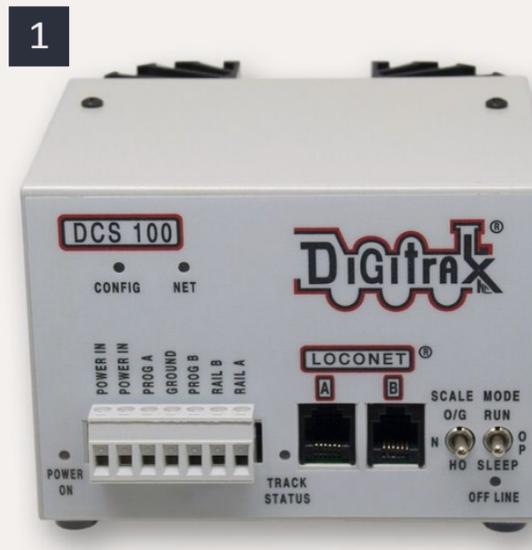
We pretty much covered the throttles and starter systems there. If you didn't read that, I suggest you start with it, as some of the threads we will discuss here began there.

Analyzing some of the internals may not be as sexy as the throttles and what you can do with them. However, you may find something here that you didn't know about your system or something to help your choices, based on the "givens and druthers."

Folks who read last month's column may realize by now that I'm taking them in alphabetical order, so as not to play favorites.

### System Amps

Each manufacturer looks at amperage ratings differently. Consider if you will, their five-amp systems.



1: Digitrax' five-amp system box – photo courtesy of Digitrax.

DCC Specialties, in the process of specifying their MF615 transformer, wanted to assure that it would work with all systems on the market. They tested several samples of both manufacturers' system.

**Digitrax** may put out five amps for a fraction of a second. A large sample of their boosters shut down with continuous current loads of about 4.5 amps. When loaded just below their shutdown current, the boosters ran fine for extended periods with adequate ventilation.

**NCE** doesn't shut down until somewhere north of six amps, and will supply 5+ amps all day with adequate ventilation.

As a side note, Digitrax boosters don't like surge current. Surges occur when the booster is first turned on or recovers from a short. A few sound-equipped locos will draw enough surge current so the booster won't reset. It will start, see the surge, shut down, wait, start again, see the surge, shut down, etc.



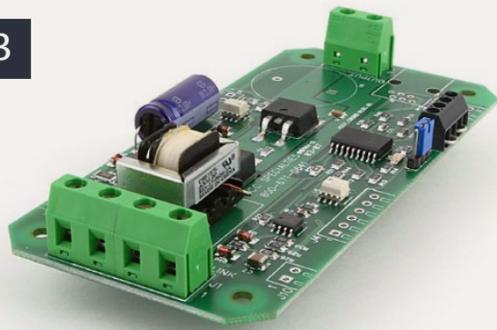
2: NCE's five-amp system box.

Remember, the booster shutdown feature protects the booster more than it protects your rolling stock. Circuit-protection boards protect your rolling stock. The PSx series were designed to help Digitrax boosters over the trauma of starting a bunch of sound locos. Be sure to select what they call the "weak booster" setting by jumper or CV when installing a PSx on a Digitrax system.

I recommend a circuit-protection board downstream of any booster larger than a couple of amps. I even

have a PSx on my PowerCab (two-amp) system.

3



**3: PSx Circuit Breaker – photo courtesy of American Hobby Distributors.**

## Network

DCC system manufacturers generally design their networks to enhance their system philosophy. This makes them incompatible among different manufacturers. Digitrax and NCE are about as far apart in their network architecture as any two manufacturers out there.

Digitrax uses one network for everything. Called LocoNet, it uses 6-conductor direct-wired RJ-style cables.

NCE uses two networks.

Its Cab Bus runs around the layout connecting all the throttle panels that provide a place to plug in to control trains.

The Control Bus connects the command station to boosters. If you use only one booster – the one built into the Power Pro five-amp system

– your entire Control Bus will be a short cable that NCE supplies going between two connectors on the system box.

NCE uses six-position RJ cables for the Cab Bus and four-position ones for the Control Bus. This makes incorrect cross wiring difficult to do. They need “direct wired” cables, not telephone cables.

Okay, that covers the physical differences, what is actually going on with the networks?

Digitrax’ LocoNet features Ethernet type communication. Any device on the LocoNet can control or retrieve data from any other device. This includes boosters, throttles, interface boards, signals, etc.

NCE’s Cab Bus contains only data necessary to run between the cabs and the command station on one pair of wires and +12 volts and ground on another pair. The third pair is used for track power, but only on the cable between the PowerCab and its PCP power panel.

NCE’s Control Bus has DCC data on one pair of wires and two signals that are no longer used by NCE on the other pair.

## Throttle Panels

You need places to plug your throttles into your DCC system. Throttle panels are usually mounted strategically around the layout on the fascia.

I highly recommend using the panels manufactured by your DCC system designer. They know what is needed to function reliably with their system.

The **Digitrax UP5** is the only offering for their system.

It features three connectors behind the panel and two in front. This allows

4



**4: UP5 LocoNet panel from Digitrax – photo courtesy of Digitrax.**

T-style wiring without the need for extra splitters. The UP5 features heavy-duty RJ-style sockets. They are much more reliable than the phone-style RJ connectors available at your local hardware store.

If you connect track power to the two terminals on the rear of the UP5, the LED on the front will show track status.

The UP5 includes a power jack that allows a 12-volt DC power supply to feed power to any throttle plugged into the front. While this will not

recharge the batteries in the throttle, it will keep them from being discharged. If the auxiliary power is kept on 24/7 the throttle batteries won’t run down, as long as the throttles are plugged in.

There is a connection provided between the two RJ connectors on the rear. If it is connected between various UP5 panels, the auxiliary power applied to one will be available to all, keeping the plugged-in throttles from discharging. This is important, as the Digitrax radio throttles have no way to be shut off, short of opening the battery door.

Street price for the UP5 is under \$15.

NCE offers several options for throttle panels. They all have a street price around \$16.

5



**5: NCE UTP, their basic panel.**

The **NCE UTP** is similar to the Digitrax UP5, but with fewer features. It has four RJ connectors: two each, front and rear. Like the UP5, these connectors are heavy-duty to withstand the rigors of plugging and unplugging throttles from them.

The UTP also has a power jack for a +12 volt DC supply to augment the power in the Cab Bus. NCE recommends providing this power every half-dozen or so panels.

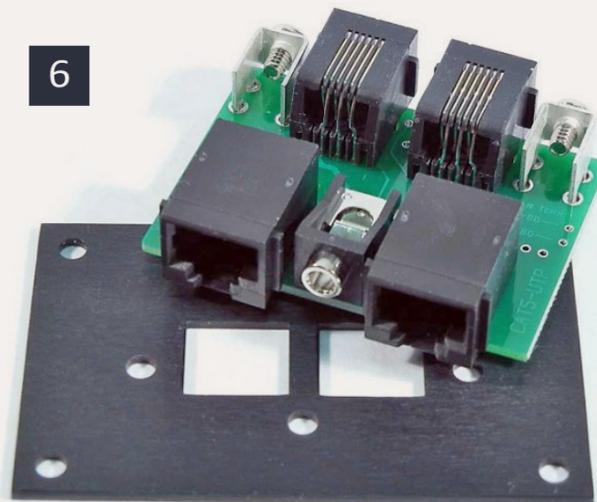
NCE doesn't need to supply backup power to the throttles when they are idle. The NCE radio throttles have a front panel shutdown capability. Also, if they don't hear from the command station for a few minutes, they shut themselves off.

To enhance data reliability, especially on large layouts, NCE offers the **UTP-Cat5**.

The front panel includes two RJ jacks, just like the UTP, but the rear is wired with Ethernet Cat-5 cable. These boards may be jumpered such that all signal and power wires are duplicated, reducing the loss from long runs and increasing reliability due to the use of two parallel contacts in the connectors.

Cat-5 cables, being shielded with larger-than-RJ wire, are already less susceptible to interference and resistive loss.

NCE makes an adapter board to transition from the RJ Cab Bus on the



6: UTP-Cat5 Cab Bus panel from NCE – photo courtesy NCE.

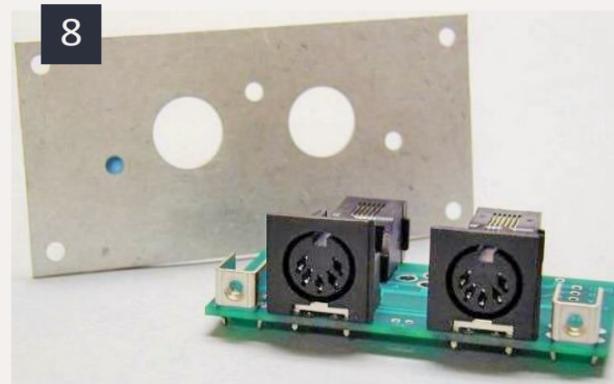
command station to the Cat-5-style bus on the layout.

The NCE **UTP-CAT5 Adapter** has a street price about \$8. Typically one is all that any layout will need.



7: UTP-Cat5 adapter from NCE – photo courtesy NCE.

In their bid to enhance the reliability of the throttle connection, NCE offers the UTP-DIN. It is a panel with two RJ connectors on the rear and a pair of DIN-style connectors on the front.



8: UTP-DIN Cab Bus panel from NCE.

Clubs and other high-usage groups usually prefer these panels. They are willing to deal with the higher insertion force of the DIN connectors for the long-term reliability over RJ connectors. NCE offers optional DIN cables to work with their throttles and these panels.

## Delete loco from roster

When you are done running a loco, it is good housekeeping to tell the system that you are finished.

**Digitrax** requires that the user remember to “dispatch” the loco.

**NCE's** system handles these chores automatically with no user intervention.

## Wireless systems

Folks seem to love the freedom of wireless DCC, walking around the layout without plugging in. Even in my small HO switching layout, I prefer not to be worrying about a cable all the time.

## Infrared wireless operation

As I mentioned last month, the **Digitrax** DT series and the UT4 series of throttles have an infrared wireless mode.

Because it is line-of-sight, like a TV remote, I find infrared less satisfactory than radio wireless. It is the only game available in countries where the radio system is not approved. The receiver for this system is the Digitrax UR90. It looks very much like the UR92 (10). The UR90 has a street price around \$40.

NCE does not offer infrared wireless options.

## Digitrax simplex radio

For years Digitrax had the upper hand in radio due to their system design. Their throttle talks to the system only when it has something to say, like a change in loco speed.



9: UR91 simplex radio receiver from Digitrax – photo courtesy of Digitrax.

So, Digitrax's original radio system was simplex: the throttles talk and the system listens. This allowed for higher transmitter power without issues around battery life or the "average transmitter power" regulations for non-licensed operation.

In order for the system to talk to the throttle, the throttle must be plugged into the LocoNet. The throttle needs to listen to the system only when selecting or dispatching a loco or when programming a loco. New Digitrax sets come only as duplex radio. Separate throttles and control panels continue to be available for the simplex system. The simplex radio system operates in the 900 MHz band.

## NCE Radio

NCE's system design requires an ongoing dialog between the throttle and the command station. This is called duplex communication. NCE radio also operates in the 900 MHz band.

A decade ago, NCE's radio was inferior to Digitrax' in terms of range and reliability. There were some design and technical issues behind these limitations.

NCE kept working on it.

With the release of radio version 1.5, they have a long-range system with rock-solid performance.

The fact that NCE required duplex communication gave their users an

advantage in the radio world, even when they were suffering the range limitations. They could acquire, release and program locos wirelessly.

## Digitrax duplex radio

Digitrax wasn't one to let NCE have this advantage and they announced their own duplex radio system a few years ago. There have been some issues with battery life and other shortcomings of the Digitrax duplex system. Digitrax has been working on it and things are improving. Digitrax allows user installation of new duplex radio software for the fascia-mounted transceiver and their throttles.

The Digitrax duplex system operates in the 2.4 GHz range, along with

Bluetooth devices, cordless phones, WiFi and microwave ovens. I don't believe interference from these other devices on similar frequencies has anything to do with the shortcomings of the Digitrax duplex system.

All new Digitrax radio sets come with the duplex, not simplex, pieces.

There is some confusion with the two Digitrax systems. They are not interchangeable with each other. However, they can operate shoulder-to-shoulder (9).

## Digitrax radio hardware

Digitrax uses a fascia-mounted **UR-91** receiver (street price about \$120) with its simplex throttles, those

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(Photo from our N-Scale layout)

10



10: UR92 radio transceiver from Digitrax – photo courtesy of Digitrax.

having an R as the last character in their part number, such as DT402R.

**Digitrax** throttles with a D suffix, such as the DT402D, are for the duplex radio system and require a **UR92** radio transceiver (street price about \$130).

While these two fascia-mounted units look very similar, especially after they are mounted, they are very different.

The strength of the LocoNet comes to the fore in that you can have as many of either unit that you want on your system. User's throttles will talk to the base unit closest to them and that unit will interface with the command station. So, you can have a mixture of R and D throttles on your system, as long as you have at least one UR91 and one UR92 base unit connected to the LocoNet.

One note on the UR91 receiver (9). There are two green wires between

the two RJ connectors at the rear of the board. They are the receiving antennas. For maximum range they should not be twisted together, but extended in a V like the old TV "rabbit ears" antenna, remember them?

## NCE radio hardware

Converting to NCE radio is as simple as plugging a NCE RB02 radio base unit (street price about \$125) into your Cab Bus. If you have a radio throttle, you are ready to go.

To achieve maximum range, the radio base unit should have its antenna vertical with a minimum of obstructions between the throttles and the antenna.

Yes, operators' bodies count as obstructions. So, the best place is upside down on the ceiling in the center of

11



11: RB02 radio base unit from NCE.



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the layout. If you have a dropped ceiling, this is easy – punch a hole in one of the tiles so that the antenna can extend below the tile and run the Cab Bus cable above the tiles. I'll have some mounting suggestions in this month's SMP sidebar on page 42.

With version 1.5 of the NCE radio system, range has improved so much that the new NCE radio throttles have no external antenna. The only way to tell them from the non-radio throttles is by their extra red LED on the top of the case. Older NCE radio units have an antenna sticking out the top of their case. Either version will work just fine with the RB02 radio base.

When they were having issues, NCE came up with what they called a radio repeater (*NCE RPT1* – street price about \$100) to augment the range. With the version 1.5 radio system, the need for this is greatly diminished. However, they are still available for those pesky situations where you have a dead spot on the layout. They look like and are cabled directly to the RB02. They are not connected to the Cab Bus or Control Bus. They mount just like the radio base units. See this month's SMP sidebar on page ?.

## Radio interference

Sharp-eyed readers will see that both the Digitrax simplex system and the NCE radio system are in the 900 MHz band. Yes, they are on the same frequency. As I learned with the

Litchfield Station layout, if you have both in close proximity, the NCE system probably will work just fine – you may see an occasional missed command. The Digitrax simplex system probably will never hear its throttles calling to it.

## Throttle Addresses

For the command station to keep track of what to do with each loco in the roster, it needs to know who is controlling it. Associating a throttle address with a locomotive address in a database or table, called a roster, keeps this straight. Okay, but that means that each throttle must have a unique name or address. Once again, Digitrax and NCE have different ideas of how to do this.

*Digitrax* uses a four-digit number that is factory preset to some seemingly random number. It can be read and changed following the instructions in the manual for the DT series. The UT series can be set with the JMRI software. There are a lot of numbers in this scheme, and Digitrax seems to think that it is unlikely that the same number will show up twice on any particular layout. Both Digitrax clubs that I've been associated with have had to go through all of the members' throttles and record the addresses. Some duplicates were found and reset. Once this was done, some of the "gee, that's weird" issues vanished!

*NCE*, on the other hand, allocates a finite number of throttle addresses (64) and expects the users to adjust



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D  
V  
E  
R  
T  
I  
S  
E  
M  
E  
N  
T

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them as needed. Toward that end, they make it very easy to change them – very much like how Digitrax expects you to select a loco with its UT4 – by holding down a button when you plug into the fascia panel.

## Consisting

One of the great things with DCC is the ability to run locos together in a consist.

**Basic consisting** has been around since the early days of DCC. Just assign the same loco address to two or more decoders and let them run together. It is very easy and effective. Makes hostling very difficult. Basic consisting has nothing to do with the command station and will work on any system or decoder, even the most basic.

As systems became more sophisticated, a new method emerged where the **command station** kept track of what you wanted to run together. This made for easy operations, as the hostler could run the locos out of storage, assemble a train and consist them with a programming-style throttle. This takes a roster entry (or slot) for every loco, but doesn't require any special features in the decoders. This is the primary method of consisting on Digitrax systems, which they call UniVersal Consisting. NCE also supports it, calling it "old-style" consisting.



**12: Two locos consisted on Rob Biddison's Moffat Line.**

**Decoder-based** consisting is the way that decoder manufacturers, such as SoundTraxx, recommended today.

This requires a decoder with the consisting feature (CV19) supported. It is most effective if the decoder also supports CV21 and CV22, which are designed to tell the decoder which commands being sent to the consist it should respond to.

CV19 is the consist address. It can be any two-digit address (1 to 127). Using three- or four-digit addresses above 127 for your locos will help prevent overlap and confusion, even if you need to add leading or trailing zeros.

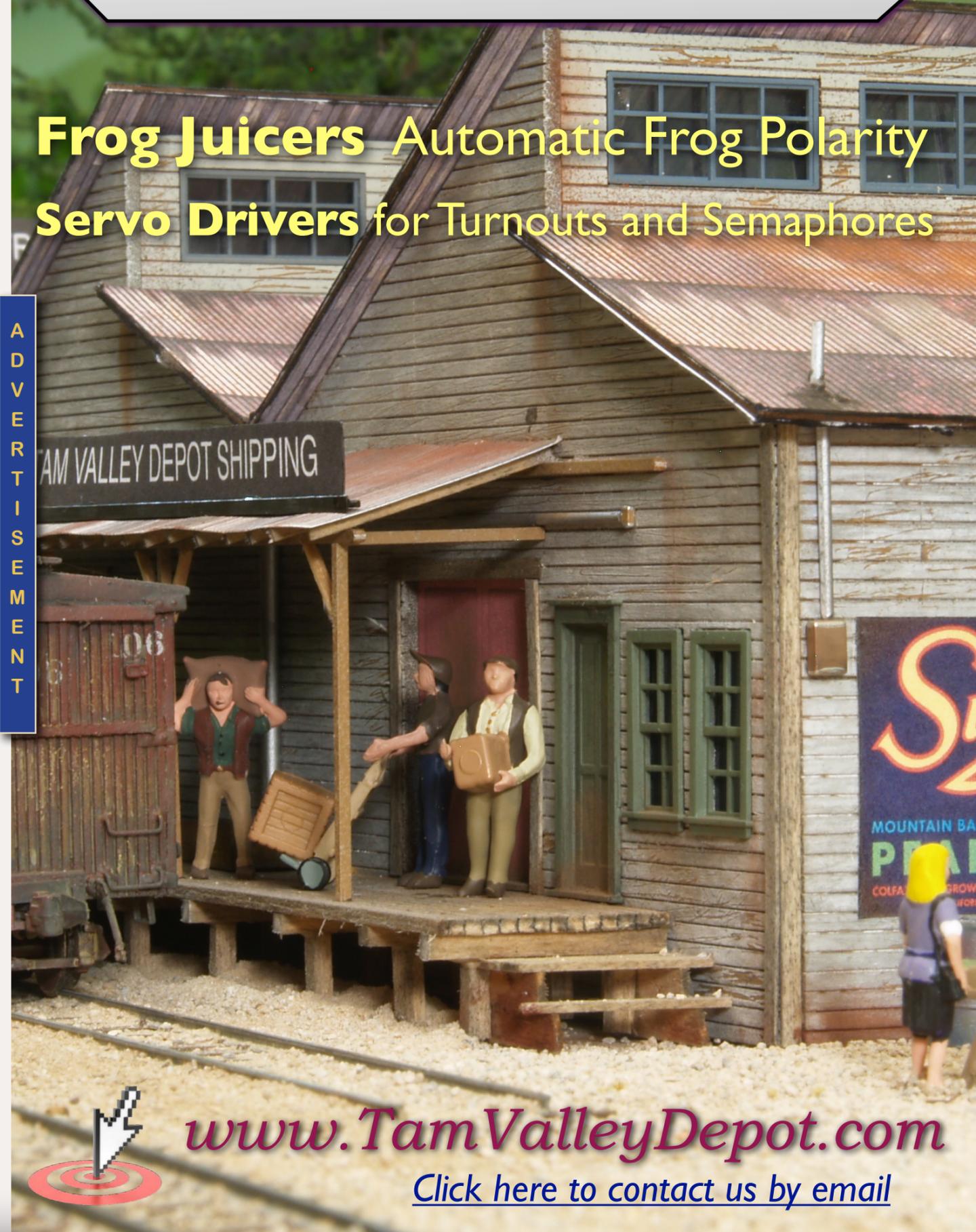
Digitrax does not automate decoder-based consisting. You manually set the CVs and command the group from the consist address. If you want to change the functions on any of the locos in the consist, you can do so by addressing that loco by its own address – a good use for the two sides of a DT400 series throttle. If your decoders support CV21 and

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CV22 consist function mapping, you probably will be able to access the functions from the consist address.

NCE automates this process with their “advanced” consist operation.

On the ProCab, NCE walks you through setting up the consist, including what is the lead loco, the trailing loco and intermediate locos. Once the consist is established, you can run it from the consist address or the lead loco’s address or the trailing loco’s address. The advantage of using a specific loco’s address is that your function commands will go to that loco.

Imagine an ABA consist. You use one of the A units’ address, depending upon which direction you are going. The headlight and other functions sent while you are running the loco will go only to that A unit, not the trailing A unit. So, on a turn, you can run out commanding the lead A unit and control its headlight, bell and horn. Coming back, with the other unit in the lead, you can address the consist through that unit’s number and control its headlight, bell and horn.

## Fast clock

Model railroading is about compression. We compress space, so why not time?

Operations folks frequently do exactly that with what they call a fast clock. Running as much as 12 times faster than reality, a fast clock allows modeling a whole shift or an

entire day in a reasonable-length operating session.



13: NCE fast clock display from Logic Rail Technologies – photo courtesy of Logic Rail Technologies.

Both Digitrax and NCE have a fast clock built into their systems. Logic Rail Technologies sells external displays to wall-mount so everybody can see the time.

The programming throttles from both vendors allow the engineer to have the fast clock time displayed on his throttle.

The DT400 series from Digitrax, requires the user to press the CLOC button to see the time.

The ProCab or PowerCab from NCE has enough display room to show the fast clock as one is running the loco.

## Turnout control

Some folks want to throw turnouts from their throttles. So let’s look at how each system handles this task.

**Digitrax’s DT** series throttles are their only offering that will control

turnouts. I prefer the DT400 series for turnout control.



14: DT402 from Digitrax – photo courtesy of Digitrax.

You press the SWCH button and the cab becomes a turnout controller and doesn’t revert until you tell it to do so. You can still control loco speed with the knob, but cannot access any functions, such as lights, while in the SWCH mode. It takes fewer keystrokes to activate a series of turnouts than either NCE throttle.

Once the desired turnout is selected, the T and C buttons (two with silver colored background at the bottom of the throttle) select Thrown or Closed.

The **NCE ProCab** (and the PowerCab, too) requires a few more keystrokes



15: ProCab from NCE – photo courtesy of NCE

than the Digitrax DT400 series to do the same job.

Once one becomes proficient with the NCE system, it is usable, just a bit more cumbersome – about half again as many keystrokes as the DT400 series. You forgo any loco control, including speed and direction, while you are in entering the keystrokes necessary to move a turnout as it comes from the factory.

The **NCE Cab06** is the only “user” level throttle from either manufacturer that will throw turnouts, as it comes from the factory. The other intermediate



16: Cab06 from NCE – photo courtesy of NCE.

throttles can be programmed to do so on individual layouts.

Here you pay for the small keypad. You need to use the shift key to change the function of some of the buttons to accomplish the job. On a test job, the Cab06 took twice as many keystrokes to spot a car on a spur as the DT400 series. Again, you cannot change a loco's speed or direction while you are controlling a turnout.

### What system do I use?

What I personally use should have no bearing on your choice.

My grandmother said, "It's a good thing folks like different things, or every woman would be in love with my husband."

Both companies make good systems. As I said in last month's column: "The 'givens & druthers' come to the fore. Some things you must have and others you are willing to forgo. All systems seem to have some drawbacks."

The three closest layouts to me use Digitrax, including our club, where I'm currently the President. They are all operations-oriented layouts, so I spend a lot of time with a Digitrax throttle in my hand, and I own a UT4R for that reason.

My choice was NCE for my HO and Fn3 layouts. Here's why:

- I don't plan to throw many, or any, turnouts with DCC.
- I want the 10-amp power for my Fn3 layout.
- NCE radio version 1.5 works as well as any non-licensed system can, with enough range to cover my yard and no need for a lot of Cab Bus wiring to acquire locos.
- There are no wires or antennas extending out of the current NCE radio throttles.
- I like the ergonomics of the ProCab and the Cab06.
- The railroads I model are all dark territory, so signals are not an issue.

- The PowerCab makes a very useful tool on my workbench, with a USB adapter connected to JMRI on my computer.

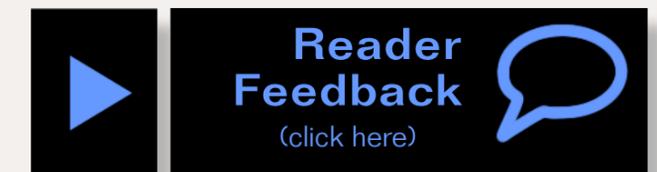
I recommend you look at your own "givens and druthers" and make up your own mind.

For example, if you are planning a lot of signaling or DCC turnout control, you would probably be happier with the Digitrax system. The SurroundTraxx system currently supports only Digitrax Transponding, which is easier with a Digitrax system.

I've worked very hard to lay out the positive and negative aspects of both systems, as I best know them.

Hopefully you find this data useful. If so, please click the Reader Feedback button here and vote "awesome". You can also leave your comments or questions on the blog by pressing the same button.

I wish you green boards until next month!



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# SMP\* from Mr. DCC – NCE Radio Base Mounting Ideas

The Digitrax radio base units mount in the fascia, just like regular throttle panels. This leads to a mixed bag of results: easy to mount, but hard to optimize. Low to the floor and surrounded by electronics and bodies is not the best place for radio reception.

NCE's RB02 radio base unit allows flexibility of mounting. This allows the user to optimize radio reception, if necessary.

Firstly, radio signals like to have an antenna above a ground plane, so mounting the RB02 on a metal plate, or even better, through a metal plate is very good. I know folks who have used old aluminum pie pans to make a ground plane. Or you can update your electric stove's drip pans and

use one of the old ones – it already has the hole.

If you have a suspended ceiling, you can really optimize the reception. You can just punch a small hole in one of the tiles near the center of the layout and stick the antenna down through the hole. An aluminum pie plate on top of the tile between it and the RB02 provides a ground plane.

This option also works with a dry-wall ceiling, but folks are reluctant to punch holes in their ceiling. I show a photo of this just because we had a sample piece of wallboard and didn't have a ceiling tile.

Starting with these ideas, you can let your imagination run wild. Just remember, the best reception occurs

when the antenna is vertical (pointing down or up, doesn't matter) and high up (keeps the bodies out the path) and near the center of the operating area.

\* SMP comes from the Amtrak world and is short for Standard Maintenance Procedure. ■



17: NCE RB02 with a pie pan ground plane.

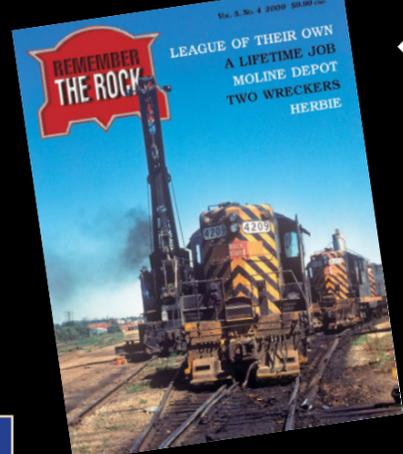


18: NCE RB02 through ceiling from above.



19: NCE RB02 through ceiling from below.

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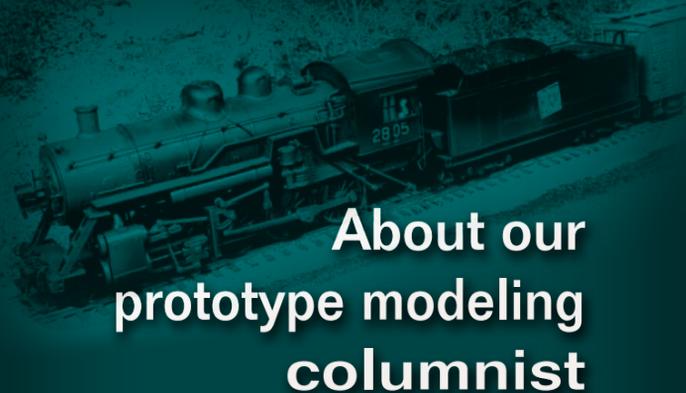
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## About our prototype modeling columnist



Marty McGuirk is a well published model railroad author with many magazine articles and six books to his credit. He founded the Central Vermont Railway Historical Society in 1989. A lifelong modeler, he especially enjoys building resin freight car kits.

Marty has built layouts in three different scales (N, HO, and Sn3), although his current project is an 18 x 48-foot HO railroad, presently in the early scenery stage, depicting several key scenes from the Central Vermont in the late steam era.

# GETTING REAL: The Right Time Adventures in Prototype Modeling

### Refining an era to model ...



**R**emember back in grade school when you learned the “Ws” of a newspaper article? If you don’t recall or if they don’t teach this in grade school anymore – they were simply: “What, Where, When, and Why.” This month, we’ll focus on the “When” – since it tells us a lot about the What and Where and can be a critical element in deciding what era we’re going to model.

The question often posed to modelers is “What era do you model?” Prototype modelers, if they want their layouts to reflect reality at a certain place and time, really need to think about the answer to this question. And I’ve come to the conclusion that a “year” is too broad a range for me. In my case, I’ve come up with a season – late fall, and a year, 1954. We’ll get to the “why late fall 1954” shortly; however the point is saying “I model ‘post Conrail’ or ‘pre-WWII’” is fine to a point but you may find it not focused enough – especially when it comes time to build a layout.



1-2: The author found these two images on the Internet. Without knowing what era you’re modeling, how can you tell how the model of this auto dealer should look? As it did pre-1947 (1) or post 1950? (2)

And yes, I know some readers will be furious, typing in the comment thread on how narrowing your era is just another example of how we dreadful “rivet counters” are ruining the hobby. To each their own, and they’re welcome to their opinions but remember, this IS the prototype modeling column... and one of the best things you can do as a prototype modeler is to focus your era as much as possible – especially if you’re building a layout. Because answering the “When?” will answer a whole bunch of those “What is appropriate?” questions. And it can even save you money, since anything that doesn’t fit your prototype and era can remain on

the hobby shop shelf. And you can use that money to purchase the items you do need.

### How do we select an “Era to model”?

I don’t know how most model railroaders chose an era, but I’m fairly certain it’s not usually a terribly scientific process. If I had to guess, I’d say it’s really based on some favorite locomotive or perhaps car type (someone who really wants to model double-stacks or covered hoppers has their window narrowed more than someone who doesn’t).

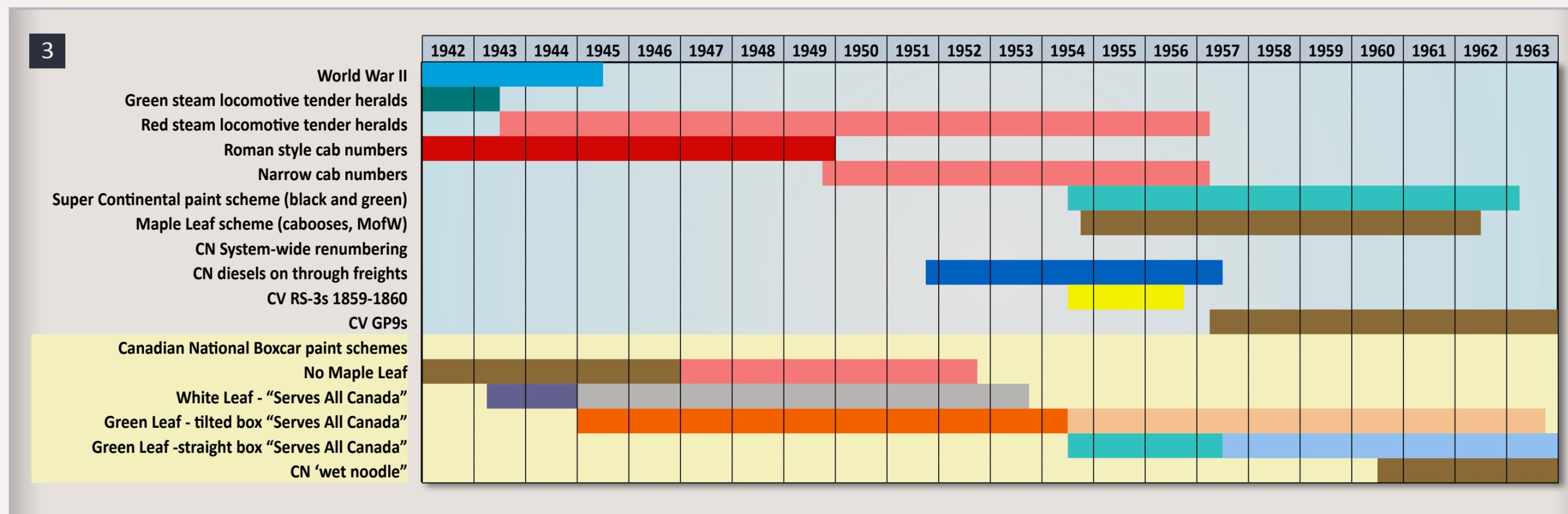
Recently I made some major changes to my home layout. Although I’ve

wavered a bit over the years on what section of the railroad to model, or even whether to approach this as a “prototype” or “prototype-freelanced” concept, I’ve always been quite comfortable with my chosen era. But before I made changes to the layout, I also revisited the era I’m modeling. I figured if I decided to switch eras, there might be some significant impacts to the layout design.

In the end, I decided not to change eras, but instead to refine my era. I’ve always set the era for my Central Vermont modeling in the “1950s.” When I didn’t have a layout, or the layout was in the very early phases of construction, this seemed specific

enough. After all, “This is the 1950s” is a lot easier to pull off when all that’s visible are plywood, roadbed, and track. But what does “modeling the 1950s, (or ‘60s, or ‘90s, or 1870s) mean? Someone (I believe Jim Kelly) once quipped, “If you say you’re ‘modeling the 1950s’ what you’re actually modeling is 1959 but doing a lousy job of it.”

Jim’s lesson for prototype modelers is clear – a LOT changed in the 10 years between 1950 and 1959, including the trains. They don’t call it the “transition era” for nothing. Most modelers think of the transition era in terms of locomotives – in 1950 most railroads still had a significant percentage of



3: This simple timeline was easy to create in Excel and was an easy way to narrow down the era the author models on his home layout.

steam locomotives, but by the end of the decade mainline steam was all but gone. But it goes beyond the locomotives. In 1950, composite freight cars (wood and steel, such as single-sheathed cars) were fairly commonplace. A combination of the Great Depression and World War II had taxed the railroad's physical plants and rolling stock to the limit – and by 1950 those composite cars were often, quite literally, on their last legs. By 1959 all-steel (and often, welded as opposed to riveted) rolling stock was prevalent.

The changes over the span of a decade, or even a couple of years, to things like signs, fashion, and vehicles are even more obvious. When you start to look more closely, you quickly conclude the more specific the era, the better.

Take, as an example, the automobile. There's been an explosion in the quality and variety in 1:87 vehicles over the last few years. At least, you may have seen them . . . I've missed out on a lot of these developments since I've been spending all my hobby money over the last few years in the lumberyard and on track and DCC stuff.

But on my last visit to the hobby store, I couldn't resist the urge to pick up a couple of examples of Detroit's finest to add to the layout. But even this proved a challenge. If I'm modeling the 1950s what cars do I select? Automobiles really changed from

1950 to 1959 – and there are a lot more people who can tell a '55 Chevy from a '50 Buick or a '48 Hornet than can tell a PS-1 boxcar from a 1937 AAR boxcar. When I tried to make an automobile selection, the railroad dates kept slipping into my thought process. And, suddenly, my "1950s" era wasn't much help. I thought "the 1959 Ford is nice, but by 1957 steam was gone from the Central Vermont" or "How long would these 1941 Plymouths have been on the road?"

Leaving the vehicle selection alone for a while, I went to look over the billboards advertising various products. And the problems got worse. An "I Like Ike" billboard would be as out of place in 1953 (which was not a Presidential election year) as it would be in 1944, or 1968.

It was obvious I needed to narrow my focus. Enter the era timeline.

### An era timeline

Developing a timeline is an easy, straightforward way to identify when all, or at least most, of the items you wish to include on your layout were around. The timeline doesn't need to be fancy – I started with a piece of paper and added a line across the top with evenly spaced tickmarks for the years. I started my timeline in 1943 and ran it until 1958 (3, previous page).



**4: The red background on the tender monogram means this image dates from after 1943. The thin letters (actually sheet metal numerals applied to the cab side) replaced painted Roman style numbers in the late 1940s. Photo courtesy Bob's Photos.**

Why that range? Well, I knew I wanted to include steam locomotives, and I also prefer the red background on the CV steam locomotive tender monogram. Prior to 1943 the herald backgrounds were green, and the last CV steam engine ran in regular service in the spring of 1957. So I knew the broadest range of my era was between 1943 and 1958.

On the left side of the timeline I added events of historical significance ("end of WWII," for example) and also added items that would affect

the items that would appear on the layout. Some items will have a firm start and end date, such as the end of WWII, or the last run of steam power in revenue service on your railroad. But as we all know, some things on railroads don't change overnight. Take freight car paint schemes for example. A new scheme might first appear on a specific date, but it may take years for that scheme to become the most common on the entire fleet.

In my case, the CV is a subsidiary of the CN – which means I have lots of

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**5:** Until a railroad lettering diagram turned up that confirmed the backgrounds on the steam locomotive tenders was indeed green, the only evidence of green tender heralds was found on stations, and bridges. This one in Amherst, Mass., lasted well into the diesel era. Marty McGuirk photo.

Canadian National boxcars. These cars wore several styles of Maple Leaf heralds over the years, and I wanted to make sure I identified the ones that would be most common at the time I was modeling.

For practical reasons, and to clue viewers in that this was a transition-era layout, I model both steam and diesel power. The Central Vermont got its first diesels during World War II – a few Alco S-2 switchers.

The CV dieselized a number of its through freights in late 1951 with Canadian National road engines, mostly four-axle C-Liners. Although all kinds of CN diesels ran on the CV, I've never been able to locate evidence that the CN's five-axle C-Liners ever operated on the railroad, so I had

to take a pass on the latest offerings from Rapido.

In 1956, the CN did a massive renumbering of its diesel fleet, which seemed to be a significant enough event to rate a note on my timeline. All my model C-Liners are numbered in the 87xx series, which dates them to before the renumbering.

The CV got its first two road diesels in late 1954 – a pair of RS-3s numbered 1859 and 1860. Since these were regularly assigned to passenger and milk train service I wanted to include them on the modeled roster. So I added an entry marked "CV RS-3s" and put a triangle in the fall of 1954, and noted these were numbered 1859 and 1860.

In that system-wide renumbering in 1956, the RS-3s were renumbered

3900 series – and by 1957 they were transferred from the CV back to parent CN. I could already see the era narrowing – if I wanted to run CV RS-3s, the era modeled was limited to about a two-year window.

I also considered the season I wanted to model. I've found full autumn colors tend to look toylike on model railroad layouts. So, I've opted to model the leafless season (which is about half the year in northern New England).

After I put together my timeline I could see the "right era" – at least for me, was sometime in the late fall of 1954. This has helped answer a number of questions about which freight cars to keep and which should go on the swap meet table.

More importantly, I now know that 1955 autos are the newest cars on the road and, the CV's RS-3s should show minimal weathering (after all, they're less than 3 months old).

I also know the really important stuff – like the New York Giants have just won the World Series, Matchbox cars made their first appearance in the US, and that brand new '55 Chevy drank \$0.29 gallon gasoline. *I Love Lucy* was America's top-rated television show.

Speaking of television, 1954 was the first year the FCC approved color television signals, meaning my "Radio and Television" store can sell TV sets that offer "Living Color."

At the movie theatre, my HO scale citizens can choose between "White Christmas," "The Caine Mutiny," or Marlon Brando in "On the Waterfront."

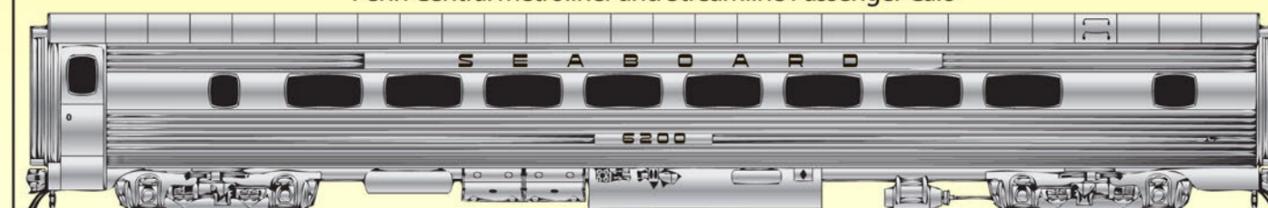
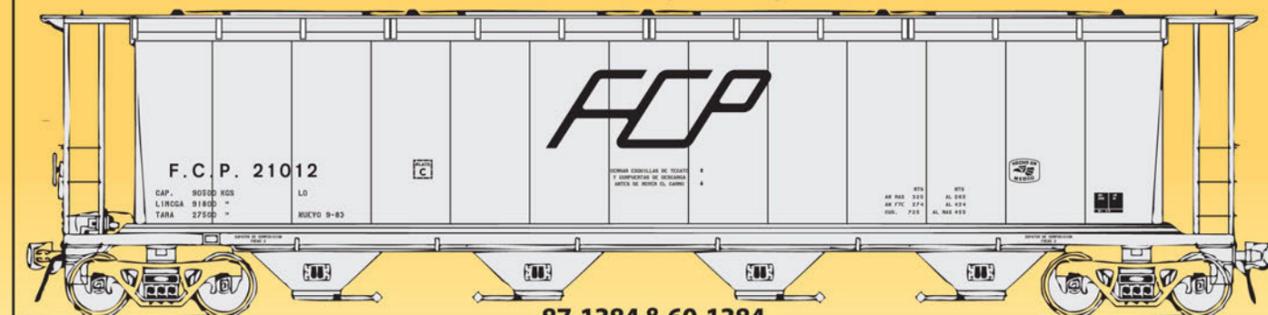
Could I simply ignore the era, and include the signs, billboards, freight cars, and locomotives I find most appealing? Sure, it's a hobby after all.

But I've noticed most visitors tend to focus not on the "model railroad" minutia – the brake rigging, diesel louvers, and such, but instead notice the cars on the road, what's playing at the movie theatre, and how much gasoline cost. They relate to those items. And I get a kick out of knowing the time is right.

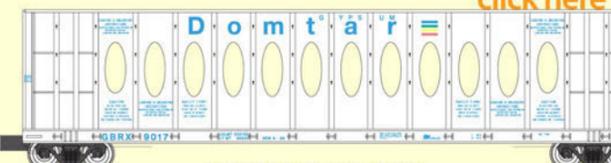
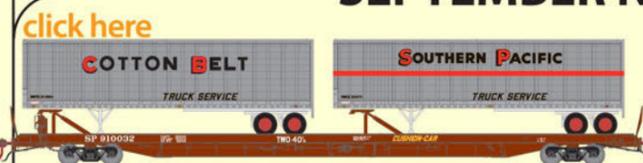
*Pictures continue on next page.*

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6: The desire to include the Central Vermont's first road diesels, a pair of RS-3s like this one meant the era modeled would be after they were delivered in October, 1954. The desire to have steam power meant the era had to be prior to the last run of steam in March, 1957. The choice was narrowed even further by the renumbering of the RS-3s as part of a system-wide CN renumbering in 1956. Robert Decker, courtesy Central Vermont Railway Historical Society collection.

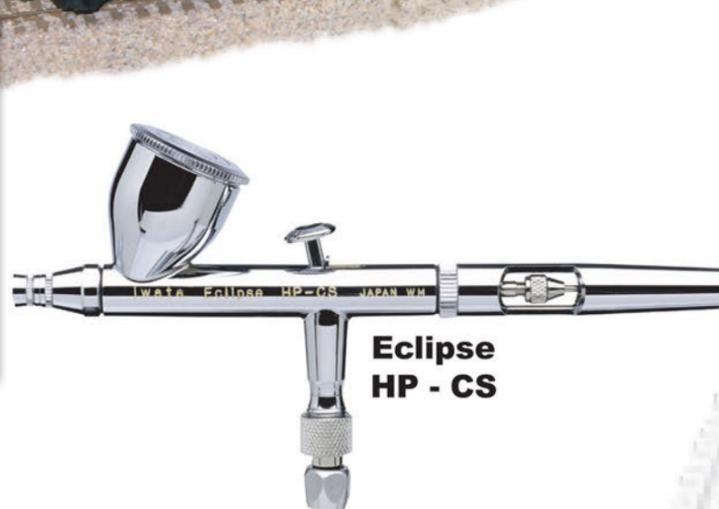
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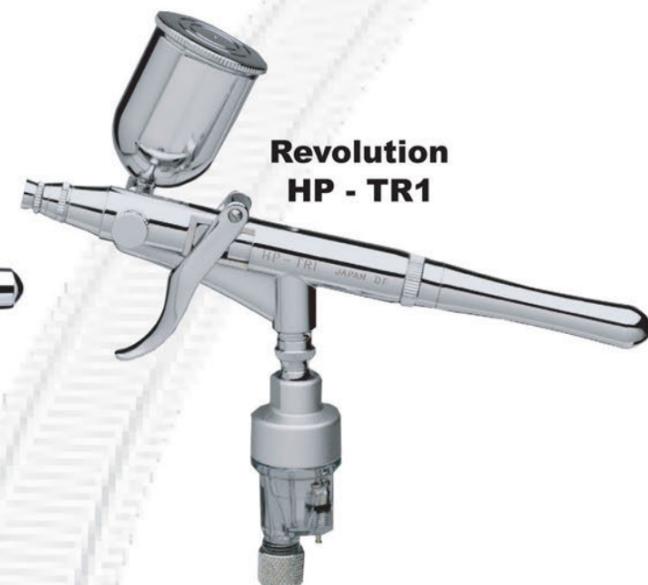
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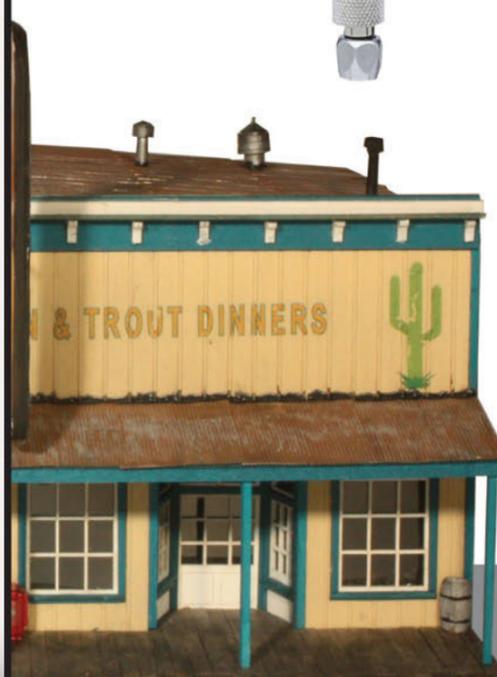
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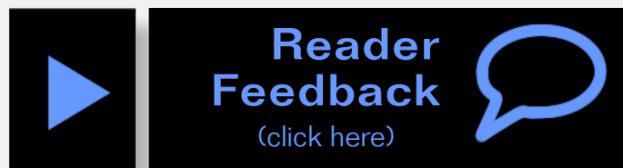


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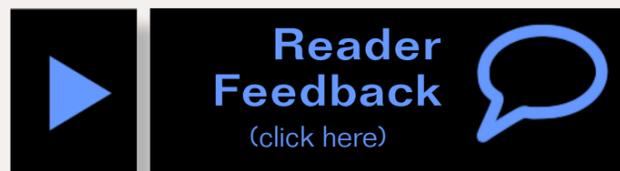
## About our “What’s Neat” columnist



Ken Patterson is an accomplished model railroad photographer and talented modeler who has been published many times in *Model Railroader*, *Railroad Model Craftsman*, and other model train publications. His backyard, on a bluff above the Mississippi River, provides an ideal background for his model photography.

# What’s Neat This Week: Launching the newest MRH column

## A photo presentation of my ongoing hobby experiences



Welcome to what I think will be a fun monthly event in the pages of *Model Railroad Hobbyist* magazine.

fellow modelers I meet through my camera lens.

I may provide information about a new product or a new modeling tip that I may be using on a project. Along the way, I might throw in some tips on getting better photos of your models. It all depends on what you guys want: use

Ken Patterson invites you join him in exploring some of the latest neat stuff in the hobby ...

“What’s neat this week” will be a text and photo presentation of my ongoing experiences in the hobby, and space to showcase works of



1: Here I am standing in my outdoor studio setting up for a street car catalog shot. Photo 2 is a sample shot.

the comment button on this article to help give me requests for what you'd like me to present.

If you'll give me lots of feedback, we can make this a truly interactive column where we're working together to cover topics you're interested in. We might as well use this modern Internet medium to partner together in bringing *you* the column *you* want to see!

In any event, my column approach will always be something about our hobby of model railroading that entertains and informs you visually through photography, which is my speciality. We will throw in some video, too!

I am usually setting up for 3 or more photo shoots each week. Sometimes, I get lucky when my location also affords prototype railfanning.

**2:** Here's a finished streetcar set up shot. It's hard to beat a real sky and outdoor lighting for adding realistic "pop" to your model photos. That's the value of modeling with modules or dioramas that you can take outside – the photo realism goes up dramatically.

**3-4:** As I set up for a large scale caboose photo real trains came by, along with a railfan that wanted to see what I was doing. I know a cornfield is not the usual location to find a Rio Grande caboose. But if you look at photo 4, you can see the rocky scenery looking the other direction, which gave me the rugged-looking background shot I was after.



We will also visit a few model manufacturers, visit a prototype modeler meets, and stop by hobby manufacturer trade shows.

I will pull back the curtain on some of my ongoing photo projects that now include video editing. As I alluded to earlier, most months I will also throw in a video clip to go along with the story.

Let's see where this goes... I'm counting on your feedback, guys!

## Midwest drought and low river revelations

The rivers here in the Midwest are very low as I write this (late August 2012). Here's a photo of the Mississippi looking south – I've never seen this much exposed sand!



**7: Mississippi River during the 2012 drought in August. I've never seen this much bare sand before!**

**5: Wow, here's a shot with a fun serendipity thrown in! I am set up (literally) on the edge of a cliff with a Micro Engineering tall viaduct. I'm shooting for a catalog HO Bachmann Dash 9's, when suddenly a prototype southbound run-by happened below the bluff! To add irony, the prototype locomotives shared some of the colors as the models. Not something you see every day!**

**6: The final photo gives the effect that I was aiming for: a train crossing a viaduct, with a river valley below. You just can't get this kind of result shooting models indoors.**



In the next photo (8) I am standing in the bed of the Meramec River, 700 feet from the Mississippi photo (7). It's like a mere creek running under the UP main line.

With the water this low, I can look at the bridge pier foundation and see wood stacked under the stone work. That's right, wood (10)!

I can study this very interesting modeling note, as we generally don't get to see the entire pier structure exposed for close inspection like this.

**8:** This bridge carries today's UP over the Meramec River. The piers were built in 1857, and the steel truss bridge was erected in the 1920s when the line was modernized. It also appears the stone piers were increased in height at that time using concrete.

**9:** The water is so low you can see that the foundations of the piers are sitting on wood! The wood pilings appear to help hold the earth together around the pier. The railroad placed sand bags on the upstream side to prevent erosion.

**10:** This shows the wood foundation clearly exposed from above. Each row of timber is stacked at 45 degrees to the water flow and crisscrossed. My guess is if the pier sinks into the wood over time, the railroad would just shim with steel plates under the bridge feet.



I'm especially interested in this bridge because I'm modeling this river crossing, with no selective compression, on my home layout (11). This scene is still under construction, and I've got a long way to go yet before it's finished.

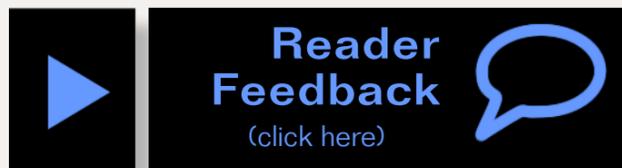
Note the cross-stacked pile of wood O scale ties next to the middle pier. Now that I have had a chance to study this bridge with the extremely low water from the drought, I'm sizing things up to model that exposed wood effect.

After building the wood foundation, the stone/concrete pier would sit atop this wood structure. The prototype bridge was originally built in 1857, and then modernized to a steel truss in the early 20th century.

Using submerged wood as a foundation was not uncommon prior to the 20th century. See the sidebar on how Venice was constructed.

I suspect the 19th-century engineers building this bridge's pier foundations figured if it was good enough for Venice's undergirding (which was centuries old and doing fine), it should be good enough for them!

**Please click this button below and give me feedback! I need to hear from you ...**



**11: This partially complete scene on my layout duplicates the Meramec River crossing with no selective compression. I've stacked some O scale ties at a 45-degree angle to see how I might be able to duplicate the wood pier foundation of the prototype on my model. This scene needs quite a bit of work before it will be complete.**

**This commercially produced video below on YouTube is helping promote our hobby. Let's thank Norfolk Southern for this delightful video!**



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## **Historical precedent for a submerged wood foundation**

The buildings of Venice are constructed on closely spaced wooden piles. Most of these piles are still intact after centuries of submersion. The foundations rest on the piles, and buildings of brick or stone sit above these footings. The piles penetrate a softer layer of sand and mud until they reach a much harder layer of compressed clay.

Submerged by water, in oxygen-poor conditions, wood does not decay as rapidly as on the surface. It is petrified as a result of the constant flow of mineral-rich water around and through it, so that it becomes a stone-like structure. Most of these piles were made from trunks of alder trees, a wood noted for its water resistance. ■

— From Wikipedia

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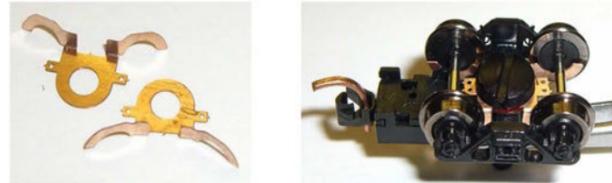
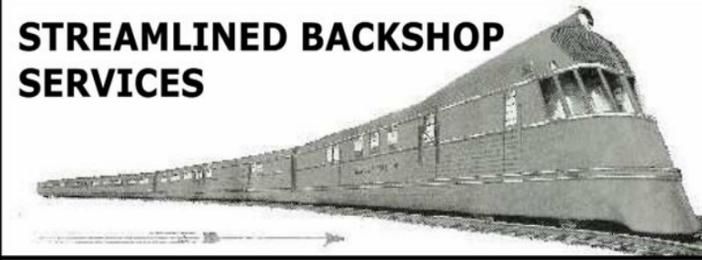
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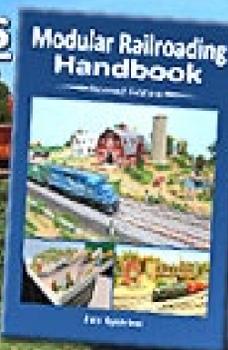
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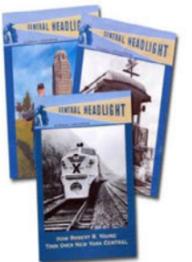
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# The Allagash Gets a New Quarry, Part 2

## Big Scenery in a Small Space

- **by Mike Confalone**  
Photos by the author



Mike Confalone continues the process of adding a new quarry scene to his layout, providing a “big” new industry in a small space...

 **Reader Feedback**  
(click here) 

Last time I located and began building the new quarry scene at the end of my Allagash Railway's White Mountain Branch.

The scenery was already finished in this location, so I showed how to alter the trackwork to add a new spur and how to extend the benchwork for the

new scene. I also showed building the basic quarry landform and doing the rockwork. This time I add landforms around the rockwork, add ground cover

and trees – and get some critical feedback that highlights a correction. Let's get started!

## STEP 5: Creating Land Forms

With the coloring of the rocks essentially complete, I began the process of creating land forms. This step would address the important transition between the end of the 2D photo backdrop and the beginning of the rock quarry. I chose to use florist foam here because of the ease of planting trees

into this material. Since this hillside would be heavily wooded, it made sense to use this material vs. extruded foam which can be difficult to plant into. I used my universal mud material to fill the gaps in the foam.



48-49: Pieces of green florist foam were cut up and placed in a staircase-like arrangement to create a gradual up-sloping hillside. I hot-glued the pieces together and then carved the foam with a razor saw until a natural terrain shape was achieved.

## STEP 5: Creating Land Forms *Continued ...*



50-51: To fill the gaps in the florist foam, and for general gap-filling and terrain-augmentation, I like to use what I call my “Universal Mud Mixture.” This is based on Lou Sassi’s “Ground Goop” he introduced many years ago. The ingredients are simple: gray Celluclay, water, flat brown latex paint and vermiculite (used for potting plants). Celluclay can be purchased in any art supply store, while the Vermiculite can be obtained at hardware and home-improvement outlets.

I mix the mud to a VERY stiff mixture, not soupy. It should stick hard to a spoon when shaken. I add water sparingly, instead using the brown paint to wet the Celluclay. This material is versatile and fun to work with.

52-53: I filled all of the gaps in the florist foam and on the plywood surface.

## STEP 5: Creating Land Forms *Continued ...*



54: I painted the remaining raw florist foam with the brown latex paint.

55-56: After the mud sequence was complete, I painted the entire surface with a light gray flat latex paint. This color approximates the overall planned coloration of the quarry work area, with crushed rock and stone dust eventually covering this entire surface.



## STEP 6: Adding Ground Cover to the Hillside

The next step was to add ground cover to the painted hillside. This hillside serves as a view block or transition between the 2D photo and the quarry. Before adding trees, I needed to cover the bare, brown paint with texture. I like to use real sifted dirt and gravel, crushed dead leaves, and static grass to create a natural appearance.



57: To start, I spooned-on real sifted dirt. The brown paint was still wet, allowing the dirt to partially adhere to the surface.

58: After wetting the surface intermittently with alcohol, I sprinkled on finely-sifted real dead leaves. These give an outstanding texture to what will essentially be a forest floor on the back side of the hill.

59: On the front side of the hill, I also sprinkled some beige-colored static grass. This represents unkempt grass that might grow on a hillside next to a quarry, and provides a nice transition between the quarry work area and the woods. Trees would be built and added later.



## STEP 7: Making Aggregate Materials for the Quarry

I took a break from the hillside project and turned my attention to aggregates. I needed to make several grades of aggregate (crushed stone) for the quarry. This operation would drill and blast the granite rock from the quarry face, and then crush and sort the materials into various grades, from large rocks all the way down to crushed stone of various sizes, including railroad ballast. To accomplish this I use a product called KolorScape Leveling Sand - Step 2. This is essentially the second material used in a two-part process for laying garden or patio pavers/stones or other similar projects. It comes in a 40-pound bag. It is actually not "sand" but rather pulverized granite, and it is gray in color. It is usually soaking wet inside, so I put the material into a container and stir it daily until bone dry. When sifted with various sizes of ordinary kitchen strainers, it yields great rip-rap and railroad ballast. It's more realistic looking than commercial ballast products and a whole lot cheaper!



60: I took a vat of the sifted leveling sand and added some white grout. The grout colors the raw sand, which was a bit too bluish/green when compared to the overall color palette in the quarry.

61: I took the sifting project outside to avoid dust contaminating the railroad room. A few old Tupperware bowls and a couple of ordinary kitchen strainers are all that is needed here.

62: After maybe 20 minutes of sifting, I've got three grades of crushed stone for the quarry. The stuff in the middle bowl is perfectly-sized railroad ballast.



## STEP 8: Recognizing a Problem and Fixing it!

After the aggregates were sifted and set aside, I took a step back to once again evaluate the progress. This time I called in the big gun and had my wife Susan come down and take a hard look. She liked what she saw, but with one major exception – there was no obvious place on the face of the quarry where there was active drilling/blasting of material going on. The rocks were colored nicely, but they looked undisturbed. We referred to the prototype

photo of Raymond Sand & Gravel and it was pretty obvious. There were areas on the quarry face that were extremely vertical, and almost snow-white, with no rust-colored rock. This was the result of the blasting and carving away of the face. This was a critical faux pas on my part. I needed to fix it. So, out came hammer and chisel and I went to work destroying a portion of the rock face!



63: A hammer and ½" chisel made quick work of the quarry face. I tried to chisel straight down to mimic the effect I saw in the prototype photo.



64: I applied a VERY light coating of the Rit dye and alcohol wash to the now-raw plaster, and once again applied white and gray AIM weathering powders to the rock face to dust it up and create the look of freshly-blasted rock.

## STEP 9: Making and Planting Trees

With the quarry face essentially complete, I turned my attention to making trees for the hillside, and the ridge line above the quarry. I needed to make two types: bare deciduous trees, and Eastern Shite Pines. I would also add a spruce or two later on.

Bare deciduous trees are a challenge because you need to find a suitable tree armature that has a fine branch structure. I found a terrific weed here in New Hampshire and I have harvested a boat load of the stuff. Looking around in fields and in the woods is the only way to solve this problem. In my opinion,

there is no commercially available bare deciduous tree that looks good. I prefer to take the time and make my own.

The Eastern White Pine is also a challenge. The raw materials are readily available, but the trees must be made branch-by-branch. This presents a problem when you need a thousand of them! I designed a prototype Eastern White Pine a couple of years ago and contracted with Carol Vreeland of Sterling Models to build a batch of them for me every year.



65: This scrappy weed I found in a field near my home doesn't look like much on its own, but when three stalks are taped together at the trunk with brown floral tape and then massed with a few more finished trees, the effect is spectacular.



66: This is the Eastern White Pine tree as built by Carol Vreeland of Sterling Models. The trunks are made by Craig Vreeland. He uses basswood. Craig not only tapers the trunks, but scribes bark texture into the wood. He then drills out pilot holes all over the trunk so Carol can affix the individual branches, which are made from Caspia, a commercially-available dried flower. The entire tree is then spray painted gray.

## STEP 9: Making and Planting Trees *Continued ...*

67



68



67-69: The bare tree is then flocked with static “grass.” I prefer to call them “needles” since they approximate pine needles in shape and size. I spray maximum-hold cheap hairspray from the top down, being careful not to get any on the underside of the branches. I then flock the tree with the deep-green needles using the Nock Grassmaster. The effect is convincing for a single tree and for a mass of them.

69



## STEP 9: Making and Planting Trees *Continued ...*

70



72



71



70-71: After I flocked a number of pine trees, I returned to the scene to begin the critical step of hiding the 2D-to-3D transition. The pine trees were arranged on the slope, with the tallest trees in the foreground, and smaller and smaller trees toward the top. This forced the perspective and created the illusion of distance.

72: Smaller, less-detailed pine trees, some made from simple bottle brushes were planted on the top of the ridgeline.

Next month I will complete the new quarry scene, so stay tuned for the finale.



Mike Confalone grew up in Smithtown, New York, and got into model railroading at age 10 or 11. Like many young teens, he joined the local model railroad club and got his first glimpse of model railroading on a large scale.

College in the mid 1980s took him away from the hobby for a while, but he still found time to visit the local hobby shop in Scranton,

Pennsylvania, and do some modeling on the side. Railfanning also became a favorite pastime. After graduation in May 1989, he and his wife, Susan, moved to New Hampshire.

He publishes a Northeastern prototype railroading magazine called Railroad Explorer ([www.railroadexplorer.com](http://www.railroadexplorer.com)), and has published six books on prototype railroading.

He has built several layouts over the years, but it wasn't until the early 2000s, after a visit to Dick Elwell's Hoosac Valley layout in western Massachusetts that he really got a kick in the rear. Seeing Dick's fully-scenicked and operational layout prompted him to get serious.

Today, his proto-freelanced, under-construction Allagash Railway occupies a 58' x 24' space – his entire basement and the former two-car garage. This is a long term project that will take much of the current decade to complete. For him, the challenge of bringing his own piece of New England railroading to life in HO scale is the driving force behind his passion. He loves all aspects of model railroading, from benchwork on up, but his specialty is scenery and weathering. He also enjoys the challenge of prototypical operations.

Besides the trains, he and Susan love to garden and landscape their wooded two-acre property in southern New Hampshire. He also plays a mean guitar, but his Fender and Marshall-fueled rock-band gigging days are over, at least for now!



# Mike Confalone does it again!

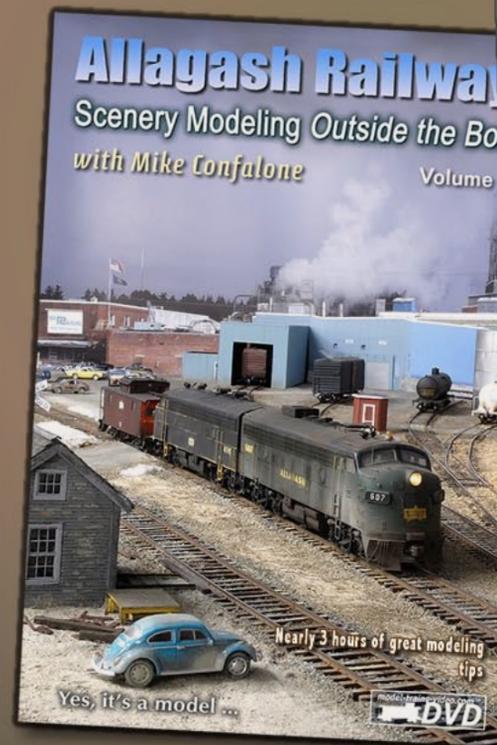
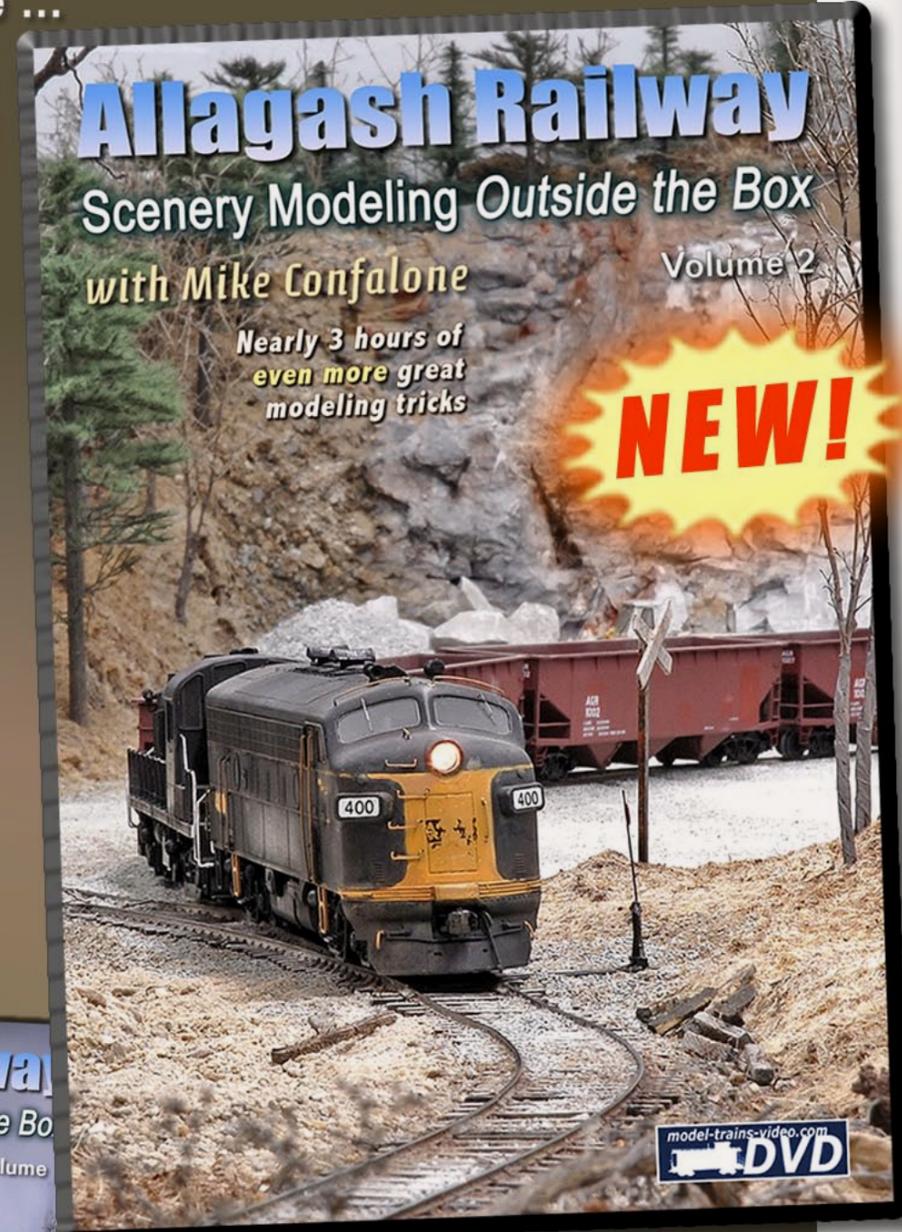
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# Recession-proof modeling: The \$1 N Scale Refinery Office

– by Philip L. Hoffman  
Photos by the author



A frugal modeler finds inspiration in Target's dollar bins and adds details from his parts stash ... maybe his approach can inspire you to do something similar!

 **Reader Feedback**  
(click here) 

**L**ike most modelers today, I work hard to stretch my hobby dollar. Whether I am trading unused equipment with a buddy for track, or browsing the aisles of the local Michaels or A.C. Moore for things that can be cheaply repurposed, I try to be both frugal and creative in how I approach projects.

So when Christmas rolled around in 2008, as the economy was really beginning to slow, I was trying to practice both frugal modeling, and good preparation. I had just secured permission from the Buildings and Plans Commission to whom I am married for construction of an N scale switching layout

based on the operations of the Baton Rouge Southern, a WATCO shortline ([model-railroad-hobbyist.com/blog/kcsphil1](http://model-railroad-hobbyist.com/blog/kcsphil1)). We were Christmas shopping in Target, when my frugal modeling got a huge boost.

As part of my planning, I was designing a compressed version of the Exxon Chemicals refinery that is adjacent to the BRS in Alsen, LA. The refinery/plant needed an office, and I had looked at a number of kits that I thought might be bashed to make a suitable building. Then I found a set of three pre-assembled buildings in the dollar bins at the front of the store, and the proverbial light bulb went on.

As shown in figure 1, the building I found was a tan, two story “modern” office building with a big sign on top for the “fire station.” Two other versions were available – a lighter blue “police department” and a red “public works” building. And at \$1 apiece, I felt it would be proper to give myself an early Christmas present and take a couple home.

The plan was to detail the buildings out of my scrap box, thus keeping the cost to a minimum. Though I did eventually have to make two purchases to complete the project, I managed to keep my cost under \$10 – which in these tough times is pretty good.

## Begin with the end in mind

As I mentioned above, I needed an office for a refinery, not a fire station, so the sign had to go. I laid the building down on the edge of my workbench, and made a couple of quick passes on both sides with a sharp hobby knife at the point where the sign base was glued into the roof. By working slowly you will get a clean cut that can be filed down (more on that in a moment) Once that was done, the sign snapped off, and the building was ready for “make-up” (2 next page).

Since my goal was to represent a modern, reasonably well-maintained office, I decided to detail the relatively blank roof, add some signage, a couple of figures, and do some light weathering. I was headed for a “used and not abused” appearance, but showing its age, since hot, humid south Louisiana can really do a number on a building.

I started rummaging around in my scrap box, and came up with several details to use, as well as some signs and paint for the roof. All of these are called out in the Parts List on the last page. I should note that some of the parts are getting hard to come by – both Cal Freight and Sunrise have suspended production of many of their detail parts. N scale modelers looking for Cal Freight details might check out LBC Hobbies in Williamsville, NY – they do mail order business and



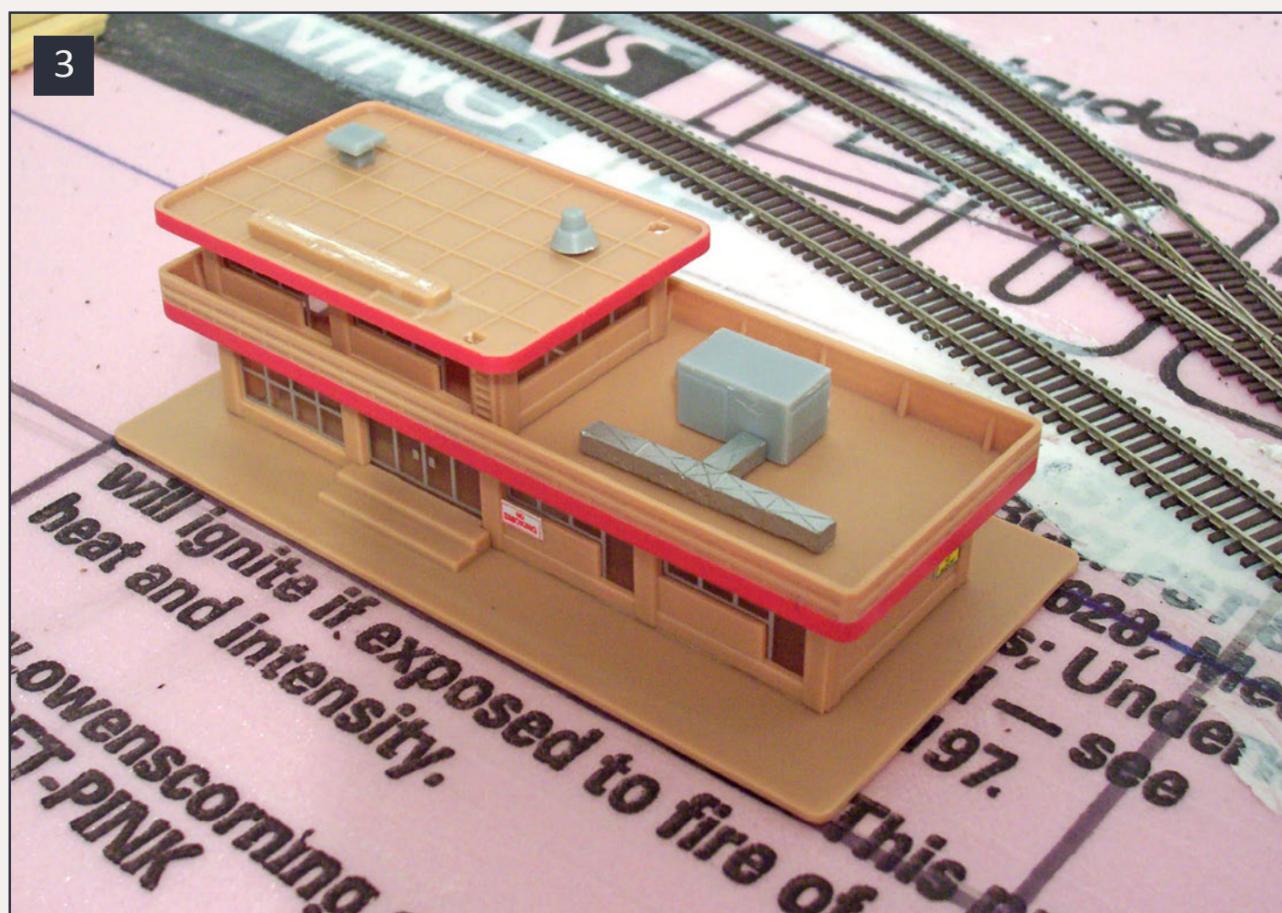
**1: The basic plastic die-cast building as purchased from Target. The windows and doors are painted on, and the sign on the roof is very much out of scale. But there is hope!**

maintain an eBay store; they are also first-class people to work with in person, and I visit on nearly every trip I make to the Buffalo region. If you can't locate all the details on my list, many of the parts in the Walther's Modulars Roof Top details series make great substitutes.

Once I had located, and sorted, all the detail I wanted, I did some test fitting of different duct work and detail combinations to see how things might look (Figure 3 & 4). I also decided to simulate a tar roof, which is a common treatment for industrial roofs in Louisiana.



2: After the sign was snapped off, the building was ready for further work.



3-4: Test fitting of different duct work and detail combinations.

After working out an arrangement of the details that I liked, I set about painting and detailing the building. I began by sanding down the long stub on the upper roof where I had cut off the sign. I used a series of increasingly fine grit sandpapers and sanding sticks to achieve a smooth, flat surface on the top of the sign nub. Then I measured the length of the stub with my scale ruler, cut three cross-wise lines (to make four segments) and followed that with a set of x-shaped cuts lightly scribed into each segment. This simulates the pattern often seen in roof mounted ductwork for HVAC systems (as highlighted by Tom Wilson in the March/April 2010 MRH beginning on page 51)

### The color of life

Next it was off to the paint shop. I began by gathering all the details that needed to be painted, and taped them to the top of a flat scrap of lumber from my wood shop. Then I took the whole assembly outside on a sunny warm Saturday, and gave the details a light coat of Floquil Bright Silver from a spray can.

While I do use an airbrush for a lot of my work, I find that base colors on details are often best done in batches using spray cans. Once the first coat had dried, I added a second light coat, and set the details aside to dry for at least 24 hours.

Next, I turned my attention to the roof tops of the building. I began by masking off the entire building, except for my “ductwork” on the upper roof. I painted it silver using the same color and techniques as the details, mentioned above. Once it was dry, I removed the masking tape, and got out my bottle of Polly Scale Tarnished Black. I found that

this color looks good for a tar roof in N scale that is fairly recent. I brush painted the tar color onto both sections of the roof, using a #000 brush around the edges of the roof, and a #0 brush to fill in the painted areas. Working slowly, I was able to keep nearly all of the “tar” off the sides. Don’t worry if you get a little paint up the vertical roof edges – real tar

is messy stuff, and it is often hard to keep off things no matter how careful you are.

### The home stretch

Once all the paint was dry, I began to glue down the details following the plan I had developed earlier (Figure 5). I glued each piece to the roof with a small drop of CA, applied to the

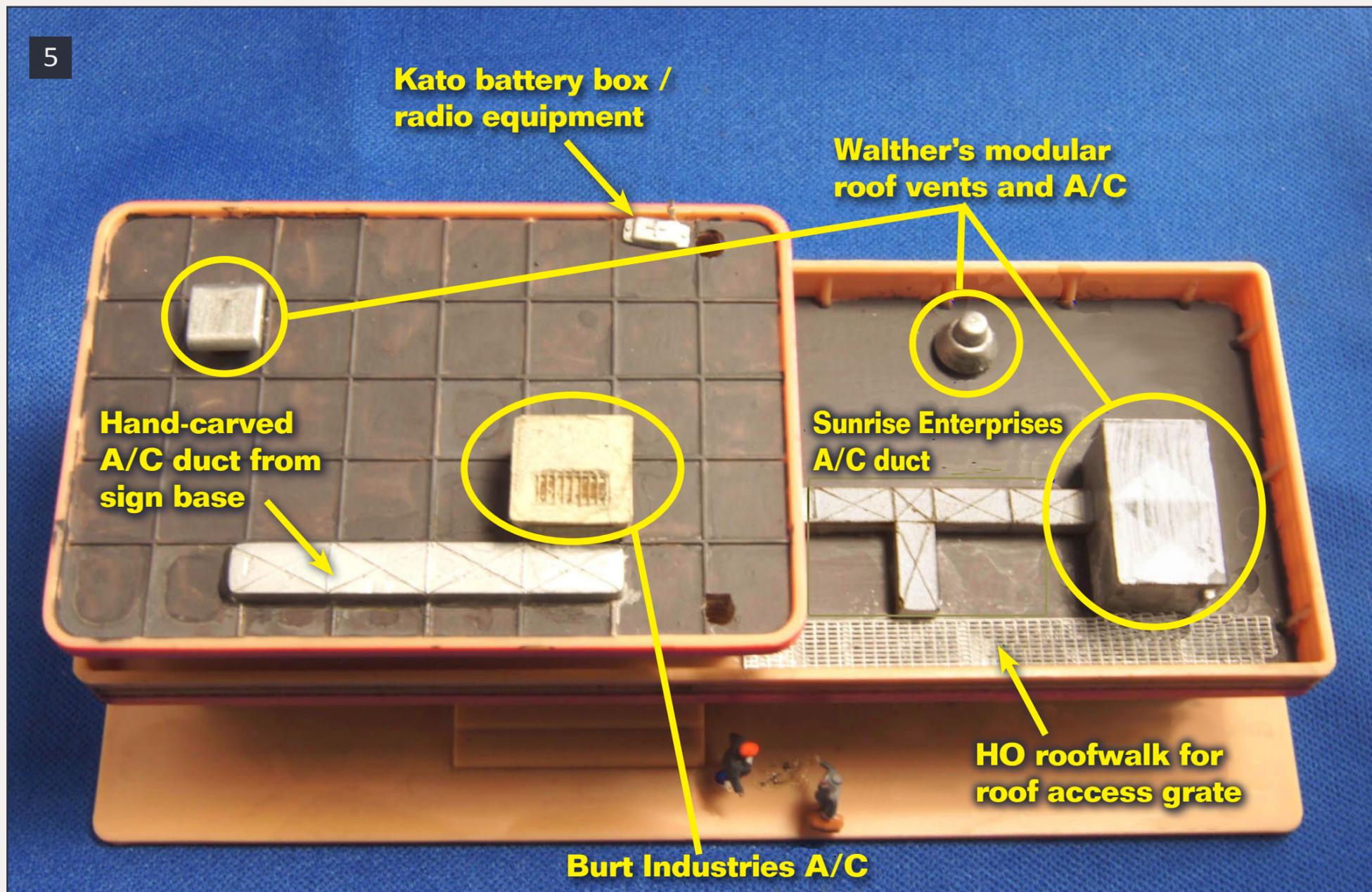
detail part with a Microbrush. The grating alongside the HVAC duct on the lower roof was a late addition – technicians servicing the big air handler needed something to stand on so they wouldn’t get stuck in the tar on a hot summer’s day!

I then added a radio antenna and radio electronics box to the upper roof using a 2” length of stainless steel wire and a Kato trackside battery box that were kicking around in my parts drawer. The antenna is approximately 2” tall, and the box is just glued to the roof next to it.

I cut several variations of No Smoking signs from the Blair Line set, and glued them to the building’s walls. Safety signs are important in industrial environments, and given the highly flammable nature of the products coming right behind the office on the track, I didn’t want my 1:160 people to carelessly blow themselves up.

I also added two figures to the front sidewalk (seen from above in figure 5) – one is an African American plant worker I hand-painted from a Preiser undecorated figure set, and the other is a plant foreman/company exec that came pre-painted in an Ibertren figure set I got in Spain long ago.

While I was doing all this, I was also trying to figure out how to create a realistic parking lot to plant the office on when I was done. I’ve never been completely happy with the poured



5: I also added two figures to the front sidewalk (seen from above).

methods – spackling, joint compound, plaster. I can never get the surface colored to match real asphalt, and even sanding the surface leaves it too rough for N scale surfaces.

My problem was solved when I stumbled on Scalesscenes.com. I downloaded a .pdf file of their TX22 Carpark photo textured paper, and printed it at 200% (the original worked for small European cars but not American trucks). I cut up parts of the print to rearrange them around the office, and laminated it to a scrap of matte

board using 3M spray adhesive (Figure 6). I then fixed the ink with a coat of Dullcote, so it won't run or fade. I finished off the parking lot by painting some BLMA Carstops yellow and installing them on the outside edge.

Once I had the parking lot done, I lightly weathered the building with a wash of India ink in 91% isopropyl alcohol. I like this formula better than the "traditional" 70% alcohol version, because I think the 91% carries the ink better, and it evaporates faster, allowing several washes to be applied



**6: The basic parking lot. The Scalesscenes.com parking lot PDF was printed at 200%, cut out, glued with 3M spray adhesive to a scrap of matte board left over from a framing project.**



**7: The newly completed refinery office comes alive with the addition of vehicles from many sources and a BLMA Pod, no doubt holding important refinery documents moving from one office to another.**

in the same sitting. Then I placed the parking lot on the layout, put the building on top, and added a few vehicles to see how it turned out.

With this project complete, I reviewed my objectives – to create a believable refinery office from materials largely on-hand, and thus keep the cost down. I think I've done that, and I hope the next time you see something in the \$1 bin at your local store, you'll stop and ponder the possibilities. You may find yourself

doing an exciting project that will add to both your modeling skills and help get your pike one step closer to completion.

*More on the next page.*

 **Reader Feedback**  
(click here) 



**8: Seen from ground level, the office sits in front of the refinery backdrop (itself a print of an Internet stock photo laminated to foamcore). Now, all I need is some refinery workers to fill the space!**



Philip L. Hoffman makes his living as a national grants program director for NOAA Research, the federal agency that conducts basic and applied ocean, atmosphere and climate research. When he's not at work, Philip spends his time being dad to Abbi, Hannah, Marcella, and Tucker, sometimes amusing his wife Kirsten in the process. Model trains are one passion, mo-

torcycles are another, and his golf clubs are less dusty than they used to be. Philip wants to thank his Uncle David Hoffman for getting him started in this hobby, and the on-line communities of the MRH Forums and The Railwire.net for pushing him to improve his modeling skills.

## Parts and Supplies List

- Die-Cast Plastic Office Building "Fire Station" World Trump Ltd. (P/N 234-240684)
- Cal freight A/C Duct Set #4 (P/N 2285)
- Walthers Modulares N Scale Roof Details (P/N933-3286)  
Small Roof Top A/C  
Short T Exhaust Stack  
Motorized Vent
- Period Miniatures Individual Power Meter (P/N2094)
- BLMA Concrete Car Stops (P/N611)
- UNKNOWN HO Roofwalk (P/N 190-491)
- Stainless steel wire, approximately 0.01 inch dia.
- Kato Track side accessories battery box (P/N unknown)
- Scalescenes.com TX22 Carpark texture sheet PDF
- Poly S Tarnished Black (P/N F414140)
- Floquil Bright Silver 3oz Spray can (P/N 130101)
- India Ink diluted 1 TBSP ink to 1 pint 91% Isopropyl Alcohol
- CA as needed ■

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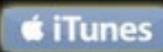
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# THE CAR SHOP



## Log Car Bark Debris

New role for garden mulch! ...

by Joe Brugger

Photos by the author



This is a project that can make anyone look like a master detailer, and is almost impossible to mess up.

Flatcars converted to haul logs accumulate bark and splinters on their decks, and the amount builds up over time. Trains hauling logs move at moderate speeds, so the debris may shake off the sides but tends to stay along the cars' center line.

These cars were an eBay find and are destined for log trains on the Columbia, Cascade & Western 1979-era club layout. They won't be used in interchange traffic, and haven't been re-stenciled yet with CCW reporting marks.

Some of the model flats are Athearn and others appear to be either

Walthers or old Train-Miniature flats. The mixture of styles is typical of old equipment converted to new uses. They arrived on the property with Details West 235-171 PC&F log bunks installed and only needed a little touch-up painting, and the addition of yellow warning bands on the tops of the stakes.

To meet club operating standards, steel weights were replaced with lead sheet to bring the car weights up to 3.5 ounces. Kadee 148 couplers and Intermountain 33" wheelsets were installed.

The list of materials is simple: bark dust mulch from the garden center, Elmer's Glue, water, dish washing liquid, and paper towels.

Take a couple of scoops of bark mulch from the bag and sift it through a coarse strainer. I used one with holes 5/16" in diameter, originally intended for draining cooked pasta. Toss the pieces that won't pass through this strainer back into the mulch bag.

Using a finer strainer (about 1/16" wire mesh works well), sift the material

down to a fine powder. I filled a couple of 16 oz. cottage cheese containers about halfway, one with bark powder and one with the minus-5/16" bits. This was far more material than needed to do eight cars. Letting the bark dry out for a day or so makes it easier to apply.

With your fingertips, grab a couple of pinches of the dust and sift them

lightly over the top of the flatcar, concentrating on the center of the car, and up against the log bunks.

Fix the dust in place with drops of a 30:70 mixture of glue and water, mixed with a couple drops of cheap dish washing liquid. The detergent helps the glue spread out on the car and absorb into the bark fibers. An

**1: Loose bits of dried bark mulch dust are sprinkled over the log flat's deck before glue is applied. The flat in the background shows a bit too much Elmer's, but the excess will be soaked up with the edge of a paper towel. The process can be messy, so work over a surface that's either disposable, or easy to clean.**



eyedropper helps to control the amount of glue dripped onto the debris. Use only enough to soak the bark.

The next step is to take a couple of pinches of the larger bark debris bits and sprinkle them over the top of the bark dust, to replicate strips of bark and small branches. The glue mixture should draw up into the larger pieces, but if it doesn't, apply another half-drop of glue.

Once the debris has absorbed the glue, check for puddles and use the edge of a paper towel to soak up the excess. If you don't, the glue will leave shiny patches. Maybe you want puddles on the decks of your log cars, maybe you don't.

Then, leave the cars in a safe place for a day or two while the glue dries. When this is done, check the debris for loose spots. Either apply more glue, or gently shake the excess debris back into the containers.

When you're satisfied with the cars' appearance, mist them with a light coat of clear flat finish to dull any shiny spots and help to fix the debris in place. I used Krylon #1311 Matte Finish, which dries quickly and comes with a good spray tip on the can.



2: Sifting in two stages produces fine bark dust (left) and coarse debris, used to form two layers of trash on the flatcar's deck. If the material is allowed to dry, it will absorb more of the glue mixture.



3: The finished product shows the generous amounts of debris that can be found on log cars. A few bits have been "coaxed" to sit up on the log bunks to give a little variety.

# Have you started your MRH Contest entry yet?

Click here to learn more ...

# Simple Weathering with Oil Paints

– by *Dirk P. Reynolds*

Photos by the author



Quick and easy car weathering,  
plus tips on making easy coal  
loads ...

 **Reader Feedback**  
(click here) 

**Y**ou take your car out of the box and it looks like it was painted yesterday. Or worse yet, it looks like just what it is, painted plastic.

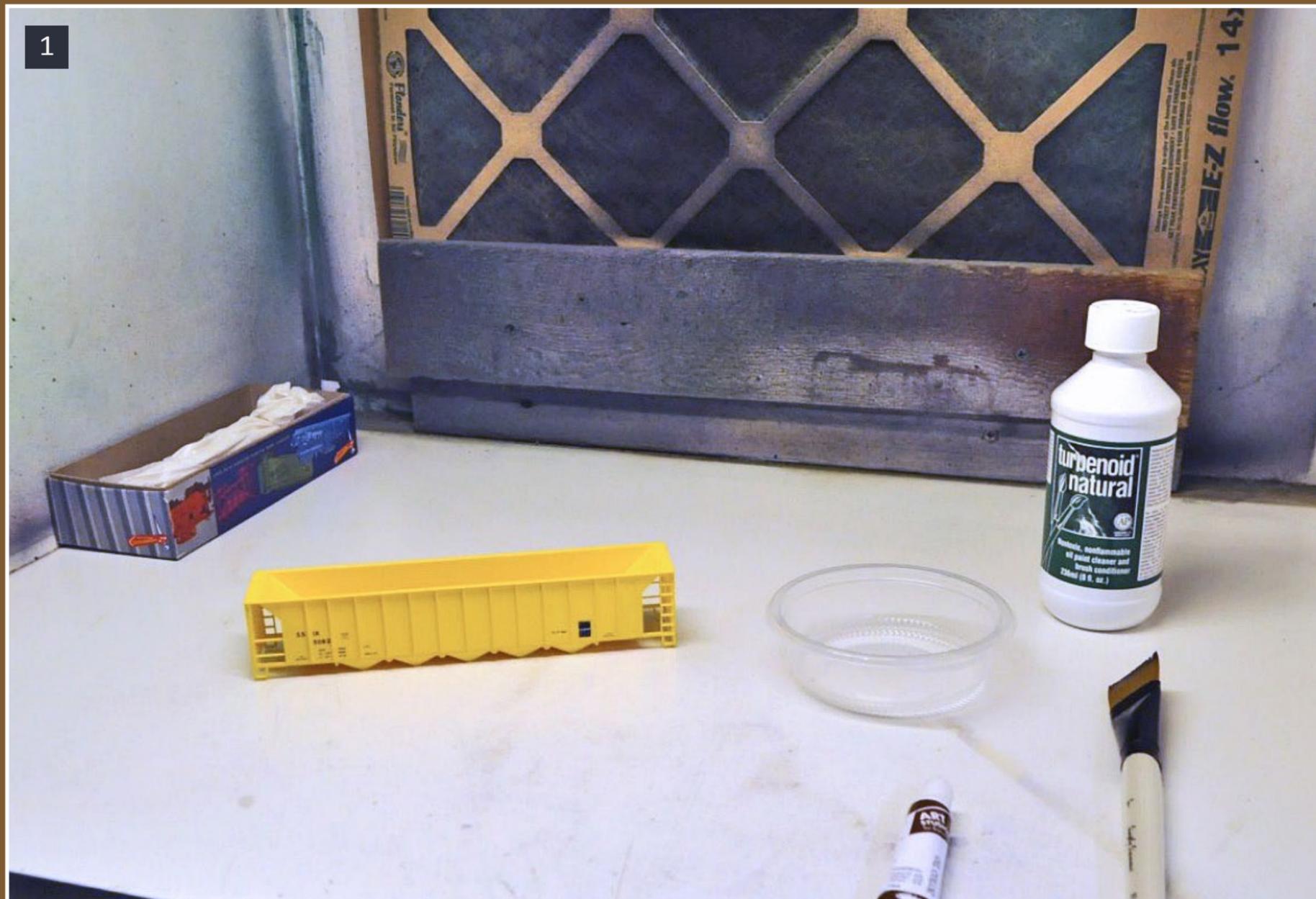
Not very prototypical is it? Freshly painted real cars get road grime and dirt on them quickly, so some weathering is in order.

If the thought of weathering your rolling stock scares you, here's a simple weathering technique using oil paints and a little airbrushing that can produce a more realistic weathered look to your cars, and it's simple to do.

Go ahead and give it a try – you'll never be afraid of weathering again!

## STEP 1: Set Up Your Work Area

Get some oil paint and turpenoid thinner from a craft store. Common colors to get include: raw umber, burnt umber, raw sienna, burnt sienna, white, and black. Next, set up your work area. I use a 1" brush, some oil paint, and a bowl for the Turpenoid. Turpenoid, an odorless version of turpentine, will not eat the decals on the model while it thins the paint.



1: Ready to begin with tools and the new car.

## STEP 2: Thin Your Oil-based Paint

Squeeze out some raw umber paint on a flat surface. Pour some Turpenoid thinner into the bowl and dip your brush into it. Put the brush in the paint and swirl it around to thin it out. Load some paint in the brush and head for the car with your brush.



2: Paint loaded in brush and ready to apply to car.

## STEP 3: Apply Paint to Car

By using straight pull down strokes, apply a thin uneven layer of oil paint to your car, trying to get more paint on top and streaking it down the sides. Also get the interior of open top cars with at least some paint - you never know when you might want to run an empty coal train. The idea is to give a streaked, dirty appearance to the car.



3: Paint applied with downward strokes.

## STEP 3: Apply Paint to Car *Continued ...*

When applying the paint, it may be necessary to dab the brush onto a dry paper towel if you get too much paint in the brush.



4: When working with oil paint, you will notice Turpenoid leaves an oily film on the model that has to be sealed. This is the next step.



5-7: When you get finished, you should have something like this. Drying time will vary due to humidity in your area. I let mine dry overnight to ensure a long curing time. Then it is onto the next step: assembly and final weathering with an airbrush!

## STEP 4: Add Grimy Black with Turpentine

For this step I use turpentine, Floquil Grimy Black paint, a “helping hands” clamp to hold the car, lacquer thinner to clean the brush and thin the paint, a Paasche airbrush, and a paper towel for removing paint from the brush. The octagonal wood cup is for holding the airbrush between paint applications.



8: Ready to apply Grimy Black to the car.



9: I begin by dipping the 1 inch brush in the Turpentine and pulling it down like before.

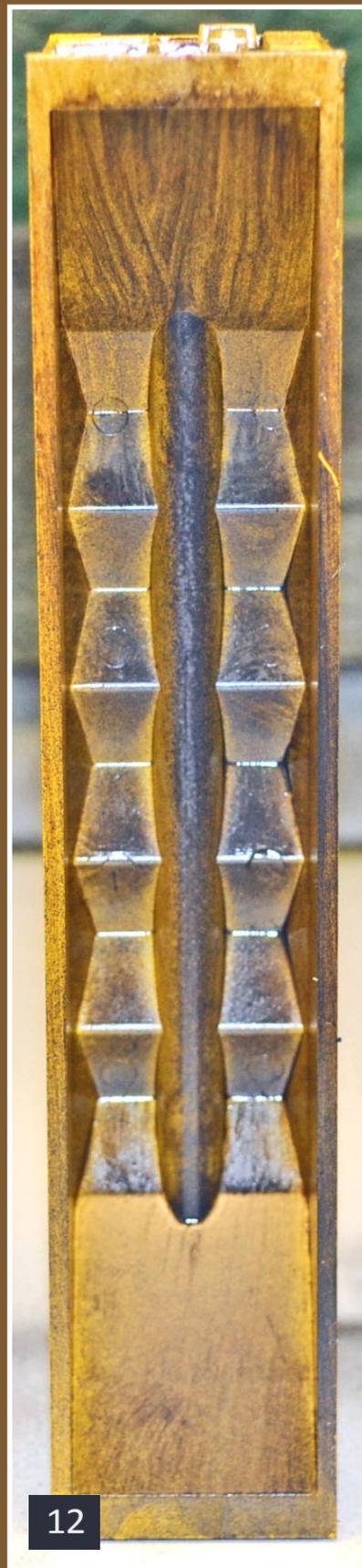
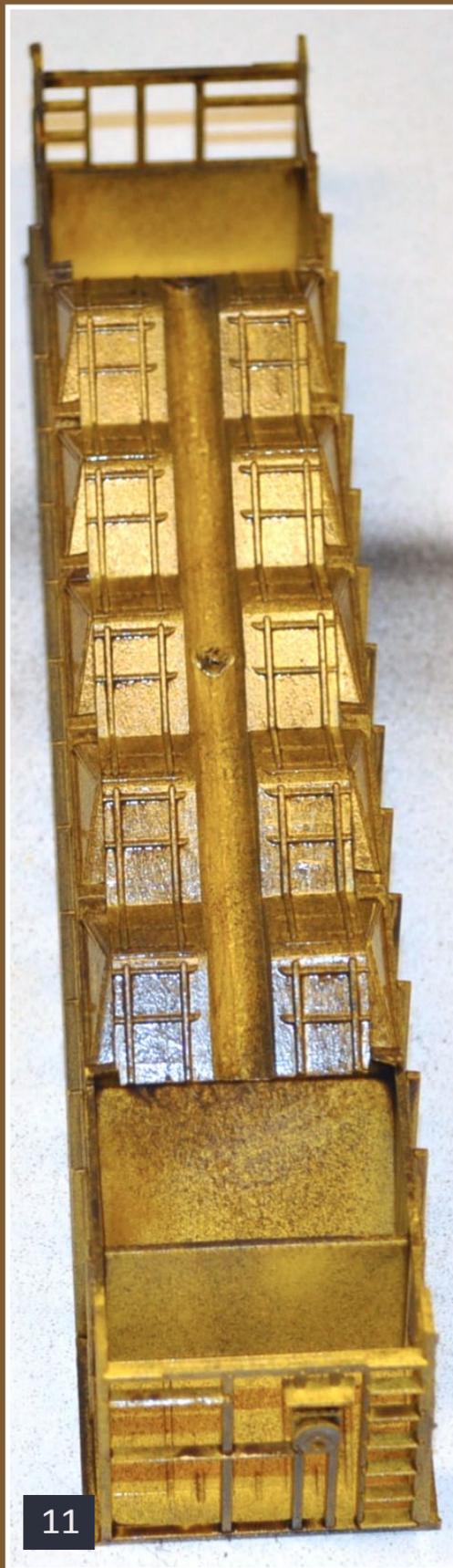
## STEP 5a: Airbrush on Coal Dust

Next comes the airbrushing. I thinned Grimy Black into a wash. I apply thin coats to the car. Some unnatural spots of black grime formed on the car surface, so I just used the brush with the pull-down method to blend them in. After letting the car dry a bit, I moved to a slightly thicker mixture of Grimy Black paint and lightly sprayed the entire model to make it look heavily used. Let the washes dry, seal the car with Testors Dullcote, and do the final assembly.



10: Always use a spray booth with an exhaust fan to avoid breathing paint and thinner fumes.

## STEP 5b: Apply the Dullcote to Seal the Paint *Continued ...*



11-13: Car with Dullcote applied.



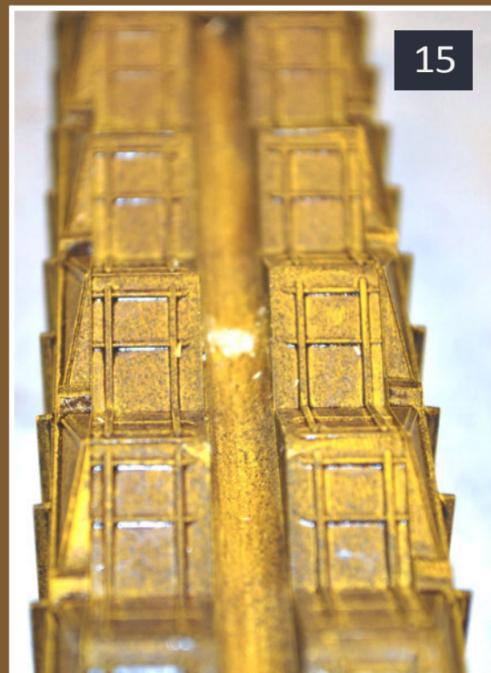
### Modelers Tip

Having trouble with the lacquer thinner evaporating out of the bottle? I used a sandwich bag twisted on with the top. Try it, *it works!* ■



## STEP 6: Final Assembly Preparation

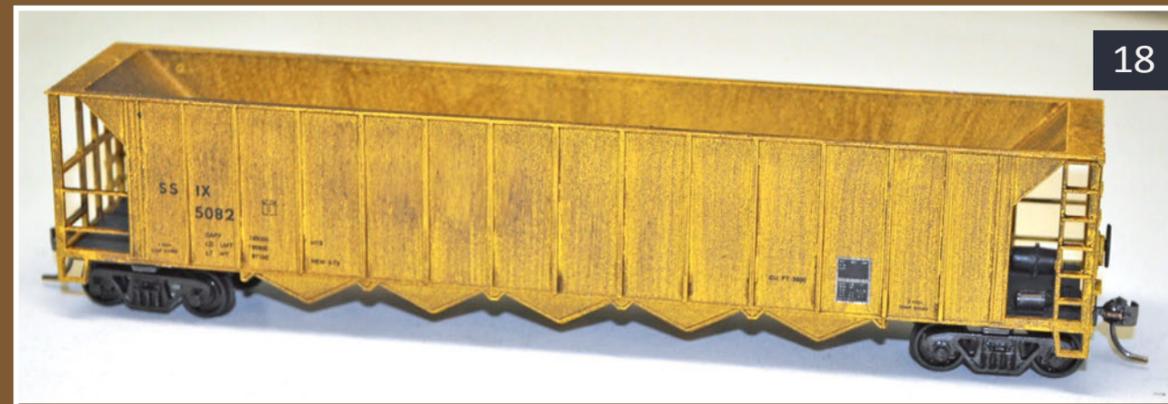
Now for assembly... On my model, I found a huge plastic burr left in the mold! I had to use an X-ACTO knife to carve it off. The frame on this model supplies the weight and I had to remove heavy metal flashing from the frame with a needle file. I also painted the frame with Grimy Black.



14-17: Burrs removed and chassis painted black.

## STEP 7: Final Assembly

Assemble the car by pushing the plastic brake details into the chassis as seen at the right of the picture. I added Kadee couplers since the model came with horn hook couplers. I added 36" metal wheel sets from Proto 2000. Finally, I added the brake wheel for a finishing touch!



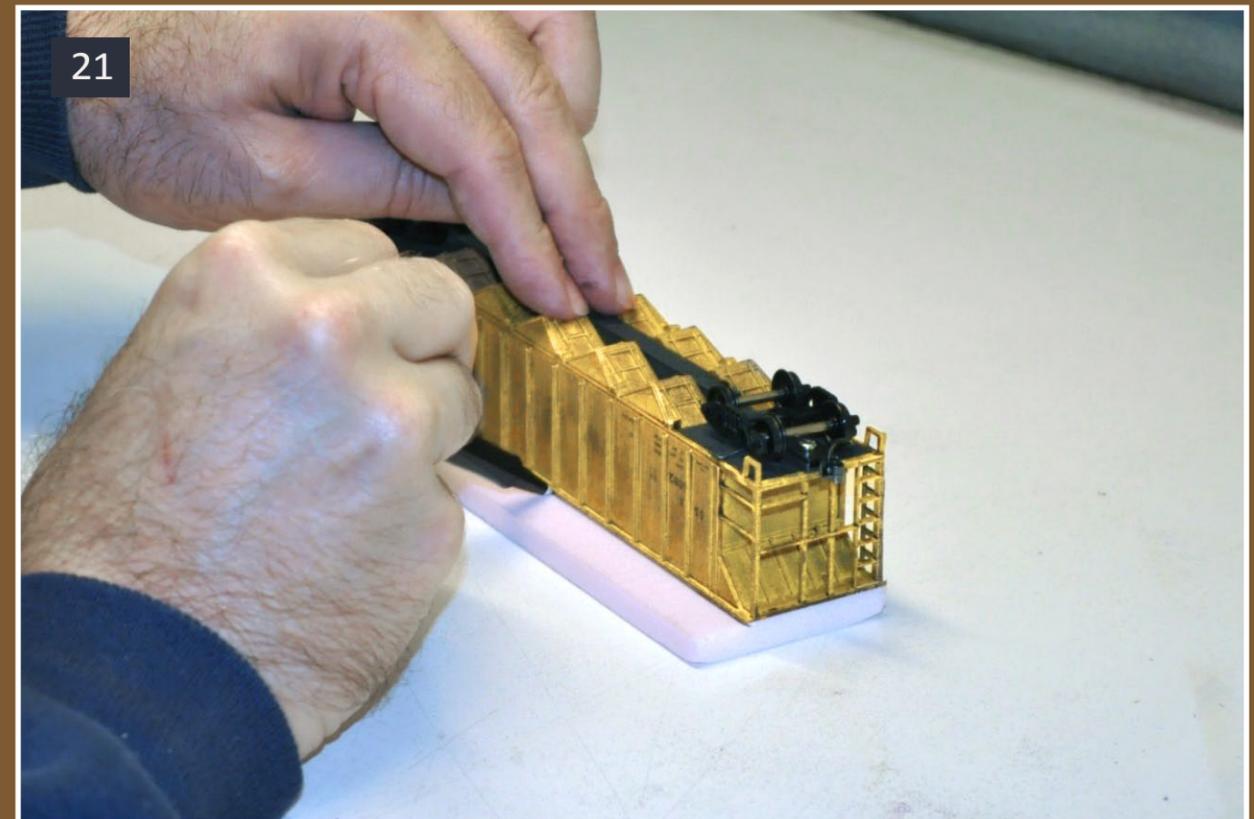
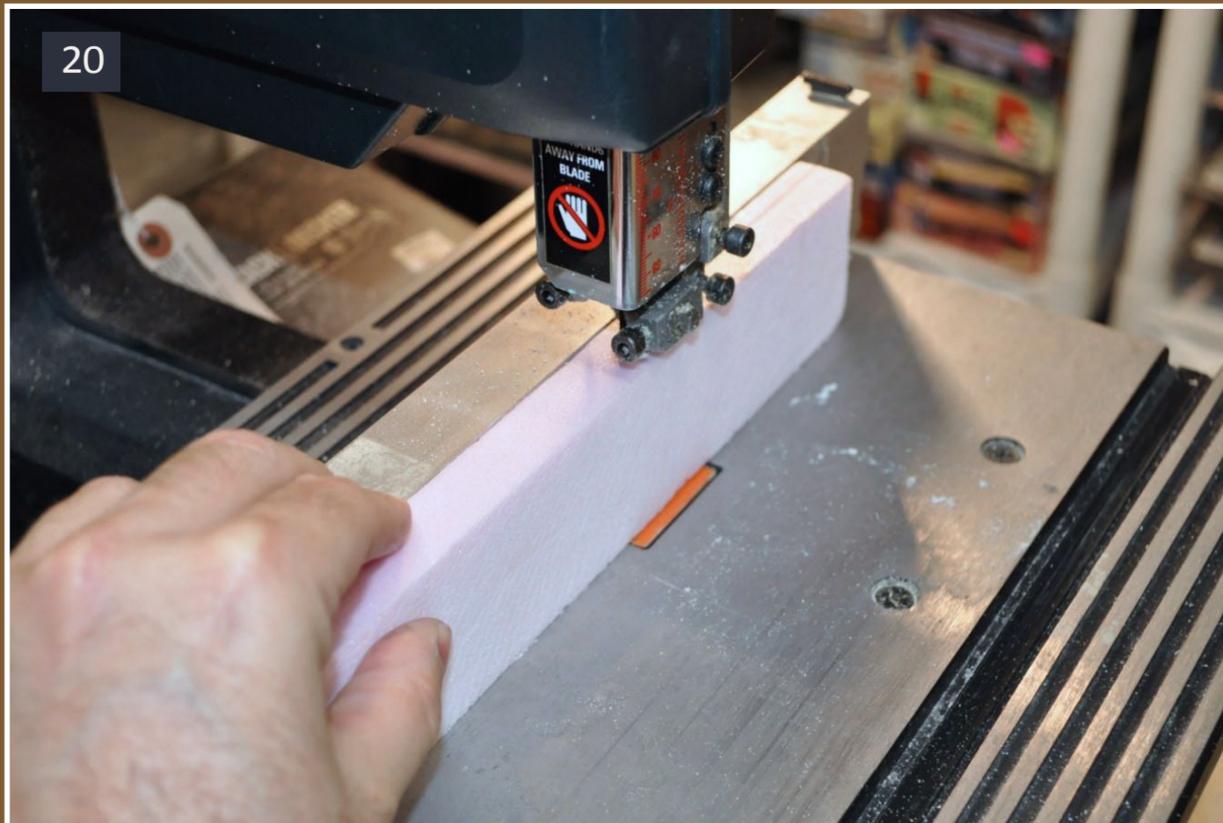
18: Assembled and painted car.



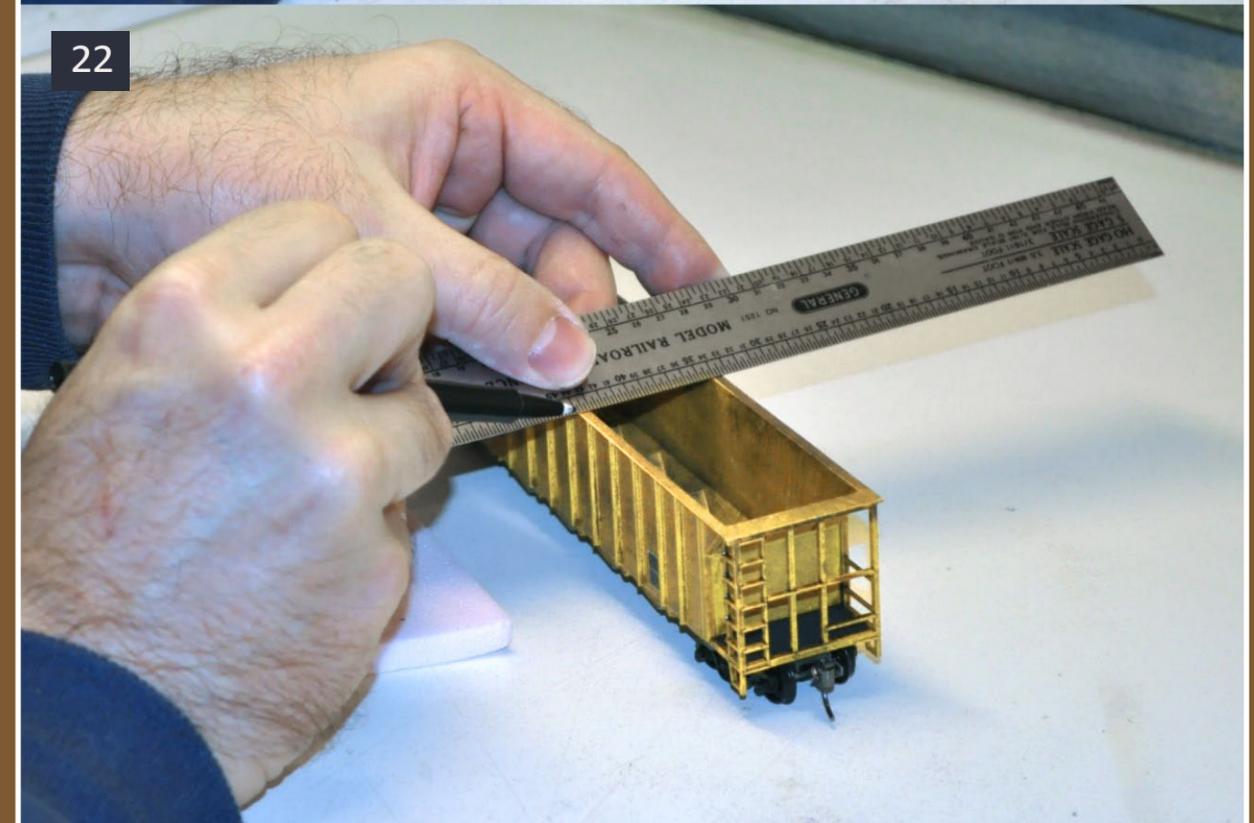
19: And here is the finished car rolling on my layout's lengthy bridge (scratchbuilt). One finishing touch – I decided to add a coal load to this car.

## STEP 8: Make a Realistic Coal Load

Cut a 1/4" thick piece of foam using a band saw.

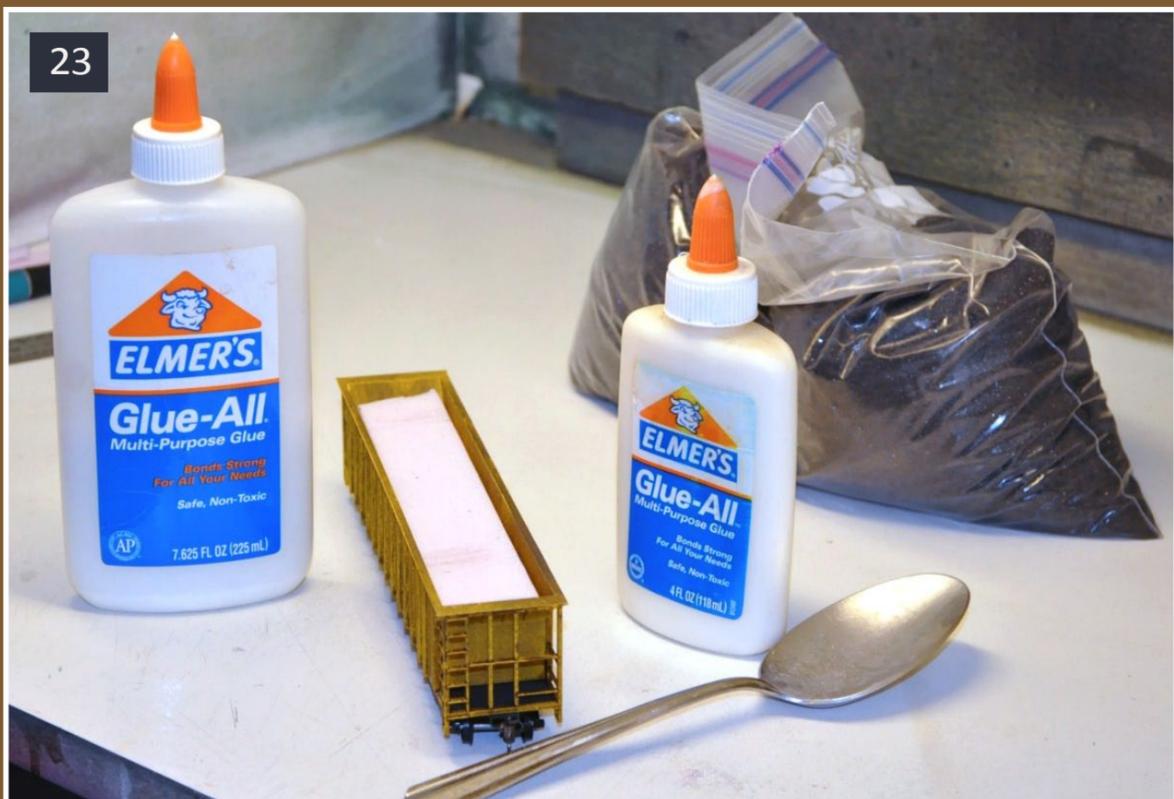


20-22: I set the car upside down on the foam and drew around it. Measure the interior width of the car's bay. Cut the 1/4" foam to fit inside of the bay of the car.



## STEP 9: Create the Coal Load

I use Elmer's glue straight, plus I also use a glue mixture thinned with water. To make the thinned mixture I put 1/4" of glue in the bottom of the bottle and fill it with water, then added one quick squeeze of liquid soap. I use a tablespoon and my bag of simulated coal (which is actually shredded black glass used to clean pipes under water).



23: Tools to be used: Coal, bottle of straight Elmer's glue, bottle of thinned Elmer's glue and a tablespoon.



24: I insert the foam into place in the car, then squeeze the straight glue onto the foam and spread it with my finger until it is covered. The glue was spread thickly giving the glass something to sink into.

# Some of the finest trees in the hobby ...

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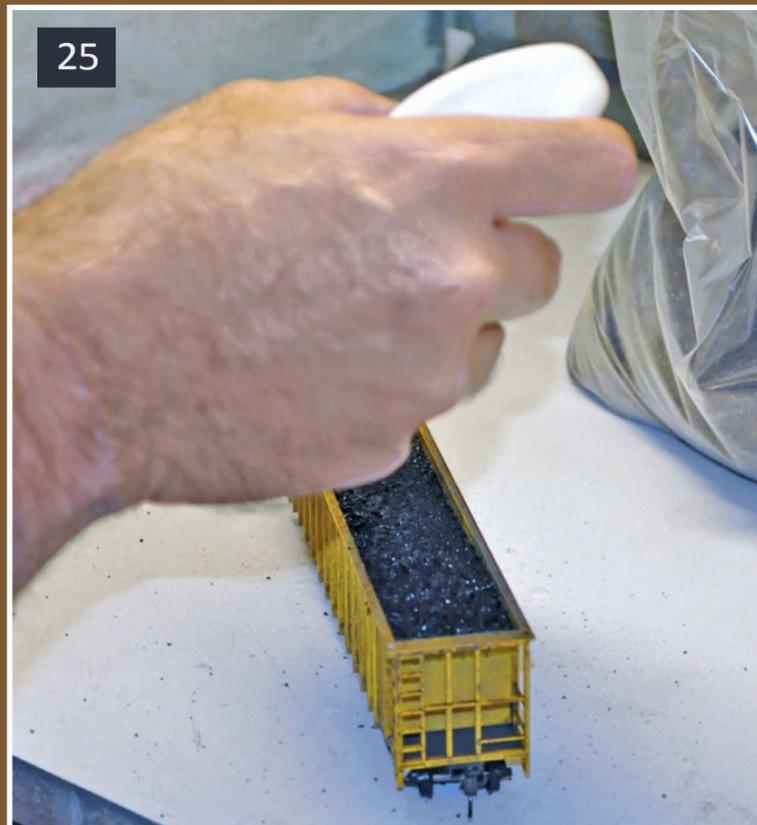
CANYON CREEK  
SCENICS  
canyoncreekscenics.com

click to visit our web site

## STEP 9: Create the Coal Load *Continued ...*

25-26: I drip the thinned glue mixture onto the black glass shreds. I do not want to overdo it, so I go very slowly until it is completely soaked. I also squirt the glass with water allowing the glue to flow in more easily.

27: Here is the final product ready for the layout. The glass gives the car extra weight. Give this a try and see what you think. I find it's easy and effective.



Dirk Reynolds has been model railroading since the dinosaurs roamed the earth. His family comes from Dupou, IL, and his great-grandfather engineered the doodlebug that ran from St. Louis, MO to Marion, IL.

Dirk also ran his own hobby shop for 9 years in Dupou, IL under the name of Reynolds Railways. It closed in early 2010, but he is now operating out of his house in Columbia, IL under the name of Dirk's Trains.

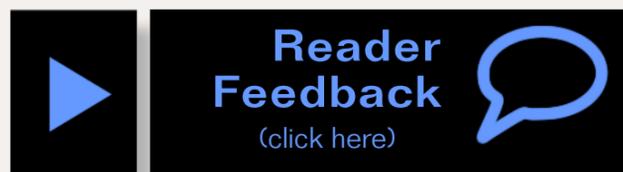
Contact Dirk at:  
[comptrain2002@yahoo.com](mailto:comptrain2002@yahoo.com).



Remember to also check out the MRH Hobby Marketplace for more great products! *Click for more ...*

# Seattle 2012

32nd  
National Narrow Gauge  
CONVENTION



By the MRH Staff: Joe Fugate, Les Halmos and Daniel Nava

**M**odel Railroad Hobbyist attended the 2012 National Narrow Gauge Convention in Seattle, Washington from September 12 - 15.

We visited layouts and walked the vendor room floor, as well as attended some clinics. Here are some photos summarizing what we saw and heard.

This photo report is far from comprehensive. As anyone who has attended these events knows, it's impossible to see and do everything. If we don't happen to show your favorite Seattle area layout, or if we don't show your favorite vendor, we apologize. We provide this report simply to give you a flavor for the event based on what we were able to see and do.

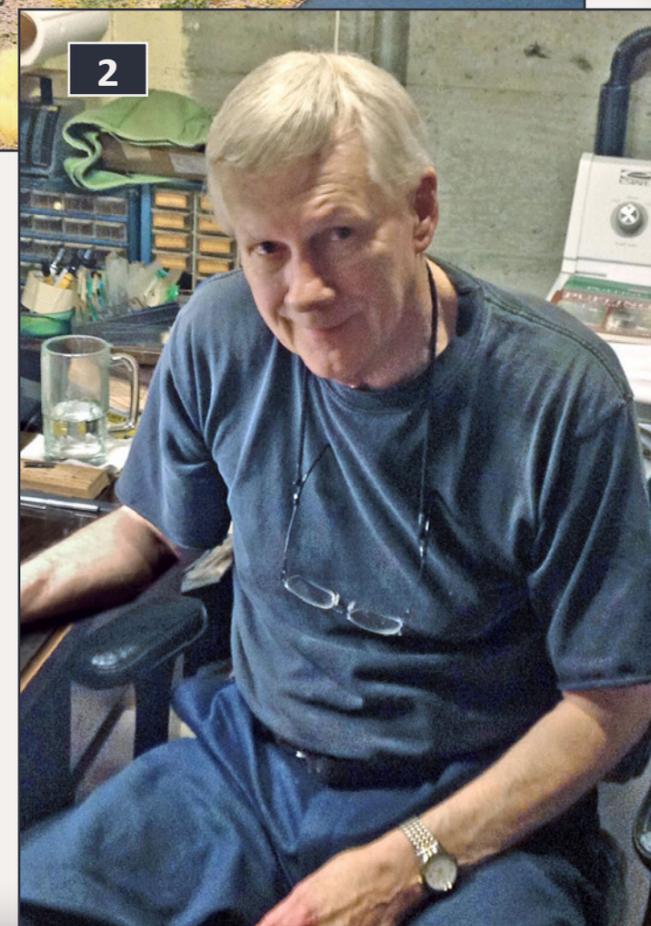
We provide photos of the layouts we managed to visit (got to about half of them) as well as a few other photos from the vendor floor and of railroad subjects around the Seattle area.

## An MRH Exclusive Report from Seattle



**1:** There's perhaps no better-known narrow gauge layout in the Seattle area than Paul Scoles' Sn3 Pelican Bay Railway and Navigation Company. Paul has done several articles, videos, and clinics on his techniques and his layout shows them off well. It's always a total treat to tour his layout.

**2:** We captured a snapshot of the scenery master himself, Paul Scoles, sitting at his workbench while a host of modelers toured his layout. We wish to thank Paul for opening his home for a layout tour. We always appreciate fine modeling and his work is some of the best.





3-4: Chuck Ricketts' On30 Sherwood, Shelton & Sarazen. Chuck's freelanced layout depicts circa 1910 on Washington's Olympic Peninsula. Chuck's layout features many logging and waterfront scenes in his 400-square-foot layout space.



5-6: Greg Wright's Consolidated Republic Mining Company is set in north-central Washington about 1935. Greg models 3/8" to the foot, which means he scratchbuilds a lot! The track gauge scales out to 20", allowing Greg to use HO gauge track on this 330-square-foot layout.



7-8: Jim Younkin's 1100-square-foot double-decked N scale layout has a many scenes depicting southwestern Washington railroading, with lots of bridges and sprawling lumber industries. Jim's layout is a combination of Burlington Northern and his own freelanced regional railroad.



9-10: The Puget Sound Model Railroad Engineers HO layout in the Washington State Historical Museum fills a whopping 2400-square-feet. Northern Cascade themes can be found across the layout, which has 1950s scenes progressing from Tacoma to Stampede Pass.



11-12: Dick Karnes' New York, Westchester & Boston in S scale takes up 470 square feet of space and depicts a northeastern line under catenary at about 1955. The motive power on Dick's layout includes heavy steam and electrics.



13-14: JJ Johnston's freelanced HO Puget Sound Iron Goat Railway is the cover story in the October issue of *Railroad Model Craftsman*. JJ's layout depicts the Puget Sound area at the end of the depression in 1939, and features many highly detailed, lighted scenes.



15-16: Adorning the entrance to the vendor room, the On3 Hangman Creek Lumber Company's shadowbox display layout captured our attention. This modular layout sports over 1000 conifer trees, and a number of unique scenes like a log dump and a Quonset hut engine house.



17-18: Barry Dupler's HO/HOn3 South Park branch of the Denver & Rio Grande depicts 1930s Colorado in about 450 square feet. The sawmill scene is a layout centerpiece on the HO portion of the layout. Barry has many additional structures on display awaiting placement on the layout.

19



20



19-20: Bill Sornsin's HO 3000-square-foot Great Northern layout doesn't yet have any scenery, but it didn't fail to impress us with its sheer magnitude and quality of construction. In photo 20, Bill and Joe Fugate discuss the mushroomed portion planned for the railroad.

21



22



21-22: Russ Segner's Sn3 Coal Creek Lumber Company depicts Western Washington's timber country and fills an area of about 300-square-feet. In photo 22, we met David Springfellow, a 13-year-old modeler who's a friend of the family. It's good to see some young blood in the hobby!



23: Dale Kreutzer's Sn3 Rio Grande Southern, 2nd District. Dale's layout fills a 700-square-foot space and models southwest Colorado circa 1920. There's more of Dale's layout on the next page.

24

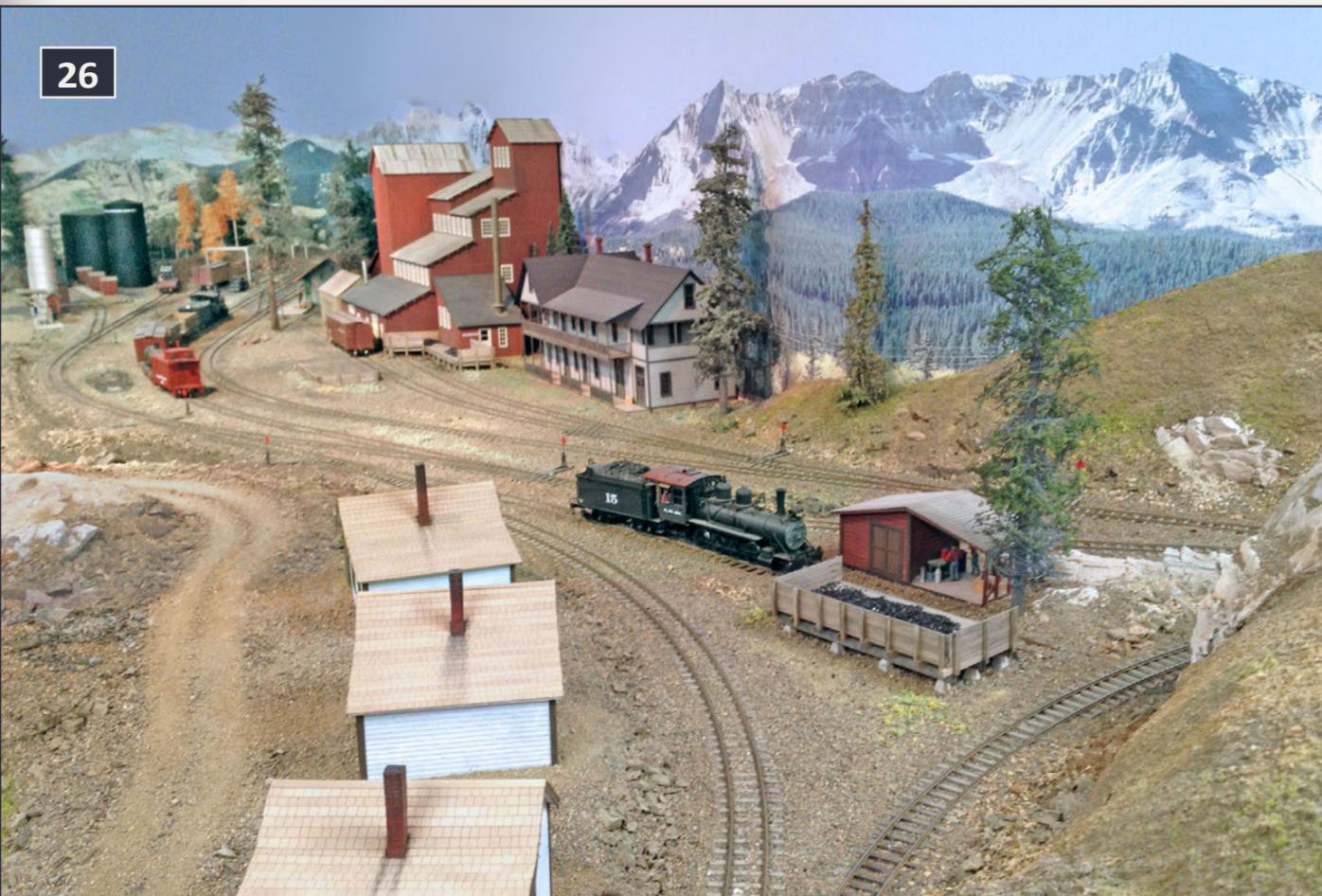


25



24-25: Here are more pictures of Dale Kreutzer's Sn3 Rio Grande Southern. Dale has captured Colorado scenery superbly, and his carefully blended photo backdrops make his scenes look especially authentic. About 30% of the layout is scenicked – we can't wait to see how the rest of it will look when it's done!

26



27



26-27: The Sn3 layout of Steve Depolo fits into a room of about 610 square feet. Steve's layout, the Alaska Pacific Railway & Terminal Company models Katalla, Alaska circa 1942. Can you spot the clever use of a mirror in photo 27? It's very effective!

28



28: This shot shows just one aisle of the vendor showroom. There were a total of five different aisles like this one!

29



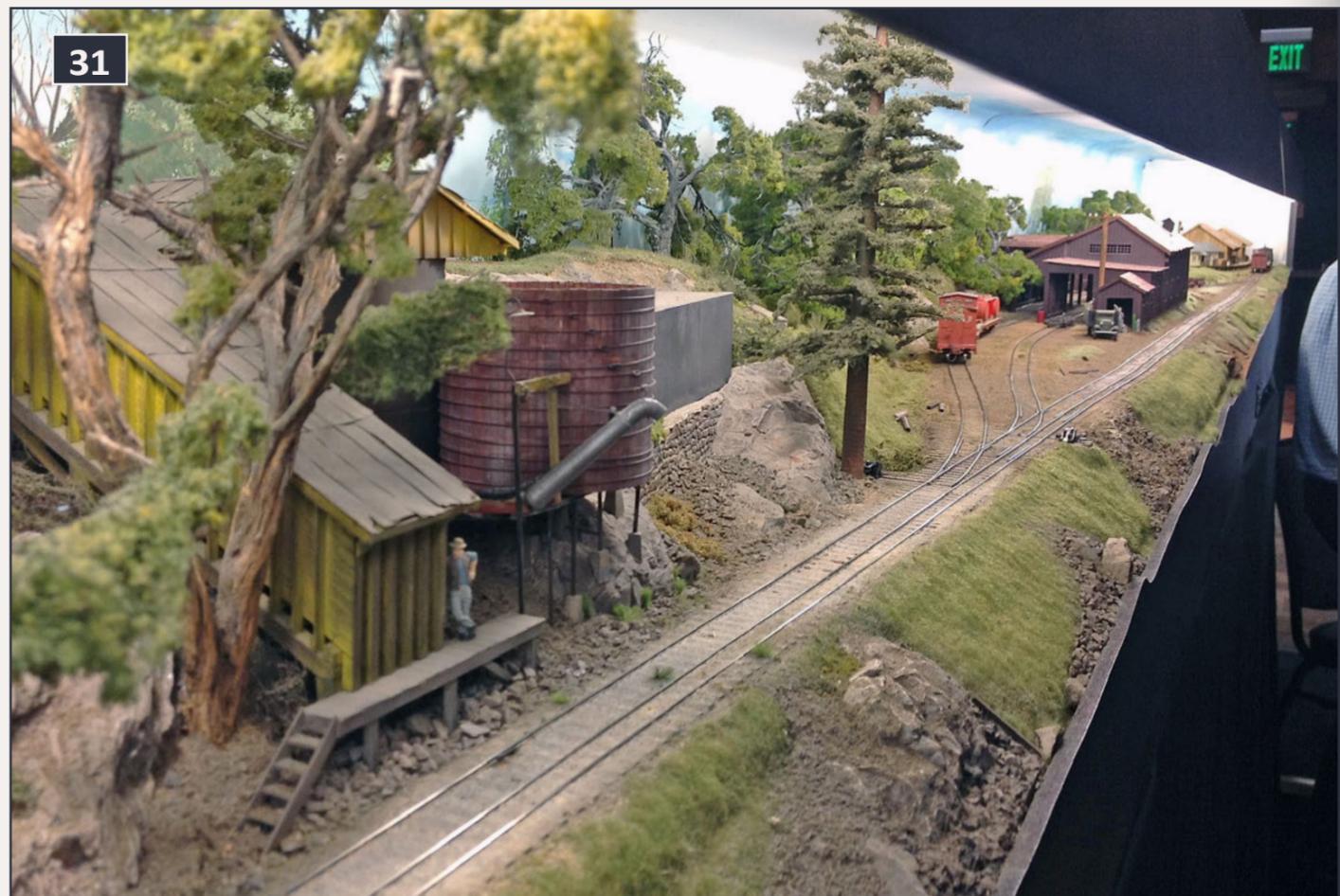
29: Here's MRH's newest sponsor, Downtown Deco – and that's Randy Pepprock at the table. They do some nice structure kits with exquisite detail.

30



30: We talked to Phil Floyd (the Shayfixer) about the On3 engine he ran for us. It went from about 300 milliamps down to 8 milliamps current draw on Nano Oil.

31



31: PBL had a nice Sn3 operational diorama set up in the vendor room. Here's a shot of their diorama and its nice shadow-box look.

32



32: This is the Ballard Locks lift bridge where Puget Sound connects to Lake Union and Lake Washington. Looks similar to the Walthers lift bridge.

33



33: We visited the Kitsap Live Steamers in Port Orchard, Washington. Here's the wonderful Southern Pacific 4-6-2 we rode behind.

34



34: You couldn't ask for a nicer setting for a live steam model railroad than the forests of the Olympic Peninsula in Washington state.



We captured highlights of our Kitsap Live Steamers ride on video!

Playback problems? [Try the YouTube version here.](#)



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## PRODUCT SHOWCASE

### Kadee: PS-1 40' Boxcar

→ [Visit Kadee.com](http://VisitKadee.com)

Kadee got the attention of the entire model railroad hobby in 1997 with the introduction of this beautifully detailed **HO scale** ready-to-run boxcar. The molded styrene model faithfully recreated all the intricate details of a Pullman-Standard PS-1 40 foot boxcar including such features as scale-sized individual grab irons, and detailed brake rigging that included air hoses, retainer valve detail, a brake wheel with finely-executed linkage and chain -- even angle cocks on the air line. The plastic molded running boards and brake wheel platform had open spaces previously limited to etched metal parts.

Kadee's introductory model was decorated for the Chicago, Indianapolis & Louisville Railroad, best known by its Monon nickname. In addition to the Camel-Youngstown door on the CIL car, subsequent versions would be offered with doors made by Superior or Pullman-Standard, depending on the railroad being modeled. The high-quality of the American-made model carried a (then) high price of \$28.95.



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## PRODUCT SHOWCASE

### Athearn: GATC Airslide

→ [Visit athearn.com](http://athearn.com)

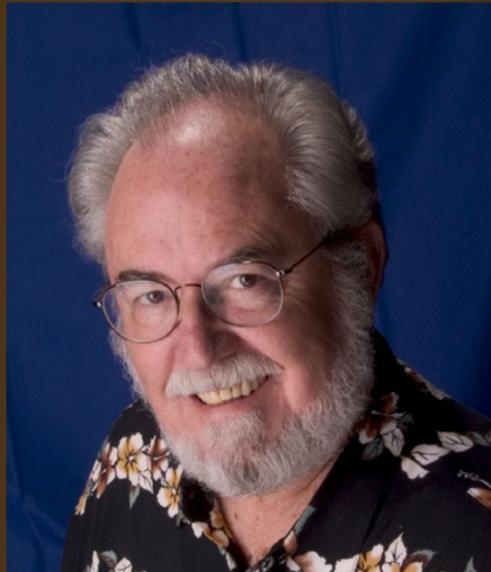


One of Athearn's most popular ready-to-run models is this General American Transportation single-bay Airslide covered hopper car. The uniqueness of the Airslide is in its method of unloading. Although many bulk products can be readily unloaded from covered hoppers, some materials such as flour, starch, sugar, and plastic pellets do not "flow" easily through a standard hopper bay. The Fuller

Company of Catasauqua, Pennsylvania, developed the Airslide in which the interior of the bays are formed into two narrow, steep-sided troughs with a layer of air-permeable material at the bottom. Air is pumped through the material causing the lading to loosen and flow easily through the hopper outlets. Athearn's **HO scale** model is based on an early version of a 70-ton, 2,600 cu ft capacity Airslide built by GATC between 1955 and 1965. The injection-molded plastic body is enhanced with etched-metal roof walks and brake platforms. Grab irons and roping eyes are also metal. Brake details, including wire piping, are all separately applied. Some details, such as hopper outlets and trucks (solid- or roller-bearing), are railroad-specific.



## About our News & Events Editor



Richard Bale writes our news column under the byline of *The Old Yardmaster*. He has been writing about the model railroad trade for various hobby publications since the 1960s.

[Click here](#) to learn more about Richard.

# MRH News Desk: The Latest Model Railroad News, Products, and Events

## October 2012

### Thank You For Your Service

A big welcome home to Bowser vp Gerry Selleck who has just completed 16 months of active duty in the Middle East. Thanks for your service Gerry...

### Consumer Advisory from M.T.H.

M.T.H. Electric Trains has issued an advisory to consumers who purchased 2011 Volume 1 RailKing Pennsylvania S-2 Turbine Proto-Sound 3.0 equipped steam locomotives to cease operating the locomotive due to a missing component that will eventually interrupt communication between the locomotive tender and locomotive boiler. A non-charge service kit with necessary parts and instructions on how to conduct the upgrade which requires soldering, is available from M.T.H. retailers. Customers not comfortable with conducting the fix may return the tender to a service center for warranty repair...

### Hobby Manufacturers Association Names Officers

Fred Hill, owner of The Coach Yard in Pasadena, California, has been re-elected president by the HMA board of directors. Bill Jeric, Losi Division of Horizon Hobby in Ontario, California was re-elected vice president, and Kalmbach executive, Hal Miller, was re-elected to the position of secretary-treasurer. Other newly-elected HMA officials include John Smith of Iwata-Medea, Richard St. John of Hobbytyme Distributors, Paul Weber of Alpha Precision Abrasives, and Bob Wilke of HobbyTown USA. Also Richard Janyszek of Bachmann, Stacy Walthers-Naffah, of Wm. K. Walthers Inc., Gale Cousins of Woodland Scenics, and Ed Rogala...

### Evergreen Hill Designs Acquired

Evergreen Hill Designs LLC, a new firm recently established by Ken Bettis of Elizabeth, Colorado, has acquired Evergreen Hill Designs from Oso Railworks Inc. Bettis said the new firm will resume manufacturing the familiar line of craftsman-style HO and O scale laser-cut structures and white-metal

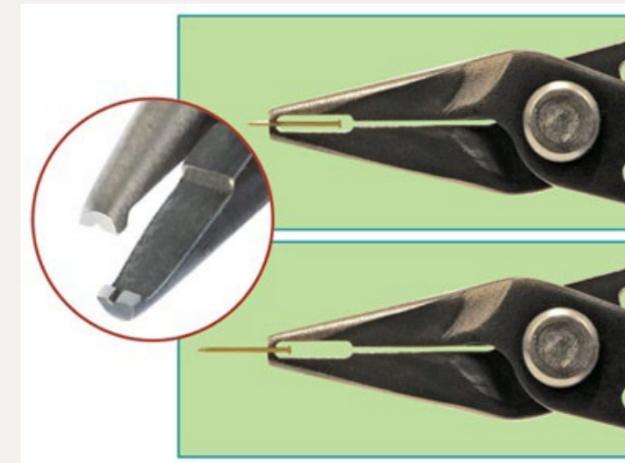
detail parts. According to Dave Rygmyr of Oso Railworks, which also owns NorthWest Short Line, their team has been so busy with NWSL they have not been able to give the time needed to revive the once-popular line of EHD kits. Additional information is available at [evergreenhilldesigns.com](http://evergreenhilldesigns.com) ...

### Tom Bissett 1938-2012

Thomas Jefferson Bissett, Jr., passed away of heart failure on September 3, in Lakeland, Florida. The Chicago native had been a model railroad enthusiast since the 1950s. Tom was a charter member of the Ridge Model Railroad Club in Winter Haven, and was also active with the Ridge Live Steamers. Tom was a gifted story teller and, as a retired locomotive engineer on the CSX, he enjoyed sharing personal experiences and information on how the real railroads operated. The MRH staff extends its sincere sympathy to Mr. Bissett's family...

Let's take a look at what's new this month...

## NEW PRODUCTS FOR ALL SCALES

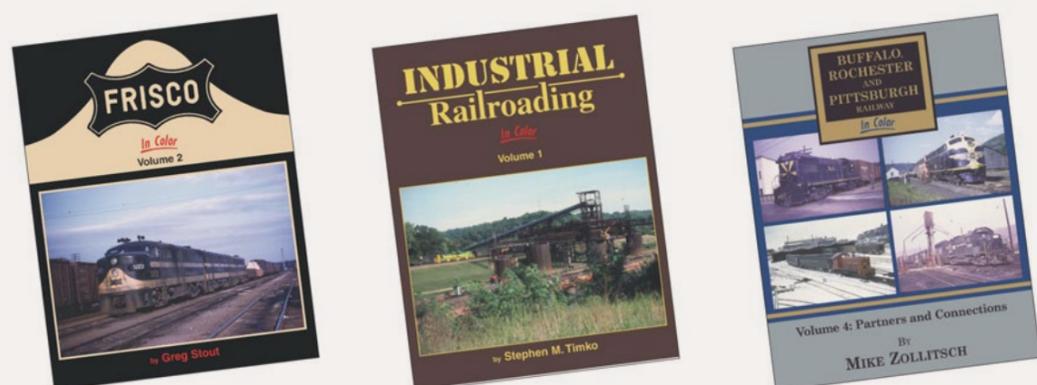


**Micro-Mark** ([micromark.com](http://micromark.com)) is selling special Pin Insertion Pliers that have been specifically designed to insert miniature pins and rail spikes. The pliers are said to eliminate

the troublesome bending and kinking that often occurs when attempting to drive miniature pins. Slotted jaws with grooved tips are designed to securely hold a pin near its



pointed end. After the pin is started, it can be re-gripped and pushed further. The flat tip of the pliers can then be used to push the pin home. Micro-Mark #85282 has a list price of \$22.95.



**Morning Sun Books** ([morningsunbook.com](http://morningsunbook.com)) has released three new all-color railroad books including "Frisco In Color Volume 2" by Greg Stout. The book provides a tour of the colorful Frisco with E8s, F-units, and FAs. Also new is "Industrial Railroading In Color Volume 1" by Stephen M. Timko who focuses on GP7s, F7s, and Alco switchers working in industrial settings.

The third new book from Morning Sun this month is "Buffalo, Rochester & Pittsburgh In Color Vol. 4: Partners and Connections." Author Mike Zollitsch shares a vast photo collection of both steam and diesel locomotives to show the relationship between BR&P and its principal feeders including the Erie, PRR, NYC, LV, and B&O. The three new books are available now at \$59.95 each plus postage.

## NEW LARGE SCALE PRODUCTS



**Bachmann** ([bachmantrains.com](http://bachmantrains.com)) has added two new road numbers (88174 and 88169) to its selection of Gramps frameless narrow gauge tank cars. The fully assembled 1:20.3 narrow gauge cars have an MSRP of \$265 each.

## NEW PRODUCTS FOR O SCALE



**Atlas O** ([atlaso.com](http://atlaso.com)) reports it will deliver a 1:48 scale ALCo RS-3 locomotive during the first quarter of next year. The prototype was produced by the American Locomotive Company during the late 1940s and early 1950s as a general purpose unit for main line, local and passenger service.

The Trainman® series model features an etched-metal fan grille, separately applied wire grab-irons, lighted number boards, and a golden-white LED headlight. Decorating schemes scheduled for this release will be British Columbia, Erie, Jersey Central, Lehigh Valley, Lehigh & Hudson River, New Haven, and the distinctively different Peabody Coal Company shown here. A 2-rail DC version with fixed pilots and scale couplers will have an MSRP of \$249.95. Three-rail versions are available for standard operation at \$249.95 or with TMCC at \$399.95.



In addition to the Erie Lackawanna car shown here, Atlas O is offering its 50' PS-1 steel double-door boxcar with new road numbers for Jersey Central, Baltimore & Ohio, Burlington, Penn Central, Nickel Plate Road, and Spokane Portland & Seattle. An undecorated version is

also available. Depending on the practice of the prototype being modeled, the Atlas cars will have either Pullman-Standard or Youngstown doors, and either 50-ton Bettendorf-style roller-bearing trucks or 70-ton roller-bearing trucks with

rotating bearing caps. The ready-to-run model will be available for 2-rail operation with Kadee® compatible couplers at a suggested list price of \$75.95, and for 3-rail operation with die-cast articulated couplers at \$69.95 each.

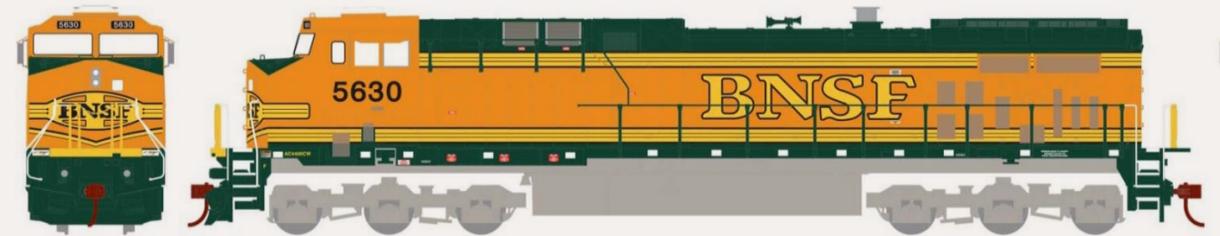


Atlas O will release 17,000 gallon syrup tank cars with new decorating schemes during the first quarter of next year. The prototype for the car was specifically designed to carry high-viscosity products such as corn syrup, liquid sugar, and molasses. The general outline mimics a barrel-shaped design to help the lading drain. Beneath the outer sheathing of the tank, heavy insulation and exterior coil pipes keep the lading warm to further speed off-loading. Between 1984 and 1998 Trinity built more than 7,000 of the cars, many of which are still in active service. The principal variation in the cars' appearance is in the arrangement of the manway, top platform, and ladder. The release will include cars decorated for ADMX, CIT Group, Ontario Northland, Tate & Lyle Staley, and VTG-North America. The Atlas Master® series car will be available for 3-rail operation at \$74.95 or 2-rail operation at \$79.95.

details, corrugated roof material, and special graphics. The finished model has a footprint of 6" x 8". The O scale kit is priced at \$62.95. Figures and vehicles are not included.

Also new, and almost sold out, is an O scale Background Building named American Iron & Boiler Works. It is designed to conserve layout space while providing an industry with plenty of opportunity for switching. Visit the above web site for pricing and availability.

## NEW PRODUCTS FOR HO SCALE



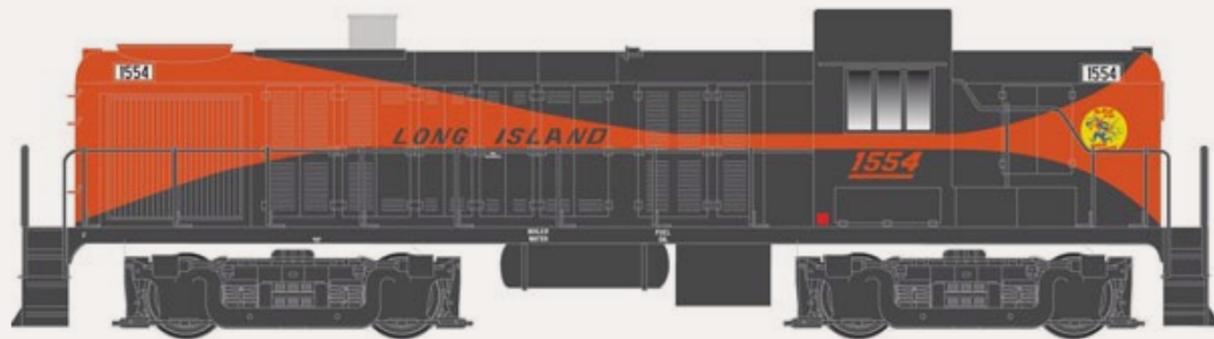
Athearn division of Horizon Hobby ([athearn.com](http://athearn.com)) has lowered the suggested list price of its HO scale AC4400CW locomotives in both traditional road names as well as the new Norfolk Southern Heritage schemes. The biggest saving is in the BNSF, CP Rail, Ferromex, and SP series of AC4400CS locomotives which dropped \$30 from \$149.98 to a new MSRP of \$119.98. They are scheduled to arrive in Dec/Jan. The NS Heritage AC4400CW locomotives, due to arrive in December, were reduced \$10 from \$139.98 to a new MSRP of \$129.98.

Athearn officials said that when the NS Heritage locomotives were ordered, they also included the AC4400CW and DASH 9 locomotives that were affected by the factory closure earlier this year. (For back story see page 103, February 2012 MRH). Because of the large quantity of models ordered, Athearn was able to negotiate a more favorable cost which it is passing on to dealers and consumers. The new prices are effective now.

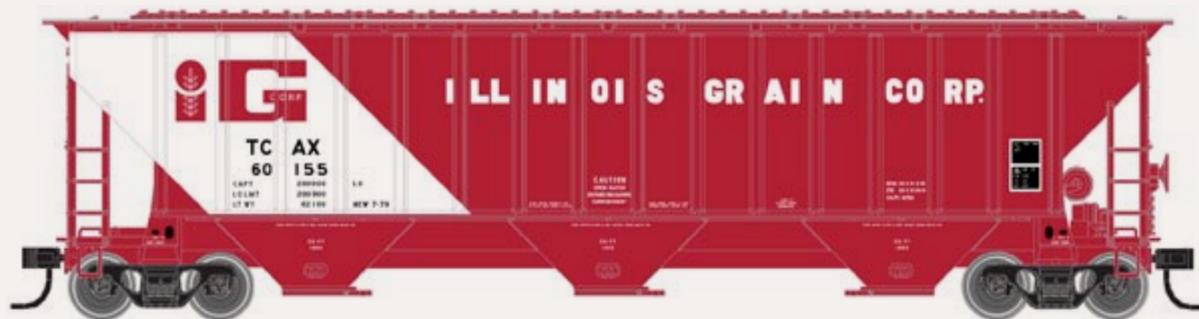
Atlas Model Railroad Company ([atlasrr.com](http://atlasrr.com)) will release its HO scale ALCo RS-3 and RSD-4/5 locomotives during the first quarter of 2013. The RS-3 with four-wheel power trucks will be available decorated for Canadian National; Gulf, Mobile & Ohio; Lamoille Valley; Long Island Railroad; Spokane, Portland & Seattle, and Penn Central. For a 360 degree Click-n-Spin view of the model see page 101 of the March 2012 issue of MRH. Road names for the RSD-4/5 version of the locomotive with six-wheel trucks are N de M, and Southern Pacific in both bloody nose and tiger stripe schemes.



Sidetrack Laser ([side-tracklaser.com](http://side-tracklaser.com)) introduced several new kits at the recent National Narrow Gauge Convention including Sodaville Country Store. The new craftsman-style kit is part of the company's Background Building series. Components include laser-cut details and structural parts, cast



The HO ready-to-run locomotive will be available for analog DC operation in Atlas's Classic Silver series at an MSRP of \$129.95 each. Gold series locomotives will be equipped for DC as well as DCC operation with LokSound Select dual-mode decoder at a list price of \$239.95. It should be noted that the Atlas Quantum Engineer will not operate an Atlas Gold Series locomotive equipped with a LokSound Select decoder on a DC layout. A detailed LokSound spec sheet is available at [atlasrr.com/Images/HOLocomotives/hors3/0812/Revised%20ESU%20Data%20Sheet.pdf](http://atlasrr.com/Images/HOLocomotives/hors3/0812/Revised%20ESU%20Data%20Sheet.pdf).



Atlas has scheduled a release of its popular Trainman® series Thrall 4750 cu ft three-bay covered hopper car for the first quarter of 2013. Road names will include First Union Rail, Illinois Grain, SSAM, and Scouler. The HO scale ready-to-run model will have an MSRP of \$22.95 each. An undecorated version will be available at a list price of \$18.95.

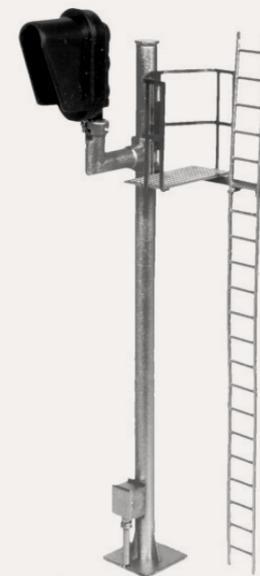


Also expected from Atlas in the first quarter of next year are new paint schemes on Atlas Master® series 17,600 gallon syrup tank cars. See the Atlas **O** scale tank

car item listing for details on the prototype. Decorating schemes will include ADMX, CIT Group, Ontario Northland, Tate & Staley, and VTG-North American. The HO scale ready-to-run models will have an MSRP of \$34.95. An undecorated version will also be available at a list price of \$25.95.



**Bachmann Trains** ([bachmanntrains.com](http://bachmanntrains.com)) has released its HO scale Baltimore & Ohio Railroad 2-8-8-4 articulated steam locomotive in three new road numbers. The DCC-equipped locomotive will accept a Plug-and-Play EM-1 sound module (sold separately). The module can be plugged into the on-board decoder and will provide 16-bit Tsunami® sound specific to the 2-8-8-4 prototype. Features of the Spectrum® series locomotive include a factory-installed speaker; DCC decoder for speed, direction, and lighting; soft white LED headlight and backup light; ball-and-socket driveshaft; separately applied handrails and stanchions; three painted crew figures; and E-Z Mate® Mark II couplers. The DCC equipped locomotive has an MSRP of \$465.00 each. The EM-1 Plug-and-Play sound module has an MSRP of \$119.00 each.



**BLMA** ([blmamodels.com](http://blmamodels.com)) continues to expand its selection of operating signals with the addition of a modern right-hand single-head block signal. The fully-assembled model is composed of sturdy plastic components and etched-metal handrails and walkway. Four wires (one for the common anode and three separate wires for the red, yellow, and green micro LEDs) are contained in the hollow mast. Item 4038 is available now at a suggested list price of \$34.95.

**Bowser** ([bowser-trains.com](http://bowser-trains.com)) has released six new HO scale kits for Pennsylvania Railroad cars including the class H-22 four-bay clamshell hopper car shown above. The group includes class GLA two-bay hoppers with shadow keystone herald; a class H-22a four-bay hopper car with circle keystone herald, class X-31 40' round roof boxcar with circle keystone herald, the same car with shadow keystone herald, and a class XF-31f 40' turtle roof boxcar



with circle keystone herald. The cars are available in three numbers each except the GLA hopper which is available in six road numbers. Bowser kits feature plastic molded one-piece body, underframe, brake wheel, interior and slope sheet braces, air tank, brake cylinder, and triple valve. Trucks with 33" RP-25 flanged wheels, a weight, and knuckle couplers are also included. All of the Bowser kits mentioned have an MSRP of \$14.95 each.



**Custom Model Railroads ([cmrtrain.com](http://cmrtrain.com))** is selling East Side Transfer, a new HO scale laser-cut acrylic kit that builds into an attractive and versatile brick industrial building. The kit includes four loading docks that can be placed in a variety of configurations. The finished structure (not including the loading docks) has a footprint of 4.6" wide

by 10" long. The building is 4.25" tall. Any of the window openings can be converted to door openings and material to block any of the windows or doors is included. Signs, graphics, and graffiti are also provided. The HO scale kit is priced at \$75.00.

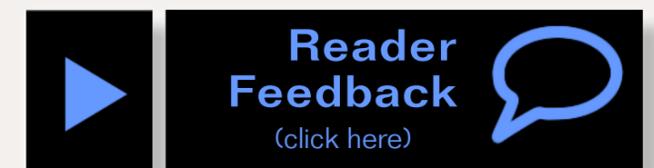


**Concept Models ([consys.com](http://consys.com))** is selling two oversized industrial loads cast in resin. Although designed for Concept's CEBX 800 Schnabel cars, the loads are suitable for other cars or as stationary details for industrial scenes. Both the Belleli energy converter and the KobelCo unit are priced at \$49.99 each.



Here is a photo of an undecorated pre-production sample of **ExactRail's ([exactrail.com](http://exactrail.com))** soon to be released Trenton Works 67' 11" bulkhead flat car. The HO scale ready-to-run model replicates a prototype built in Nova Scotia by Trenton Works for TTX. The Platinum series model consists of photo-etched stainless steel brake platforms, brass bulkhead caps, laser-cut wood, formed wire parts, and an injection molded plastic body produced in ExactRail's facility in Orem, Utah. Separately applied details include air hoses, brake rods, and brake appliances. The model comes with equalized 100-ton ASF Ride Control® trucks with machined metal wheel sets, and Kadee #156 whisker couplers. Three variations of the model will be produced: Five yellow conspicuity stripes (12 road numbers), three white conspicuity stripes (12 road numbers), and TTX's new "Forward Thinking" slogan (two road numbers). ExactRail is accepting pre-orders through October 12, at \$38.95 each. A firm delivery date is expected to be announced soon.

ExactRail has made a third release of its popular HO Scale Trinity 64' TRINCool refrigerator car with 18 new road numbers.





Fos Scale Models ([fosscalemodels.com](http://fosscalemodels.com)) is set to release Red Hook Wharf in late November. The impressive HO scale craftsman kit is composed of eight separate structures that use a variety of construction materials. The kit does not include the telephone poles and concrete seawall shown in the photograph, however, suggestions on how to make them are included in the detailed assembly instructions. The overall dimensions as shown are 16" x 34", but the waterfront and buildings can be arranged in a variety of ways.

The individual structures are Red Hook Fish Oil, a 5.75" x 7" corrugated building; a one-piece Hydrocal® cast 1.5" x 5" brick building named Sea Hag Bar & Grill; Kidwell Spar & Mast, a 2" x 8" structure; Grove Marine Paint that occupies 2" x 3"; J. Knapp Ship Chandler, a 4" x 4.5" hardware store for boaters; Langford Ice, a 2.75" x 8" building with a laser-cut ice chute and acrylic ice blocks; Goldring Oyster, a 2.75" x 3" building of board-by-board construction over a laser-cut assembly; and Sternad Freight Co., a three-story 3" x 4" structure with interior laser-cut components so each level can be detailed with open doors.

Windows and doors for the buildings are by Tichy. NorthEastern Scale Lumber is used for the various wood components. Also included are numerous metal and resin-cast details; a large freight cluster; rooftop tank; forklift, freight cart, two jib cranes (one wood, one by Tichy); laser-cut shingles; corrugated, seamed, and gravel roofing material; and color signage. The kit does not include the figures, vehicles, or scenery shown in the photo. Fos Scale's limited-edition Red Hook Wharf is priced at \$329.00.



Full Steam Ahead ([fullsteamahead.ca](http://fullsteamahead.ca)) is now selling an HO scale kit for Frary's Furniture, a structure originally designed by Troels Kirk. The walls of the building are composed of clapboard and etched laser board. The roofing material is simulated cedar shakes. Other components include a store front, chimney, street lights, and furniture. The kit is available for \$23.99 plus \$6.00 shipping to U.S. addresses. Because of the high cost of Canadian postage, customers in that country are asked to send an email to [joe@fullsteamahead.ca](mailto:joe@fullsteamahead.ca) before ordering.



InterMountain Railway ([intermountain-railway.com](http://intermountain-railway.com)) has released its HO scale ready-to-run EMD FT A-B locomotives in several new paint schemes. Four new road numbers are available for AT&SF (blue and yellow), Atlantic Coast Line (postwar scheme), Baltimore & Ohio, Boston & Maine (maroon and gold wing), Erie, and Chicago & North Western as seen here. EMD demo units are also available in two road numbers. Features include dynamic brakes, etched-metal screens for roof fans, and Kadee couplers. DC models have a list price of \$219.95. Locomotives equipped with SoundTraxx® DCC sound decoder have an MSRP of \$359.95.

New paint schemes are available now on InterMountain's HO scale 1,958 cu ft twin-bay covered hopper cars. Roads include AT&SF; Chessie System; Gulf, Mobile & Ohio; Halliburton-HWCX; Norfolk & Western; and Polybor Chlorinate-NAHX. Six new road numbers are available on cars decorated for Louisville & Nashville, Northern Pacific, Rock Island, Frisco (StL&SF), and Soo Line. Features



include etched-metal running boards, formed wire grab irons, and Kadee couplers. The ready-to-run models have an MSRP of \$34.95 each.



InterMountain has six new road numbers available on its 4750 cu ft triple-bay rib-side hopper cars decorated for Arkansas-Oklahoma (ex-Chicago & North Western); BNSF; CSX; Dakota, Minnesota & Eastern; Norfolk Southern; Pittsburgh & Lake Erie; Frisco (StL&SF); and Soo Line. The ready-to-run cars have etched-metal running boards, metal wheelsets, and Kadee couplers. The MSRP is \$32.95 each.



InterMountain is selling Milwaukee Road horizontal ribbed-side boxcars with six new road numbers in four decorating schemes: late, modern (without running

boards), and "Route of the Hiawathas" (with and without original door). Features include etched-metal running boards (where appropriate), metal wheelsets, and Kadee couplers. The ready-to-run HO scale models have a list price of \$31.95.



The next release of InterMountain's SD40-2 locomotive is planned for January. Our report in the July 2012 edition of MRH provided details about that release including road names. The subsequent production run of SD40-2s is expected to be available in April or May. New road names with a standard nose include CP Rail Expo, C&NW, Milwaukee Road, Soo Line, and Ontario Northland.



A high-nose version decorated for Southern will be available along with snoot-nose locos decorated for AT&SF (blue & yellow scheme), and Union Pacific.



Non-sound models will have a factory installed DCC decoder capable of operating on analog DC or DCC. They will have an MSRP of \$149.95. Sound models, with a list price of \$224.95, will have a factory installed SoundTraxx® Tsunami® DCC decoder.



New items coming next month from **Kadee Quality Products** ([kadee.com](http://kadee.com)) include a 40' PS-1 boxcar decorated for Vermont Railway. The HO scale model has 8' Pullman Standard doors and welded-

seam Pullman ends. The ready-to-run car comes with Kadee's two-piece self-centering trucks. The MSRP will be \$36.95.



Also due in November from Kadee is a 50' PS-1 Southern boxcar with a pair of Youngstown doors to cover the 15' opening.

The ready-to-run HO scale model will be decorated in the original 1960s factory scheme of boxcar red with aluminum roof and doors. The car is priced at \$35.95 and comes with Kadee self-centering trucks.



**KatoUSA** ([katousa.com](http://katousa.com)) is booking pre-orders through October 5th for an early December delivery of two colorful HO scale ready-to-run locomotives. The General Electric P42 diesel replicates Amtrak's #100 in special US Post Office livery that operated during 1999-2000. The "Celebrate the Century" P42 has a list price of \$170.00.

Penn Central's specially decorated GG1 #4902 "Museum of the American Railroad" pulled the 1969 celebratory Golden Spike Centennial Limited from



Baltimore, Maryland to New York's Penn Station, during the final leg of the train's historic journey. In addition to the special livery, the GG1 will be modified with redesigned blower ducts that are elevated higher and to the rear of the locomotive number boards. This was done to reduce the amount of debris being sucked into the locomotive's cooling system. The model is priced at \$200.00. These historical models are being created under Kato's KOBO custom series and will not be repeated.



A new company named **Paper Railroad** ([paper-railroad.com](http://paper-railroad.com)) has introduced downloadable PDF files of textures and structures that can be printed on standard color printers. The 300 dpi files are scaled for HO but can be printed in other scales by adjusting the printer settings. The printed material is glued to heavy construction board (not supplied) or recycled chipboard such as cereal boxes, trimmed and assembled

following the instructions. Textures such as brick, stone, shingles, fencing, and wood siding are also available. The printed structures can be weathered. They are well-suited for background scenes and can be reduced in size to reinforce a sense of distance.

**Sidetrack Laser** ([sidetracklaser.com](http://sidetracklaser.com)) introduced Sodaville Country Store at the Seattle National Narrow Gauge Convention. The new craftsman-style kit is part of Sidetrack Laser's Background Building series. Components include laser-cut details and structural parts, cast details, corrugated roof material, and special



graphics. The finished model has a footprint of 3.5" x 4". The HO scale kit is priced at \$39.95. Figures and vehicles are not included. A kit for Fox Theater, an art deco structure, is scheduled for release later this month.

**Sunshine Models** is drastically downsizing operations and discontinuing most of its older kits. Limited quantities of the following HO scale resin kits are currently available but will not be rerun when sold out: AT&SF class Ca-49 and Ga-53 steel gondolas; various low-side steel gondolas including N&W class G-1, Virginian 22000 series class G-5, and PRR class G-29 cars; SFRD classes RR-5-9 wood reefer cars; Southern Pacific class B-50-13, and B-50-14 boxcars; T&NO class B-50-1 with Allen doors; CB&Q class XM-30 single sheathed boxcars; original and rebuilt versions of Missouri Pacific 120000 series 36' wood boxcar; and several 37' boxcars including Erie 78000 series, C&O 5400 series with Deco ends, and Naval Powder Factory cars with Viking roof and Buckeye ends. Sunshine does not use email and does not have a presence on the internet, however, an unofficial web site with details on pricing and how to order can be accessed at [sunshinekits.com](http://sunshinekits.com). For direct information send a stamped self-addressed envelope to Sunshine Models, P.O. Box 4997, Springfield, MO 65808.



Here is an early look at a pre-production sample of **Walthers** ([walthers.com](http://walthers.com)) Amtrak Metroliner. The production version will have a metal finish that Walthers says will realistically simulate the stainless steel exterior of the prototype. The lower photo provides a close view of the spring-loaded pantograph at the rear of the car. For more details on this project see page 124 of the June 2012 issue of *Model Railroad Hobbyist*.

Walthers is developing commuter locomotives and bi-level gallery cars that should have great appeal for Chicago-area modelers. Proto<sup>®</sup> EMD F7A locomotives will be available in March with road specific details for Chicago & North Western and Rock Island. Special features will include 14:1 helical gears for improved speed control reportedly as slow as three miles per hour. DC models will have an MSRP of \$169.98 while Tsunami<sup>®</sup> DCC versions with a decoder will list at \$259.98. The locomotives will be available in two road numbers for each railroad.



Pullman Standard 85' Bi-Level commuter cars will be available in February for Chicago & North Western and

Rock Island, as well as Southern Pacific in both gray and two-toned gray. The coach (Rock Island) and cab/coach (CNW) cars will be available at \$69.98 or with lighted interior at \$79.98. Features include authentic window tinting, car number decals, and turned metal wheels. The length of the cars requires a minimum 24" radius for reliable operation.



Walthers has scheduled a run of its Proto® series HO scale EMD E7A diesel locomotives decorated for Pennsylvania Railroad. The PRR livery will be rendered in Brunswick green with buff lettering and five stripes. Special features include PRR roof antenna, 12-wheel pickup, constant and directional headlights, and helical gears for positive speed control. The locomotive is due in late March and

will be available with standard DC at a suggested list price of \$199.98 each, and with Tsunami® sound and DCC decoder at a list of \$299.98.



Walthers is now selling its Mainline series 36' two-bay offset-side hopper car in single packs at \$19.98 each, and in six-packs with different road numbers at \$119.98. Available road names include AT&SF, C&O, NP, PRR, and data only.



Walthers Cornerstone® has introduced a kit that builds into Liberty Bank & Trust. The model can be assembled to represent either a vintage structure or a modern bank with a walkup ATM. The components of the kit are molded in three colors. The HO scale kit is available now at a suggested list price of \$49.98.

**White River Junction Rail** is selling a 50' boxcar decorated for Mike Schafer's Illinois & St. Louis Railroad as seen in the Kalmbach's Model Railroad Planning 2005. The custom decorated model is based on a Roundhouse 50' plug-door boxcar. Each I&StL car is individually numbered. The car is available direct from White River Junction, P.O. Box 129, Lee, Illinois 60530 for \$19.95 each plus \$3.95 shipping for the first car. Add \$.99 shipping for each additional car ordered at the same time.



**Yarmouth Models** ([yarmouthmodel-works.com](http://yarmouthmodel-works.com)) has an HO scale resin kit for a Wabash single deck stock car. One thousand of the prototype cars were built by ACF in 1925

as auto cars. Later, Wabash rebuilt 400 cars into single deck stock cars and 200 into double-deck stock cars. The major components of the craftsman style kit are vacuum cast gray urethane resin. The Z-bracing is rendered with full undercuts and the slats are to scale. The running board is laser-cut plywood. Photo-etched detail parts, Tichy brake components, and correct decals are included. Tahoe Model Works truck frames without wheelsets come with the kit which sells for \$59.99. Add \$7.00 for shipping and handling.

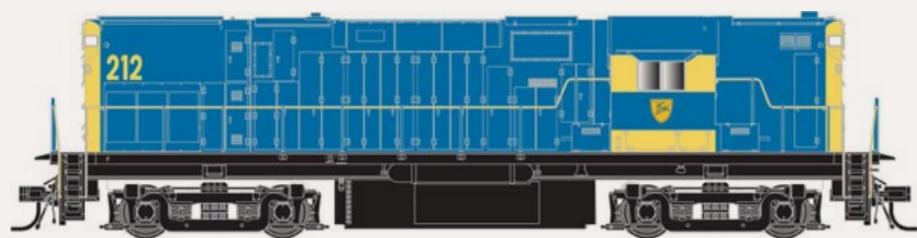
## NEW PRODUCTS FOR N SCALE



During the first quarter of 2013 **Atlas Railroad Company** ([atlasrr.com](http://atlasrr.com)) will begin shipping both low- and high-nose phase 1 versions of

ALCo's C420 locomotive. The prototypes have an interesting history that began in 1963 when ALCo introduced the Century series 2,000 hp C420 as a replacement for its RS-32 series diesel. Atlas's low-nose C420 represents locomotives originally owned by Lehigh Valley that were transferred to Delaware & Hudson when Conrail was formed in 1976. LV 405 was later sold by the D&H but was eventually returned

and is now operating as Delaware-Lackawanna 405 in their attractive gray/white corporate scheme.



The high-nose, short-hood models in this run represent locomotives originally owned by the Long Island

Railroad. When their lease expired in 1976, LI's phase 1 C420s were placed in storage on the Delaware & Hudson and Morristown & Erie Railroads. Some were leased by the D&H in 1977 and operated in patched Long Island blue and yellow paint. The Vermont Northern eventually became the Lamoille Valley Railroad. Buffalo Southern number 2010 is a former Susquehanna unit still in service today. Both Canada and Mexico are represented in this release by the Nacionales de México scheme and Roberval & Saguenay, a Quebec short line. Special features on Atlas's Master® series N scale ready-to-run C420 include dual flywheels, directional lighting, and dynamic brakes where appropriate to the prototype road.

Road names on low-nose units include D&H, Delaware Lackawanna, and Lehigh Valley. Locomotives with a high-nose will be available for Long Island, Delaware & Hudson, NdeM, and Roberval & Saguenay. Limited edition models will be available for Buffalo Southern and Vermont Northern. Standard DC models will have an MSRP of \$129.95. Units with an NCE DCC decoder will list at \$164.95

Also expected in the first quarter of next year are new paint schemes on Atlas Master® 17,600 gallon corn syrup tank cars. See Atlas O tank car item for details. Road names for the N scale model will include ADMX, CIT Group, Ontario Northland, Tate & Staley, and VTG-North American. The ready-to-run models will have an MSRP of 25.95 each. An undecorated version will also be offered at a list price of \$17.95 each.

Atlas has scheduled the sixth release of its popular Trainman® series Thrall 4750 cu ft three-bay covered hopper car for the first quarter of 2013. Road names will be First Union Rail, Illinois Grain, SSAM, and Scoular. The N scale ready-to-run models will have an MSRP of \$17.95 each. An undecorated version will be available at a list price of \$14.95.

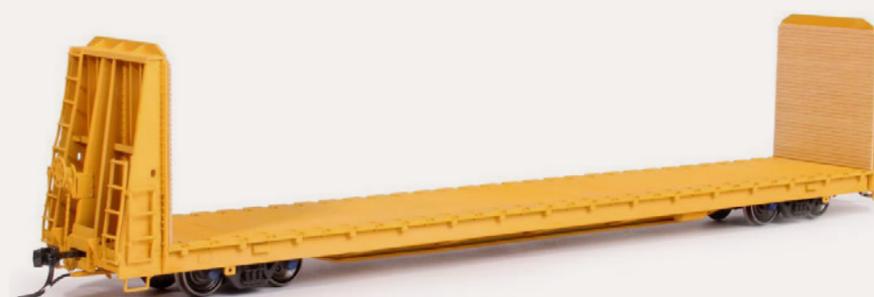
**Custom Model Railroads** ([cmrtrain.com](http://cmrtrain.com)) has introduced East Side Transfer, a new N scale laser-cut acrylic kit that builds into an attractive and versatile brick

industrial building. The kit includes four loading docks that can be placed in a variety of configurations. The finished structure (not including the loading docks) has a footprint of 2.6" wide by 5.5" long. The building is 2.4" tall. Any of the window openings can be converted to door openings and material to block any of the windows or doors is provided. Signs, graphics, and graffiti are also included. The N scale kit is priced at \$45.00.



**ExactRail** ([exactrail.com](http://exactrail.com)) is selling an N scale version of a modern Gunderson 6269 cu ft high-cube boxcar. The ready-to-run model features a Stanray Redi-Roof®, 12'

doors, 100-ton ASF Ride Control® trucks with machined metal wheel sets, and Micro-Trains #1015 couplers. Six road numbers will be available for BN, BNSF, Illinois Central, IBT, and Wisconsin Central. The model is sold direct only at \$22.95 each.



ExactRail is preparing to release an N scale Trenton Works 67' 11" bulkhead flat car. The ready-to-run model (undecorated pre-production HO scale

model shown) replicates a prototype built in Nova Scotia by Trenton Works (previously Greenbrier) for TTX. The model consists of photo-etched, stainless steel brake platforms, brass bulkhead caps, laser-cut wood, formed wire parts, and an injection molded plastic body produced in ExactRail's facility in Orem, Utah. The model comes with equalized 100-ton ASF Ride Control® trucks with machined metal wheel sets, and Micro-Trains #1016 couplers.

Three variations of the model are available: Five yellow conspicuity stripes (12 road numbers), three white conspicuity stripes (12 road numbers), and TTX's new "Forward Thinking" slogan (two road numbers). ExactRail is accepting pre-orders at \$25.95 each through October 12, 2012. A firm delivery date is expected to be announced soon.



InterMountain Railway ([intermountain-railway.com](http://intermountain-railway.com)) has released its N scale 4,750 cu ft triple-bay rib-side hopper car with six new road numbers for Arkansas-Oklahoma (ex-Chicago & North Western); BNSF (post-2005 scheme); CSX; Dakota, Minnesota & Eastern; Norfolk Southern; Pittsburgh & Lake Erie; Soo Line; and St. Louis-San Francisco (Frisco). Features on the ready-to-run cars include etched-metal running boards, Micro-Trains® trucks, and Magne-Matic™ couplers. The suggested list price is \$22.95 each.



InterMountain expects to ship the latest release of its N scale AC-12 Cab Forward steam locomotive this month. They will be equipped with Soundtraxx® Tsunami® system. Although InterMountain did not include number 4294 (the only surviving AC-12 Cab Forward now housed at the California State Railroad Museum in Sacramento) in the original reservation listing, they decided to

produce it due to popular demand. Contact your favorite dealer now if you are interested in obtaining one of the unreserved models of number 4294. The stock number is 79009 without sound and 79009S with sound.



Late this month KatoUSA ([katousa.com](http://katousa.com)) is scheduled to release a complete CB&Q Silver Streak Zephyr train set including EMD E5A locomotive #9909 “Silver Bullet,” and five matching cars. The six-unit N scale train set is priced at \$250.00 and comes in a special book-style presentation case that has room to accommodate two additional E5A locomotives if desired.

Specially built by EMD for CB&Q’s Silver Streak Zephyr, E5A #9909 had a covered cowl to emphasize the unbroken streamlined appearance of the train. Stainless steel corrugations on the locomotive matched those on the Budd-built cars. As a final touch, #9909’s trucks were fitted with skirts. The five matching named cars in Kato’s Silver Streak train set are baggage/RPO car Silver Sheen, baggage car Silver Light, coach Silver Gleam, coach Silver Glow, and observation car Silver Spirit.

For hobbyists modeling other Zephyrs, Kato will release individual E5A locomotives without skirted trucks, making them suitable for pulling CB&Q trains of a later era. Individual E5Aa are priced at \$110.00 each. The front coupler cowling on all E5A locos can be removed to permit mounting a Kato magnetic knuckle coupler for multiple lashups when pulling longer trains such as the California Zephyr. Kato is booking pre-orders now for both the six-unit Silver Streak train set as well as individual E5A locomotives.



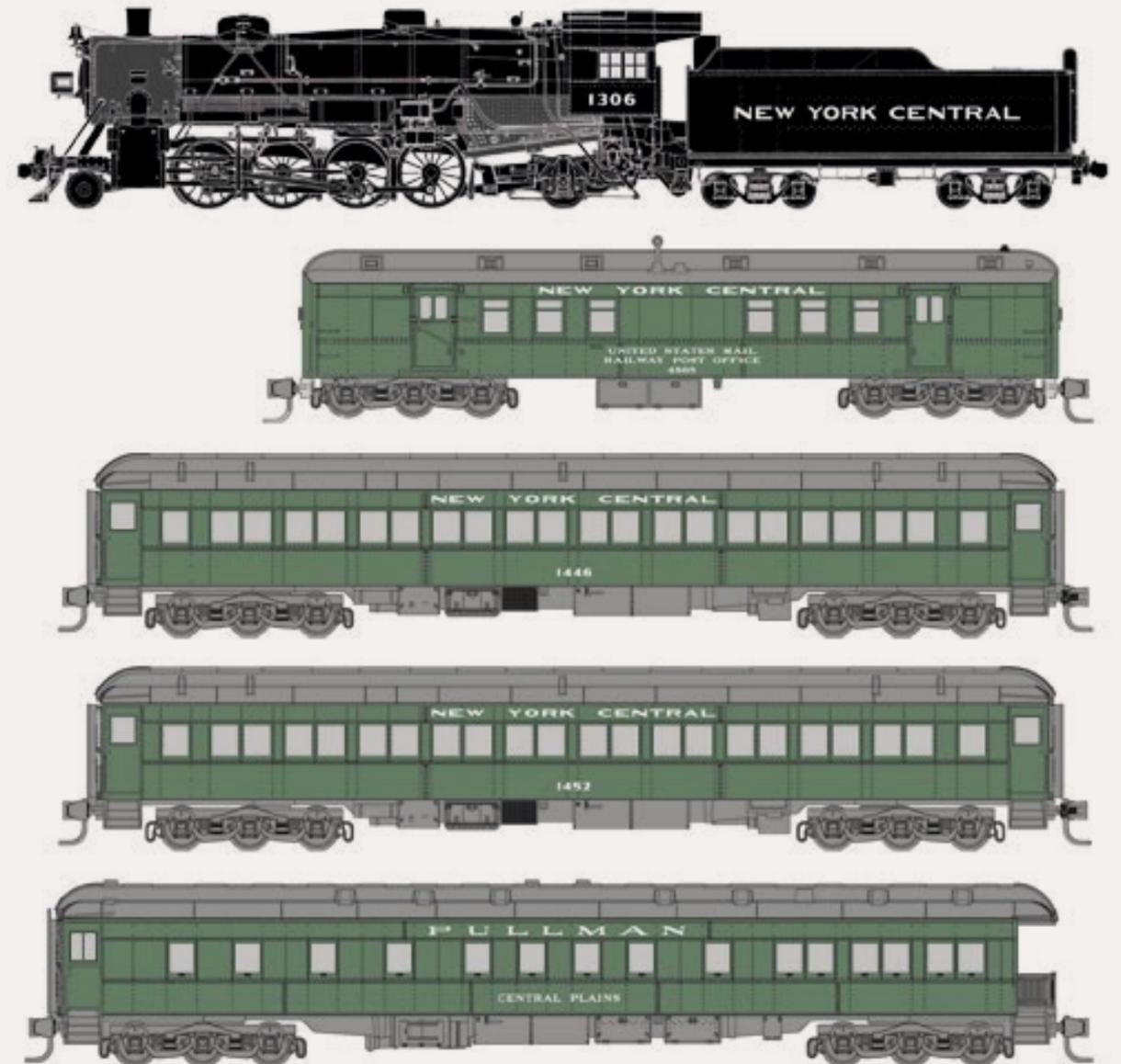
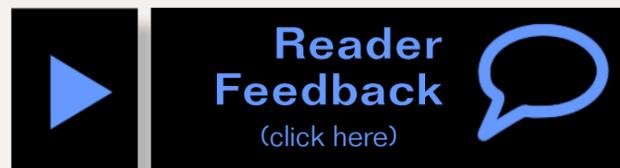
The November release in **Micro-Trains Line's** ([micro-trains.com](http://micro-trains.com)) on-going Runner Pack series will be a trio of PFE trailers and Southern Pacific flat cars. Two trailers will be lettered for Pacific Fruit Express, while the third trailer will be decorated for Southern Pacific Truck Service. The PFE/SP Runner Pack will be priced at \$129.95.



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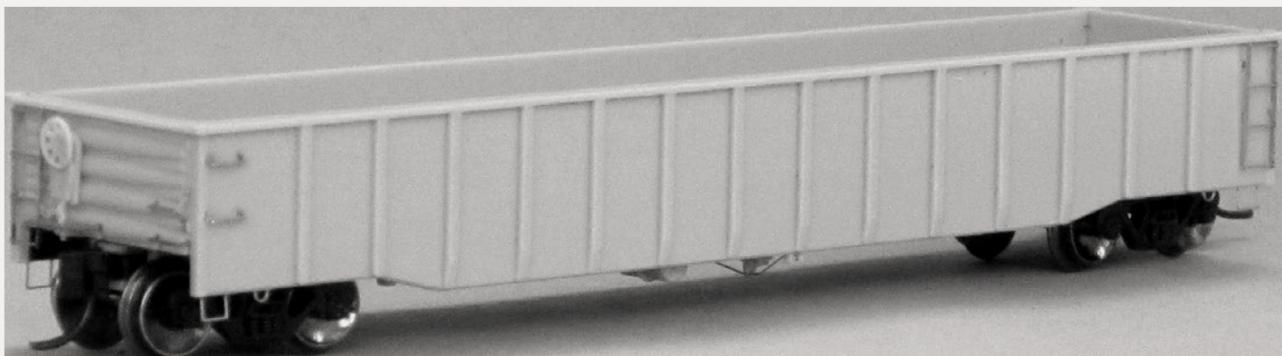
Micro-Trains is developing an N scale steam-era passenger train set with a locomotive and four heavyweight cars. The set is being produced in recognition of the 100th anniversary of the opening of New York's historic Grand Central Terminal.

Equipment will include a 2-8-2 steam locomotive (sourced from Model Power®), an RPO (railway post office) car, two paired-window coaches, and an observation car. All of the equipment is decorated for New York Central except the tail-end car which is lettered for Pullman. The complete set is priced at \$229.95. Availability is planned for February 2013.

**Paper Railroad** ([paper-railroad.com](http://paper-railroad.com)), a new company, has introduced downloadable PDF files of textures and structures that can be printed on any suitable color printer. The 300 dpi files are scaled for HO but can be printed in other scales by adjusting the printer settings. The printed material is glued to heavy

construction board (not supplied) or recycled chipboard such as cereal boxes, trimmed and assembled per the instructions. Textures such as brick, stone, shingles, fencing, and wood siding are also available. The printed structures can be weathered. They are well suited for background scenes and can be reduced in size to reinforce a sense of distance.

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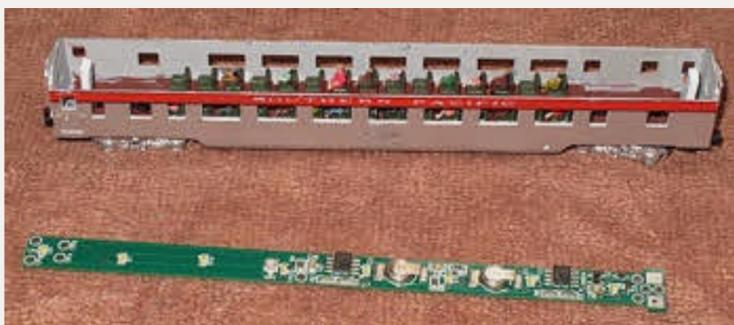


**Train-Worx** ([train-worx.com](http://train-worx.com)) has provided this pre-production view of a new Thrall 2244 cu ft 52' 6" gondola it is developing. The body and underbody details are on two separate plastic injection molded parts. Weight is provided by a die cast metal underframe. The car will have separate molded brake stand and brake wheel. Grab irons, ladders, foot boards, stirrup steps, tow rings, and retaining valve linkage are all metal. The ready-to-run N scale model will have body-mounted Micro-Trains® 1015 couplers, and 100-ton trucks with Fox Valley metal wheels.

The first release will include six numbers each for Rio Grande (orange, action road scheme), Rio Grande (orange, action road scheme coil car), Rio Grande (black car action road scheme), Rock Island (box car red), and Rock Island (THE ROCK). A red Union Pacific car will be available in 12 road numbers, also a Western Pacific car painted black in five road numbers. The list price will be \$26.95 each. An undecorated version will list at \$23.95. Availability will be the first quarter of 2013.

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**Voltscooter Electronics** ([voltscooter.com](http://voltscooter.com)) is selling an adjustable lighting board for Walthers N scale passenger cars. The drop-in replacement board has eight LEDs that use super-capacitors and regulators to provide uniform levels of light



that can be adjusted from dim to bright. When set for normal light levels the car will remain lit at a constant brightness for up to a 30 seconds after power is removed. The system can be installed in any car with electrical pickups. The board can be shortened for 60' cars. The units are priced at \$19.95 each plus \$5.00 for shipping the first unit. Additional units ordered at the same time are shipped at no added cost.

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## NEW PRODUCTS FOR Z SCALE

**Great Lakes Models** ([greatlakemodels.com](http://greatlakemodels.com)) is selling two versions of a Z scale kit for a versatile wood shed. The model is available with a metal roof or with a wood shingle roof as

shown here. All of the components are laser-etched styrene. The design of the shed is based on a prototype in Holland, Wisconsin. The kits are available through the above website at \$17.95 each.

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**Micro-Trains Line** ([micro-trains.com](http://micro-trains.com)) is offering a Z scale AT&SF 50' plug-door Shock Control boxcars in a special four-car Runner Pack. The cars all have different road numbers and display a large Santa Fe target herald. The four-pack will be available next month at \$89.95 each.

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## NEW DECALS, SIGNS, AND FINISHING PRODUCTS

New HO decal sets recently announced by Jerry Glow ([home.comcast.net/~jerryglow/decals](http://home.comcast.net/~jerryglow/decals)) include Missouri Illinois AAR boxcar in both the original



1932 arrangement and as modified in 1937 (above). Also new are decals for NKP covered hopper cars and a N&W 65' gondola. All items mentioned are sold direct at \$4.50 each.



New decal sets from **Microscale** ([microscale.com](http://microscale.com)) include Southern Pacific and Cotton Belt (SSW) 85' and 89' flatcars and Fruehauf Trailers; Burlington Northern flat cars, bulkhead flats, and Centerbeam cars; NOK Leasing Centerbeam flat cars, including Domtar (GBSR) and BC Rail (BCOL); and Santa Fe 40' and 50' boxcar data/markings. HO scale sets are priced at \$7.00 each. N scale versions are \$5.75 each.

New projects currently in the works at Microscale include streamlined passenger cars for Seaboard Air Line, Seaboard Coast Line, and Penn Central including Metroliners; NdeM freight cars; FCP cylindrical hoppers including CEMEX PS 2003 and 2893 hoppers; and Southern

Pacific 12,500 to 23,545 gallon tank cars.

**Mount Vernon Shops** ([mountvernonshops.com](http://mountvernonshops.com)) has several new decal sets including N scale decals for PRR 65' mill gondolas classes G26, G26a, G33, G33a, and G33b in the circle keystone scheme. The set is priced at \$7.00 and has enough material to complete two cars. HO scale decal sets are available now for Pennsylvania class G28 and G29 gondolas with the circle keystone herald. The set is priced at \$7.00 and includes enough data to decorate four cars (two in each class).

Also new are decals for SR two-bay 55-ton offset-side hopper cars with all four number series plus reweigh and repack date for all Southern Railway System locations. The HO scale set is priced at \$5.00 and contains data to letter one car. An HO scale lettering set is available for Western Maryland two-bay hoppers for both U-channel and fishbelly cars in WM's Fast Freight paint scheme. The set is priced at \$9.00 and provides sufficient material to decorate three cars including reweigh and repack locations for all WM locations. Visit the above website for ordering instructions including shipping fees.

#### DISCLAIMER

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### Briefly noted at press time...

... Athearn Division of Horizon Hobby is booking dealer orders through October 19 for HO scale Genesis series EMD F7A and F7A/F7B diesels in Great Northern Big Sky blue freight livery with enlarged cab windows, a single headlight, and a 48" DB fan in the B units. Also SOO Line FP7 and FP7/F7B in maroon passenger scheme with double headlights and a stretched A-unit body to accommodate a water supply and steam generator to heat the passenger cars. Also arriving next May is a Genesis Southern Pacific class C-50-7 bay window caboose. It will be offered both with and without lights for road numbers 4605, 4621, 4622, and 4642.

Athearn's May release schedule includes SD70ACe locomotives decorated in Union Pacific's Heritage series for Katy and President George W. Bush, plus a Norfolk Southern SD70M-2. Additional items arriving

early next summer are a series of 40' milk cars in N scale along with HO versions of the same decorating schemes under the Roundhouse brand. We'll have pictures and pricing on all these new items in the next edition of MRH. ■



## Selected Events

### October 2012

**CALIFORNIA, SAN LUIS OBISPO area**, October 5-7, Fourth Annual Central Coast Railroad Festival, a self-guided tour of 20 layouts at 12 locations from Paso Robles south to Lompoc, with most layouts in the San Luis Obispo area.

The mix includes eight HO scale, two N scale, seven G scale, and one each Fn3 and On30 layouts. Among the better known are Jeff Parker's beautiful HO layout at the Central Valley Model Works factory. For a tour map and description of each layout contact coordinator Bob Chaparro at [chiefbobbb@verizon.net](mailto:chiefbobbb@verizon.net) or visit [ccrrf.com](http://ccrrf.com).

**CONNECTICUT, ORANGE**, October 7, 20th Annual Model Train Show hosted by New Haven and Derby Model Railroad Club, with 90-100 vendor tables. Hourly door prizes. HO, N, and G scale modular operating layouts, plus a kid-friendly S gauge layout. High Plains Community Center, 525 Orange Center Road (Route 152). Info at [newhaven-derbymodelrailroadclub.org](http://newhaven-derbymodelrailroadclub.org).

**ILLINOIS, NAPERVILLE**, October 18-20, 19th Annual RPM-Naperville Conference with blue ribbon panel of speakers including Jack Burgess, Sam Clarke, Bill Darnaby, Paul Dolkos, Jeff English, Glenn Guerra, Ed Hawkins, Richard Hendrickson, Tony Koester, Pierre Oliver, Jim Panza, Ramon Rhodes, Bill Schaumburg, Andy Sperandeo, Mont Switzer, Tony Thompson, and Bill Welch. Sign up for three-day registration or one-day Saturday only. Naperville Marriott Conference Hotel. Info from host Joe D'Elia, PO Box 2701, Carlsbad CA, 92018, (760) 721-3393, or visit [railroadprototypemodelers.org](http://railroadprototypemodelers.org).

**MARYLAND, TIMONIUM**, October 27-28, Great Scale Model Train Show, one of the nation's largest train shows with more than 350 vendor tables. Hosted by Howard Zane in Exhibition Building, Maryland State Fairgrounds. Info at [gsmts.com](http://gsmts.com).

**NORTH CAROLINA, BREVARD**, October 12-13, Narrow Trak 12. Annual narrow gauge and logging mini-convention featuring model displays, operating modules, popular-vote model contest, seminars, camaraderie, and Saturday night bluegrass music. Seminars begin at 2:30 PM Friday. Speakers include Matt Bumgarner, Jerry Ledford, and Tom Yorke. Transylvania County Recreation Center, 1078 Ecusta Road. For information contact [narrowtrak@mac.com](mailto:narrowtrak@mac.com) or send inquiry to Narrow Trak 12, 102 College Station Dr., PM 104, Brevard, NC 28712-3195.

**OHIO, CLEVELAND**, October 11-14, iHobby Expo, annual hobby industry trade show, IX Center. Open to public on October 13-14 only. Info at [ihobbyexpo.com](http://ihobbyexpo.com).

**OKLAHOMA, TULSA**, October 19-20, Oklahoma Narrow Gauge Meet. Clinics include Bob Hyman on 1:20.3 scale outdoor RGS layout and Chuck Lind on logging and sawmills, plus op sessions. Progressive meet in private homes requires RSVP as early as possible. Info at [okng.org](http://okng.org) or e-mail Ken Ehlers at: [ehlerskd@hotmail.com](mailto:ehlerskd@hotmail.com).

**PENNSYLVANIA, STRASBURG/LANCASTER**, October 11-13, Fine Scale Model Railroader Expo, with manufacturers displays, clinics, dioramas, display layouts including Muskrat Ramble On30 layout, plus other activities at the Strasburg Railroad and The Pennsylvania State Railroad Museum (PSRM). HQ at Lancaster Host Hotel & Conference Center, with special awards dinner at PSRM. Info at [modelrailroadexpo.com](http://modelrailroadexpo.com).

**SOUTH CAROLINA, MYRTLE BEACH**, October 13-14, Grand Strand Model Railroaders 3rd Annual Model Train Show, Lakewood Conference Center, 5837 S. Kings Hwy. Info at [isfans.com/gsmrrc](http://isfans.com/gsmrrc).

**SOUTH DAKOTA, YANKTON**, October 6-7, Missouri Valley Train Show, sponsored by Missouri Valley Model Railroad Club, 4H Grounds, 901 Whiting Drive. Info at [mvmrc.webs.com](http://mvmrc.webs.com).

**UTAH, SALT LAKE CITY**, October 26-28, NMRA Wasatch Division hosts Wasatch Rails 2012. Grand Building, Promontory Hall, Utah State Fair Park. Info at [nmrawasatch.org](http://nmrawasatch.org).

**VIRGINIA, SUFFOLK**, October 18-21, 2012 NMRA Mid-Eastern Region Convention at Hilton Garden Inn. Guest speaker Jim McClellan, former vice president of the Norfolk Southern Railroad. Info at [mer.nmra.org/MERConv/MERConv.html](http://mer.nmra.org/MERConv/MERConv.html).

**WASHINGTON, SEATTLE**, October 13, Rails By The Bay 2012, Pacific Northwest Railroad Prototype Modelers meet. Info at [northwestrpm.com/RPM\\_Meet.html](http://northwestrpm.com/RPM_Meet.html).

### November 2012

**CANADA, BRITISH COLUMBIA, BURNABY**, Trains 2012 (November 9-11) and Fifth Annual BC RPM Meet (November 10) in combined gathering. BC RPM features model and diorama displays, informative show 'n tell sessions and clinics by Mark Dance, Scott Calvert, and Al Lill. Trains 2012 offers operating sessions, public show, escorted layout tour, banquet, and prototype tour. \$25.00 CDN registration does not include banquet. Cameron Centre (across from Lougheed Town Centre), 9523 Cameron Street. Info at [bctrains.org](http://bctrains.org) or send email to ahutchinson. [mudbay@gmail.com](mailto:mudbay@gmail.com).

**CANADA, NEW BRUNSWICK, QUISPAMISIS**, November 3, 28th Annual Model Train Show sponsored by St. John Society of Model Railroaders, at Island View Lions Club, 8 Market Street. Info at [sites.google.com/site/sjsmrclub](http://sites.google.com/site/sjsmrclub).

**MAINE, BREWER**, November 17, Annual Train Show with operating layouts, vendor tables, and The Train Doctor. Sponsored by Eastern Maine Model Railroad Club, at Jeff's Catering, 15 Coffin Avenue in the East West Industrial Park. Contact Geoff Anthony at 207-374 2786 or [geoff04614@gmail.com](mailto:geoff04614@gmail.com) for information including details on vendor tables.

**PENNSYLVANIA, MONACA**, November 18, Beaver County Fall Model Train Show at Center Stage, 1495 Old Brodhead Road. Hosted by Beaver County Model Railroad Club. Info at [bcmrr.railfan.net](http://bcmrr.railfan.net) or contact Walt Steiner at 724-843-3783.

**PENNSYLVANIA, YORK**, November 25, and December 2, 8-9, 15-16, 22-23, and 29-30, Annual Open House, hosted by Miniature Railroad Club of York. Saturdays 3 to 8 PM, Sundays 1 to 5 PM. 381 Wheatfield Street. Donation at door. Info at [mrrcy.com](http://mrrcy.com) or call 717.458.2932.

**SOUTH CAROLINA, NORTH CHARLESTON**, November 10-11, Annual Train Show and sale hosted by Charleston Model Railroad Club, at Danny Jones Armory Park, 5000 Lackawanna Blvd. For details including table rental information visit [chamrc.com](http://chamrc.com) or send email to [trainshow@chamrc.com](mailto:trainshow@chamrc.com).

**WISCONSIN, PEWAUKEE**, November 2-4, 37th Annual Fall S Fest, buying, selling and swapping S-gauge and S-scale train equipment and related items plus clinics and tours, hosted by Badgerland S Gaugers of South East Wisconsin. Marriott West Convention Hall, W231 N1600 Corporate Court. Info at [trainweb.org/bsg/events/sfest.htm](http://trainweb.org/bsg/events/sfest.htm).

## **FUTURE 2012**

**COLORADO, COLORADO SPRINGS**, December 15-16, TrainExpoCO, includes sales tables, operating layouts, clinics, and manufacturers presentations. Financial Services Expo Center, 3650 N. Nevada. Info at [tecoshow.org](http://tecoshow.org).

## **FUTURE 2013**

**AUSTRALIA, MELBOURNE**, March 29-31, 2013, 11th Annual Australian Narrow Gauge Convention. Carwatha College, Noble Park North. Details are pending. For info visit [cngg.org.au/index.html](http://cngg.org.au/index.html).

**AUSTRALIA, MELBOURNE**, April 12-14, 2013, 13th National Australian N Scale Convention, Rydges Bell City Event Centre, Preston, Melbourne. Info at [convention2013.nscale.org.au](http://convention2013.nscale.org.au) or send email to [nscale2013@bigpond.com](mailto:nscale2013@bigpond.com).

**CALIFORNIA, PASADENA**, August 28-31, 2013, 33rd National Narrow Gauge Convention. Hilton Hotel, 199 S. Los Robles St. Info at [33rdnngc.com](http://33rdnngc.com). Send inquiries to Jeff Smith at [jeff@railmasterhobbies.com](mailto:jeff@railmasterhobbies.com).

**CALIFORNIA, SACRAMENTO**, February 23-24, 2013 World's Greatest Hobby on Tour, featuring manufacturers displays, operating displays, interactive activities, and workshops presented in a family-oriented atmosphere, at Cal-Expo. Attendee and exhibitor info at [wghshow.com](http://wghshow.com).

**CALIFORNIA, SAN DIEGO**, February 9-10, 2013 World's Greatest Hobby on Tour, featuring manufacturers displays, operating displays, interactive activities, and workshops presented in a family-oriented atmosphere, at Del Mar Fairgrounds. Attendee and exhibitor info at [wghshow.com](http://wghshow.com).

**CALIFORNIA, SANTA CLARA**, January 24-26, 2013, O Scale West and S West Annual Meet, Hyatt Regency Hotel, 5101 Great American Parkway. Info at [oscalewest.com](http://oscalewest.com).

**FLORIDA, COCOA BEACH**, January 10-12, 2013, Prototype Rails/Cocoa Beach 2013, Major RPM meet hosted annually by Mike Brock. To preregister send \$35 check payable to "Prototype Rails" to Marty Megregian; 480 Gails Way; Merritt Island, FL 32953. Event at Hilton Hotel, 1550 N. Atlantic Ave. (Highway A1). For reservations call 800-526-2609 or 321-799-0003. Refer to Prototype Rails for reduced room rate.

**GEORGIA, ATLANTA**, July 14-20, 2013, National Model Railroad Annual Convention and National Train Show.

**GEORGIA, PINE MOUNTAIN**, February 1-3, 2013, Southern Rails (formerly Narrow Gauge Railway Day) a family oriented event with clinics, contests, vendors and "down south" fun, at Callaway Gardens. Info at [southernrails.org](http://southernrails.org).

**MASSACHUSETTS, WEST SPRINGFIELD**, January 26-27, Amherst Railroad Hobby Show, sponsored by Amherst Railway Society. Major event attracting 25,000 or more people annually with operating layouts, clinics, and up to 250 vendor tables. Participants include manufacturers, publishers, importers, and historical societies. Eastern States Exposition Fairgrounds. Info at [railroadhobbyshow.com/abouttheshow.php](http://railroadhobbyshow.com/abouttheshow.php).

**MINNESOTA, BLOOMINGTON**, April 25-28, 2013, 28th Annual Sn3 Symposium. Ramada Mall of America Hotel. Info at [Sn3-2013.com](http://Sn3-2013.com).

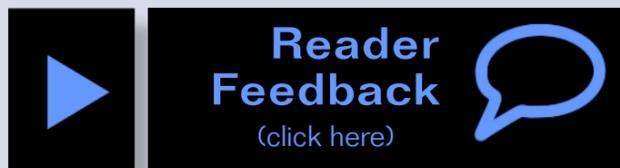
**MISSOURI, ST. LOUIS**, January 12-13, 2013 World's Greatest Hobby on Tour, featuring manufacturers displays, operating displays, interactive activities, and workshops presented in a family-oriented atmosphere, at America's Center. Attendee and exhibitor info at [wghshow.com](http://wghshow.com).

**NEW MEXICO, ALBUQUERQUE**, June 6-9, 2013, Rails Along the Rio Grande, NMRA Rocky Mountain Region, Rio Grande Division 6, convention with clinics, layout tours, train show, OpSig sessions, UPRR and BNSF modelers showcase night, and banquet. Marriott Pyramid North. Info at [rarg2013.org](http://rarg2013.org).

**PENNSYLVANIA, YORK**, January 5-6, Annual Open House, hosted by Miniature Railroad Club of York, Saturdays 3 to 8 PM, Sundays 1 to 5 PM. 381Wheatfield Street. Donation at door. Info at [mrrcy.com](http://mrrcy.com) or call 717-458-2932.

**TEXAS, FORT WORTH**, January 5-6, 2013 World's Greatest Hobby on Tour, featuring manufacturers displays, operating displays, interactive activities, and workshops presented in a family-oriented atmosphere at Will Rogers Memorial Center. Attendee and exhibitor info at [wghshow.com](http://wghshow.com).

**TEXAS, HOUSTON**, February 16, 2013, Greater Houston Train Show, features 20,000 sq ft of operating layouts, instructive classes, model and photo contests, train videos, and vendors. Also offers tours of many local home layouts. Hosted by San Jacinto Model Railroad Club at Stafford Center, 10505 Cash Road at Murphy Road. Info at [sanjac.leoslair.com/resources/2013-Public-Flyer.pdf](http://sanjac.leoslair.com/resources/2013-Public-Flyer.pdf). ■



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# REVERSE RUNNING: The problem of an empty space

## Stepping outside the box with a contrary view



fall out of the sky for those of us who have been in the hobby for a while.

Or they've actually gotten past the designer's block and have drawn up some cool track plans, but they don't know which one would be "best".

But going back to the notion that real railroads are linear, running the trains around the room on a shelf works better than putting a table in the middle of the room for the trains.

Okay, so we need to think "shelf" instead of "table" - got it. But how do we get a cool shelf track plan, then?

That thinking is backwards. Remember, real railroads don't design track arrangements because they look cool or are more interesting.

Real railroads design track arrangements because those tracks enable them to move goods and/or people from place to place on two rails *in the most efficient manner possible*.

As someone who is developing a track plan, it helps to understand something about what those tracks do. Why are those tracks there? Just because it looks cool doesn't cut it.

Time to put down the pencil and go get some knowledge of real railroads.

You can get this knowledge by reading books like John Armstrong's classic, *Track Planning for Realistic Operation*, for example.

My favorite way to get this knowledge, however, is more fun. Go run trains on other people's layouts. And I'm not talking about roundy-roundy

train running, I'm talking about layouts that do realistic operating sessions with switching, trains that simulate doing what real trains do - transporting goods and/or people.

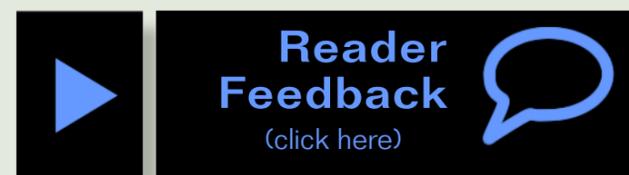
Google "op sig" and go run trains!

Once you know the difference between facing-point and trailing-point turnouts, you start to understand why things like runaround tracks are important. You can look at the track plan for a town and a little movie starts to run in your head as to how you'd switch these industries.

Then as you look beyond a town to the more complete layout picture, you get a movie in your head of the trains that will be needed to service those towns - a through freight here, a local freight there, a passenger train from here to there.

As you realize what you need to service those locations, you start to get a picture of the trains you'll need. This leads to what you'll need for yard capacity and off-stage capacity to bring those trains onto the layout or to run them off the layout to points not modeled.

And hey, what has happened? Track planning analysis paralysis has been eliminated ... because you *finally know what those tracks do!*



— by Joe Fugate

**Y**ou've finally got some space for a layout! Then it hits you. Now what?

Beginners in the model railroading hobby often don't know where to start. They have this empty space and most commonly they find a "neat" track plan somewhere, then plop it into the space.

Or they get online and confess they're stymied as to what to put into the space. They ask for the rest of us to "suggest a good track plan" for the space - as if good track plans just

Let's step back for a minute and look at how real railroads work.

They don't start out looking for a "cool track plan". They exist to transport goods and/or people from one place to another.

By definition then, real railroads are linear; they don't go around in circles. This means an along-the-wall design works better than a design that sits in the middle of the room on a table.

I think the fill-the-room-with-table mindset came from the idea we want our trains to run in circles, so a table seems like a good format to contain a loop of track.

And our loop-of-track mentality comes, I believe, from the good old "round the Christmas tree" origins of the hobby.

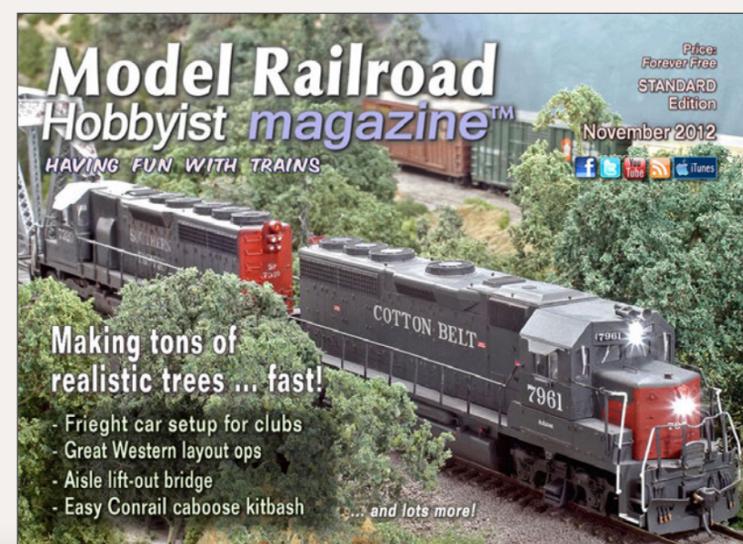
Clickable Advertiser Index	Page
<a href="#">Accu-Lites</a> .....	21
<a href="#">Accurail</a> .....	48
<a href="#">Alpine Division Scale Models</a> .....	13
<a href="#">Andover Junction</a> .....	42
<a href="#">Backdrop Junction</a> .....	57
<a href="#">BLMA</a> .....	3
<a href="#">Bowser</a> .....	16
<a href="#">Bullfrog Snot</a> .....	57
<a href="#">Canyon Creek Scenics</a> .....	86
<a href="#">Clever Models</a> .....	58
<a href="#">Coffman</a> .....	22
<a href="#">Con-Cor</a> .....	11
<a href="#">DigCom</a> .....	57
<a href="#">Digitrax</a> .....	43
<a href="#">ESU</a> .....	10
<a href="#">ExactRail</a> .....	4
<a href="#">Fifer Hobby Supply</a> .....	22
<a href="#">Great Decals</a> .....	58
<a href="#">GnFlyer</a> .....	58
<a href="#">Horizon Hobbies</a> .....	9
<a href="#">Iwata-Medea</a> .....	50
<a href="#">Jelsma</a> .....	57
<a href="#">Litchfield Station</a> .....	15
<a href="#">Logic Rail Technologies</a> .....	57
<a href="#">Micro-Mark</a> .....	23
<a href="#">Microscale</a> .....	49
<a href="#">Model Railroad Benchwork</a> .....	58
<a href="#">Modular Railroading</a> .....	58
<a href="#">Model Train App</a> .....	27
<a href="#">Model Trains Video</a> .....	69

Clickable Advertiser Index	Page
<a href="#">Monster Modelworks</a> .....	27
<a href="#">M.T.H.</a> .....	37
<a href="#">Nano-Oil</a> .....	14
<a href="#">NCE</a> .....	5
<a href="#">New York Central System</a> .....	58
<a href="#">North American Rail Car</a> .....	32
<a href="#">Ohkwari Sales</a> .....	58
<a href="#">O Scale Resource</a> .....	12
<a href="#">RailMaster Hobbies</a> .....	20
<a href="#">Rapido</a> .....	7
<a href="#">Ring Engineering (1)</a> .....	12
<a href="#">Ring Engineering (2)</a> .....	30
<a href="#">RSlaser</a> .....	31
<a href="#">Rulers of the World</a> .....	58
<a href="#">Rusty Stumps</a> .....	41
<a href="#">San Juan Car Company</a> .....	57
<a href="#">SBS4DCC</a> .....	57
<a href="#">Scenic Express</a> .....	29
<a href="#">Short Hill and Western</a> .....	28
<a href="#">Southern Digital</a> .....	36
<a href="#">TAM Valley Depot</a> .....	39
<a href="#">The Amherst Railway Society</a> .....	17
<a href="#">The Scotty Mason Show</a> .....	75
<a href="#">The Proto:87 Store</a> .....	58
<a href="#">Tony's Train Exchange</a> .....	44
<a href="#">TrainTek</a> .....	38
<a href="#">True Line Trains</a> .....	51
<a href="#">True Scene Modeling</a> .....	58
<a href="#">Yankee Dabblor</a> .....	19

Clickable Topic Index	Page
<a href="#">Conventions – National Narrow Gauge</a> .....	88
<a href="#">DCC Impulses – DCC System Comparison Prt 2</a> ...	33
<a href="#">Editorial – Publisher's Editorial</a> .....	8
<a href="#">Editorial – Reverse Running</a> .....	118
<a href="#">Getting Real – Refining an Era to Model</a> .....	45
<a href="#">News – October MRH Showcase</a> .....	98
<a href="#">News – October Newsletter</a> .....	100
<a href="#">News – October Events</a> .....	115
<a href="#">Q and A – MRH Questions, Answers, and Tips</a> ...	18
<a href="#">Rolling Stock – The Car Shop</a> .....	76
<a href="#">Scenery – The Allagash Gets a Quarry Prt 2</a> ...	59
<a href="#">Structures – Refinery Office</a> .....	70
<a href="#">Up the Creek – Peninsula Construction!</a> .....	24
<a href="#">What's Neat This Week – A Photo Presentation</a> ...	52
<a href="#">Weathering – Weathering with Oil Paints</a> ...	78

---

<a href="#">Other – Cover</a> .....	1
<a href="#">Other – Index</a> .....	119
<a href="#">Other – MRH Sponsors</a> .....	2
<a href="#">Other – Table of Contents</a> .....	6
<a href="#">Other – Staff Notes</a> .....	11
<a href="#">Other – Hobby Marketplace</a> .....	57
<a href="#">Other – Derailments</a> .....	120



## For the love of model trains

### Coming in November 2012 MRH

- Joe Fugate makes trees ... lots of 'em!
- Movie theater with animated lights
- Aisle lift-out bridge
- Shelf layout project
- Freight car setup for clubs ...and lots more!

Derailments, humor,  
and document options  
on next page ►

## HOW TO HIDE A HELIX:

#76



Cartoon by  
Scott Sackett

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