Model Railroad Hobbyist magazine™

HAVING FUN WITH TRAINS

Price:
Forever Free
STANDARD Edition

November 2011

- IN DEPTH: Moving coal
- Stripping Kato paint
- Improving Atlas crossovers
- Canvas curtains from teabags

and lots *more, inside* ...

Tom Patterson does a Central Valley Bridge Kitbash

Model Railroad Hobbyist magazine™

Front Cover: MRH forum regular Tom Patterson shows us how he beefed up a Central Valley truss bridge to make it more suitable for heavy coal train mainline traffic on his CVE railroad. Read all about what Tom did in this issue. Cover photo by Tom Patterson.

ISSN 2152-7423

Editorial Staff
Joe D. Fugate, Publisher
Charlie Comstock, Editor

Columnists
Richard Bale, News and events
John Drye, N scale
Lew Matt, Narrow gauge and shortlines
Bruce Petrarca, DCC
Les Halmos, Modular railroading

Special Correspondents
Jim Duncan, Layouts and operations
Byron Henderson, Layouts and track planning

Production
Patty Fugate, pasteup and layout
Joe Brugger, copy editing
Mike Dodd, copy editing

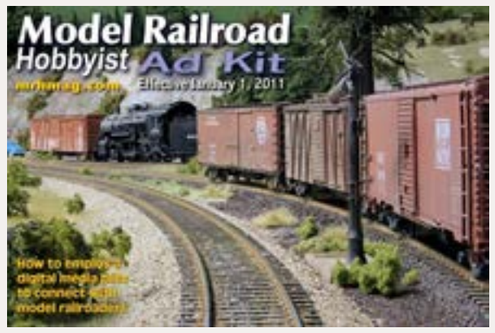
Technical Assistant
Jeff Shultz

Advertising Account Manager
Les Halmos

Remember to tell them: "MRH sent me!"

Sponsoring Advertisers -

Our sponsors get extra visibility with the MRH web audience (45,000+).



Click here to learn how to become a *sponsoring advertiser.*

There's also our Hobby Marketplace! see page 22 ...

For more model railroading products, including hard-to-find items, also see our Hobby Marketplace on page 22.

Photo by Bruce Jacobs

BLMA MODELS

Another COOL Flavor

NEW!

TRINITY 64' MODERN REEFER

N scale $24.95 #15901-15924 CEFX

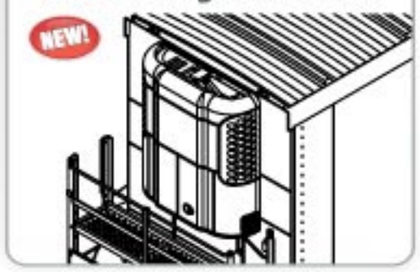
HO scale $32.95 #52901-52924 CEFX

Reserve By: Dec 31, 2011 **Delivery: 2nd Quarter, 2012**

24 UNIQUE ROAD NUMBERS **Pre-Order Now!**

Thermo King Reefer Unit

NEW!

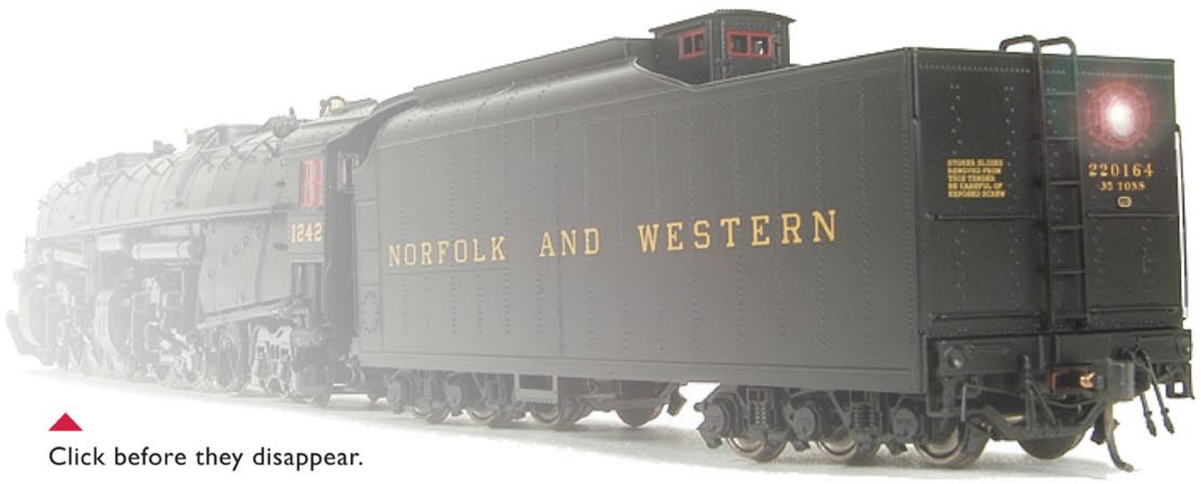


CEFX Features

- *New* CEFX Paint Scheme!
- *New* Thermo King Reefer Unit
- *New* ASD Door Tooling
- Prototypical Ride Height
- Fine-Scale 36" Metal Wheels
- Body-Mounted Couplers (HO & N)
- **24 Unique Road Numbers!**

WATCH THE VIDEO AT **BLMAmodels.com**

Phone: 562-712-7085
sales@BLMAmodels.com



Click before they disappear.

Table of contents

Main Features

Other Features

Columns

TurboTrain®

WITH UPDATED DRIVE SYSTEM

CLICK HERE TO GET THIS 1968-1971 ERA TURBOTRAIN FOR $299.95 INCLUDING SHIPPING!

About the Editor

Charlie Comstock has been a regular columnist, author, and editor of ***Model Railroad Hobbyist Magazine*** since its inception.

To learn more about Charlie, click here.

EDITOR'S SOAPBOX: Selective Compression

Turning less into more ...

Reader Feedback *(click here)*

Let's face it. The vast majority of us will never have enough space to model everything we want to include on our layouts. Over time, and through many counselling sessions (referred to by some as "hanging out with the trainheads") we learn to deal with such realities and move on with life – and our layouts. Maybe the mantra "it's not what you've got, but how you use it" applies here?

When it comes to dealing with our limited spaces we resort to various techniques and ruses.

- Shortening the mainline to make room for more towns.
- Reducing the size and number of towns and picking a handful of key structures or features. We include those to clue visitors in on where we're modeling and omit lots of the humdrum surrounding them.
- Resorting to trickery such as strategically placed mirrors to make it seem as though the layout extends beyond the walls.
- Building a series of microvignettes to seduce the eye into dawdling over each area of the layout, making it feel bigger when viewed up close.
- Modeling large structures at a reduced scale.

The list goes on.

With operations we face different problems.

- Sometimes we look for ways to justify more traffic than would be present on our tracks. Those modeling heavy duty mainlines are not likely to have sufficient staging to permit running 100 trains a session so a subset of trains is selected.
- Our all-too-short mainlines present us with runs that end too soon. Either we run more slowly to savor the mainline, or some of us park trains in a tunnel for a few minutes to represent running up mainline miles somewhere. One compresses time, the other real estate.
- A fast clock compresses the appearance of elapsed time.

The most recent op session on the Bear Creek and South Jackson was interesting – there were only eight operators present. I consider a full crew to be 14 to 18 people though it's possible to run all positions with 10. What are the crew positions and how did I compress them?

The "bare creek", as I sometimes call it, uses a dispatcher, a yardmaster, a yard switch crew, a two man local switch job in Redland, and two man road crews.

The first reductions are road crews. Locals, which do a ton of switching, keep two man crews, but other trains run with just an engineer.

I made more cuts by dropping the second man in the switch crew at Redland and making the yardmaster run his own switch engine.

The next step is using single man crews for locals. This lets the railroad run with a crew of 10 people.

But I only had eight, what now?

The dispatcher got a throttle and dispatched from a cab instead of his office.

Instead of TWC (track warrant control), trains ran on verbal authority.

The fast clock was turned off and trains departed in sequence as space and crews became available. "Is there room in the destination staging area? Is the track where you need to go clear enough? Then go!"

The result? We ran a 3.5 hour session in about 2.5 hours, with a pint sized crew.

Sometimes less really is more! ☑

Kadee®
Quality Products Co.

There is Only One Real Choice When Purchasing Couplers.

1946 - 2011 65 YEARS OF EXCELLENCE Kadee Quality Products Co.

Kadee® Cars
Accuracy, Detail, Quality, Value, Made in the U.S.A.

Kadee® HO SCALE

Kadee® Quality Products have the ONLY Couplers that conform to the NMRA Standards!

WORLDS BEST COUPLERS FOR OVER 65 YEARS!

#58 kit with #232 Gearbox

Kadee® Made in the U.S.A.

Patent Number 5,785,192

#2100 Factory Assembled

WHISKER® COUPLERS

#156 kit with #242 Gearbox

#158 kit with #242 Gearbox

#153 kit with #242 Gearbox

Patent Numbers 5,662,229 & 5,785,192

#178 kit with "Scale" Gearbox

Kadee® "Scale" Head Couplers

DELAYED MAGNETIC UNCOUPLING®

CONFORMS TO NMRA STANDARDS nmra.org

Kadee® couplers are guaranteed*, built strong with quality materials engineered & designed to last & last with years of trouble free operation & the only couplers with Delayed Magnetic Uncoupling®, Instructions, Coupler Conversions, Coupler Support & are manufactured in the U.S.A.

HO-Scale, PS-1 Box Car Kits

Patent Numbers D414,533 D410,709 5,785,192 7,434518 B2.

#4100 40' PS-1, 6' Door

THIS PRODUCT CONFORMS TO ALL APPLICABLE NMRA STANDARDS

- Craftsman Quality detailing engineered throughout the plastic & die-cast metal components, No Glue Required.
- Kadee® Magne-Matic® Metal "Scale" Couplers with delayed centering action for accurate, reliable coupling that lasts & lasts.
- Kadee® smooth rolling non magnetic metal RP-25 wheels & fully sprung highly detailed metal trucks.
- Kadee® Boxcar equipped with Apex running board, Youngstown doors, highly detailed hand brake.
- Precision balanced for optimum performance. Partially assembled underframe.
- Made in the U.S.A.

HO-Scale, Log Car Kits

#101 Disconnect Log Car

Highly detailed logging equipment with die-cast center beam, metal trucks, ribbed back wheels, log bunks and falling stakes. Comes with three unpainted plastic logs and couplers. Made in the U.S.A.

PS-1 Box Car Kits

#4100	40' PS-1, 6' Door	$25.95
#4105	50' PS-1, 9' Door	$25.95
#4110	50' PS-1, 15' Double Door	$25.95
#4115	50' PS-1 Cushion, 10' Door	$26.95
#4120	50' PS-1 Cushion, 9' Door	$26.95

Log Car Kits

#101	Disconnect Log Car	$24.50
#102	Skeleton Log Car	$30.15
#103	Truss Log Car	$36.65
#104	Logging Caboose	$22.60
#107	Disconnect Log Car w/o Logs	$20.45
#LL	Log Load Kit	$4.60

CONFORMS TO NMRA STANDARDS nmra.org

Patent Numbers D414,533 D410,709 5,785,192 7,434518 B2.

#6912 40' PS-1, 8' Door.....$37.95
Kadee® 65th Anniversary Boxcar

#6914 KDC 014.....$38.95
Kadee® 2011 Christmas Car

#7042 C&I 647.....$42.95
50-ton AAR "Standard" Open Hopper

#8335 PRR 257201.....$41.95
2003 CU FT. 2 Bay PS-2 Hopper

YouTube

Tel: (541) 826-3883 • Fax: (541) 826-4013
www.kadee.com

Visit Kadee.com to check out our Latest Releases, Order Products, or Locate Authorized Dealers.

Notes from the MRH Staff

How do you read MRH, October's ratings, cool video, and more ...

How do you read MRH?

As we plan 2012, we'd like to find out how and why you, our readers, access and read MRH. We're wondering things like what devices you typically use, if you download to multiple devices and so on. We're also asking why you read MRH and what points you might make if recommending MRH to a new modeler.

These answers will help us plan MRH's direction in 2012, and what to tell visitors to our website about why to become a regular reader.

Sure, we're free, but the value we provide our fellow modelers had better be a lot more than being free, or we're almost certainly out in the weeds!

So please take the survey – it shouldn't take you more than 10 minutes.

October's ratings

The five top-rated articles in the October 2011 issue of MRH are:

- **4.6** The 35 dollar challenge, part 1
- **4.6** Upper Bear Creek gets water
- **4.5** DCC Impulses - Back to basics
- **4.5** Modular Adventure - Erecting the walls
- **4.5** Getting Real - Bridge abutments and piers
- Issue overall: **4.5**

Thanks to you who take the time to rate articles – the more of you who vote, the better we can tell what you, our readers, want to see. This is your chance to get your voice heard about-what kind of articles you like best!

Very cool video

There's a lot of not-so-great "hack" videos out on YouTube, but once in a while something gets posted that makes your jaw drop. This YouTube video, **AICP Southwest 2011 Sponsor Reel** by *Element X Creative* qualifies for sure.

Go ahead and check out this amazing video, we promise you will not be disappointed!

And while you're at it, also go check out this forum thread about the video

(mrhmag.com/node/6127) on the MRH website.

This video makes us wonder what hobby legends like Frank Ellison and John Allen would have thought of a model train video like this!

Even the spouse, significant other, and kiddies will like this one.

Deal of the century is back!

Speaking of cool things around videos, our parent company Model Trains Video has brought back their popular **Deal of the Century holiday sale** – with a new twist.

Last year, all the DVDs were 50% off, with the get-them-all-for-one-low-price deal being a whopping 77% off for the entire 10-video set.

This time, Model Trains Video has extended the deep savings to all the sets, with the 5-disk Siskiyou Line series (by MRH Publisher and founder Joe Fugate) being the lowest it's ever been at $29 – a full 80% off!

Other sets are likewise 60%-70% off, and all the individual disks are 50% off.

But the best deal is the multi-volume sets – you get a great discount on the collection and the per disk cost of shipping is lower than buying them individually.

The other wrinkle is this is an inventory clearance sale for the Model Trains Video DVDs. Model Trains Video has decided they're going to phase out the DVDs completely in favor of moving to downloadable video only for all their videos.

Downloadable is cheaper and you get the video a lot faster – plus it saves having to produce, inventory, and physically ship a lot of DVDs.

This means the Deal of the Century sale is the last holiday season DVD sale. Once the DVDs are all gone, they're gone.

It's truly the last deal of the century on these videos. If model railroading how-to DVDs are your thing, we don't recommend waiting too long since they won't last at this low price.

So click over to model-trains-video.com and get some inspiring expert answers to those nagging model railroading questions you've got.

The MRH forum

If you like the free Model Railroad Hobbyist magazine, you owe it to

Figure 1: If you log in and click Recent web posts on the MRH website, you can see all that's new since you last visited. One more reason why subscribing can be quite useful.

yourself to also check out the MRH website forum and blogs.

You'll find many helpful and seasoned modelers on our forum, and there's many quite useful posts made by subscribers there.

The best way to view the forum is to subscribe (it's free, of course) and then log in.

Because you have logged in, we track what you've already viewed and we'll show you anything that's new since your last visit.

Here's some examples of the **more useful forum posts that were on the MRH site** the week before this issue was published:

- Replacement Windows for ATSF Observation Car
- Wiring a commuter locos and cab lights to be prototypical! Feasible?
- Rusting rail
- Are there any alternatives to MEK based solvent for gluing styrene?
- Valance Positioning
- Any experience narrowing an Atlas roundhouse? (With photos!)
- Proto 88 Wheels

In a number of these threads, MRH staff have also posted their comments. There's no better way to get immediate access to an active,

Figure 2: The MRH website also contains a lot of nice modeler blogs (web journals) of their model railroading projects, complete with photos. There's some amazing modeling represented in these blogs!

friendly community of model railroaders than the MRH forum!

And then there's blogs

Besides the MRH forums, we also have blogs.

So what's a blog?

Blog is short for weBLOG and it's nothing more than a public journal by one person, with comments posted by others.

It can look something like a forum, but a blog is a collection of posts by one person, that chronicle their thoughts or activities around a topic – which is model trains in this case.

MRH has some very good blogs, a number of which are chronicalling their layout construction projects, with photos!

Here's just a sampling:

- Trackwork and roadbed by *chessie_077*
- Steps for Structure Building by *rclanger*
- Mt. Coffin & Columbia River by *M.C. Fujiwara*
- 22 Stories Up by *Scarpia*
- The New Great Western by *George Booth*
- LED Lighting test by *LKandO*
- Reducing the stall angle of an Atlas roundhouse by *DKRickman*
- Layout #7 - The Lift Bridge by *dfandrews*
- JL&T Railroad Blog by *JLandT_Railroad*
- Buck and Loretta trailer house by *rtw3rd*
- In the beginning there was a basement.. by *Pennsylvania And Allegheny Railroad*
- Progress on my Train Room - Video- by *robfeed*

This is just the beginning. You will literally find hundreds of blog posts from modelers about their projects on the MRH site.

What's in this issue

The November issue has a number of articles we're excited to bring you. Here's a quick run-down:

First Looks: Jeff Shultz looks at a couple of helpful publications for modelers. The *2012 Walthers catalog* (Resource Book they call it) truly is much more than merely a catalog – and the *Beginner's Guide to Creative Effects* book is loaded with great ideas for enhancing your model scenes.

Kato Paint Removal: You may have heard Kato paint is near impossible to remove – well no longer. Author Brian Banna shows you the secret in this one evening project.

Kitbashing a Central Valley truss: Our cover story author, Tom Patterson, shows you how to transform the ubiquitous Central Valley truss into a bridge able to carry heavier equipment. Tom's modeling and article don't disappoint!

Improving Atlas crossovers: Lou Venema shows how he cleverly modified a couple of Atlas code 83 #6 turnouts to fit together as a crossover and get the more common 2" double track spacing for HO.

Rochester coal deliveries: Author David Karkoski's in-depth study of coal movements in the 1950s around Rochester, NY yields great insights for more realistically modeling coal traffic on a layout. David combines analysis with practical modeling applications to help you model coal more realistically on your own layout.

Making cab curtains in any scale: We just knew we had to publish Chad Zentz's piece on using tea bags to simulate canvas curtains – in any scale, no less!

The 35 dollar challenge, part 2: Matt Snell continues his landmark modeling-on-a-budget series with the details of modeling an modern IPD car on-the-cheap. Matt's article last issue was the most popular article in the issue, so make sure you don't miss this next installment. ☑

MRH
Questions, Answers and Tips

Reader Feedback *(click here)*

Figure 1: Nick Biangel used natural twigs and ground cover materials to create this scenery on his friend Jerry Diaz's layout in Hialeah, FL.

QUESTIONS AND ANSWERS

Q: Can you use real wood (branches, twigs, etc.) and dirt for scenery? If so, what do you have to do to prepare it so it will last? Are there any downsides to using natural scenery?

A: Yes, natural materials can be used on a layout as scenic materials, with some caveats.

Twigs and branches can make realistic tree trunks and dead logs. Dirt can be used for ground cover. It is a good idea, however, to briefly microwave any natural materials to eliminate any "little critters" living in them.

You should also run a magnet through any dirt to make sure it has no iron filings that can be attracted to the magnets in a locomotive motor.

Also note that if you use dirt with a high concentration of clay, it can crack as the glue dries.

Another natural material trick is to grind up dead, dry leaves for use as forest floor deadfall. Be careful, however, to make sure such materials are completely dry.

Damp materials can encourage unhealthy mold and mildew growth, and can attract things like small bugs and spiders. Some natural greenery such as lichen can be treated with glycerin to preserve it (more on this later).

You can also use real rock and sand for talus. See MRH Jan 2011 article, Fun with Talus - model-railroad-hobbyist.com/magazine/mrh-2011-01-Jan/fun_with_talus.

To eliminate any "little critters" living in the natural materials, heat them in a microwave. Place the items on a paper towel, and put another paper towel over them to keep any boiling moisture bubbles from splattering the inside of the microwave.

Microwave them for 30 seconds; allow everything to cool for a minute. Put the items on a fresh paper towel, and also put a fresh paper towel over them and microwave them another 30 seconds. This is long enough to take care of any "critters" in the natural materials, yet is short enough to not do damage to most natural materials.

To keep natural materials such as lichens soft and fresh looking, you can apply a glycerin solution.

Mix 4 ounces of Glycerin with 8 ounces of 70% Isopropyl alcohol then pour the mix into 1 quart of boiling water and stir. Allow to cool then pour into a gallon bottle.

Place 6 ounces of the mix into a plant misting sprayer. Spray the natural materials periodically (once a year) to keep them soft and fresh looking.

Alcohol will make the water/glycerin mixture flow better but will not speed up the evaporation of water. The stored mix will last about 6 months on the shelf – shake before each use.

Scenic Express sells glycerin (see www.sceneryexpress.com/prodinfo.asp?number=EX0070).

For some good examples on using natural materials for scenery modeling, see this link: www.trainboard.com/grapevine/showthread.php?t=129883 on the Trainboard Forum.

— Joe Fugate and the MRH forum

Q: I have converted my 10'x12' layout from cab control and block toggles to DCC. Now whenever I get a derailment and there's a short, every single train on the layout quits running until I clear the short. What am I doing wrong?

A: You're not doing anything wrong – this is one of the "side effects" of moving from cab control to DCC.

Under cab control, you split the layout up into train length blocks and each block is powered by a different power pack or power supply. If you have a derailment and it causes a short, only that train (and its power pack) is affected.

Now with DCC, your entire 10' x 12' layout is probably now powered by a single booster. In effect, your layout is now powered by a single power pack, and when you get a short, everything quits until you clear the short.

There are solutions, and it involves going back somewhat to what made cab control isolate shorts – breaking the layout up into blocks.

In DCC terminology, these are called "power districts" and creating more than one power district helps you manage shorts. Having more than one power district also increases your layout's capacity to run more locos, but the scope of this question is managing shorts, so we'll stick to that topic.

When wanting to isolate shorts on a DCC layout using power districts, look at what part of the layout has the most turnouts, since 99% of derailments tend to happen there.

Most likely, the areas with lots of turnouts will be a yard or major industrial district. For example, you should give serious consideration to making a main yard or a staging yard a separate power district with its own booster.

Now when a short occurs, only the yard will shut down – trains on the main will keep on running.

A second technique for managing shorts involves creating train-length blocks by gapping the track within each power district and then putting short protection on the feeders to each train-length block.

For the short protection, you can use Tony's Trains block protectors at a cost of $25 - $45 per train block. See: tonystrains.com/products/type_power-protect.htm

You can also use a clever trick with 1156 auto tail light bulbs to get similar short protection behavior for about $1 per train block.

The video below illustrates how I use the tail light bulbs on my HO Siskiyou Line to manage shorts. While some point out the bulbs are not real electronic short protection like the breakers from Tony's Trains, I find they are most effective, and the price is right!

When using the 1156 bulbs for short management on your DCC layout, here's a great website by Marcus Ammann with more insightful details:

members.optusnet.com.au/nswmn/1156.htm#i1156test

One of the handier things Marcus Ammann has on this website is an in-depth study of amperage draw and the effect of the tail lights on voltage drop.

Marcus has done his homework, too. An 1156 bulb (27 watts) will limit total block current to 2.1 amps, while a two-filament 1157 bulb (33 watts – if the filaments are wired in parallel) will increase the current limit to 2.5 amps.

Wiring two 1156 bulbs in parallel increases the block current limit to a whopping 4.2 amps.

This means using something like:

1. Two 1142 bulbs in parallel (18 watts) would give you a 3 amp current limit.

2. Two 1152 bulbs in parallel (17 watts) would give you a 2.8 amp current limit.

So looking at all the common bulbs:

1. One 1152 bulb - 1.4 amp limit
2. One 1142 bulb - 1.5 amp limit
3. One 1156 bulb - 2.1 amp limit
4. One 1157 bulb - 2.5 amp limit (if both filaments wired in parallel)
5. Two 1152 bulbs - 2.8 amp limit
6. Two 1142 bulbs - 3.0 amp limit
7. Two 1156 bulbs - 4.2 amp limit
8. Two 1157 bulbs - 5.0 amp limit (if both filaments wired in parallel)

This allows you to tune your layout's train block amp draw and short flow limit to your liking. Going with 3 amps seems about right in HO, but going over 4 amps isn't a good idea since it would allow shorts to start doing some serious damage. ***— Joe Fugate***

Q: I've heard baking the paint on a model produces the most durable finish. What's the best way to do this?

A: A baked-on paint job is harder and more durable than any other finish. The down side is that high heat will deform plastic, unsolder parts and melt detail castings.

Fortunately, it does not require very high heat to make paint dry hard and durable like a glass film. At only 115° F, this temperature will dry a wet, high gloss paint finish to the point of no paint odor in only a few hours.

You can use a variety of ovens and baking devices as long as you can keep the temperature low. Oven baked finishes are not good to hurry, especially with low temperature detail castings and plastic bodies. The home oven is very difficult to use without overheating.

The oven you need doesn't have to be complex or even traditional in looks or technology.

There are some basic expectations of a model paint oven:

- A constant temperature of about 115° F.
- Something to move the air so there are no hot spots and the paint fumes can be moved away from the model's surface.
- An oven or container that will hold in the heat and be strong enough to support the model.

In my years of modeling, I have frequently used a home-made bake oven for my models. Cardboard, wood and metal boxes make suitable bake ovens as long as there is lots of space inside.

A foil lined cardboard box is an excellent container, with an incandescent electric light bulb as a heat source, sitting on a cookie bake tray with air space underneath. Do not use a CFL

lamp as a heat source, they don't get hot enough.

My early circulating fans were the toy ones that worked off of a 3V battery, but computer fans are inexpensive and readily available now, that they would work well - you only need to move the air inside the box, not exchange the air from the outside. You need a sturdy shelf about half way up the container to support the model, with the light (heat source) underneath, sitting on an insulated fireproof surface.

The shelf should be well perforated so that air and heat can readily pass through. Rigid screen or hardware cloth will work well.

I also have had good success with the famous "as-shown-on-TV" Ronco food dehydrator as a model paint drier. Currently, I am using a large, professional stainless steel food dryer (surplus from my farm business) that is very big inside and has multiple shelves for many cars and locos.

Food dehydrators are good because food is dried at about 120 deg F, well within the safe temperature range of very low solder temperatures, cast low temperature white metals, like Cerro Bend alloys, and thermoformed plastics.

For very accurate temperature control, do a "wet" run of heat by putting a pint container of water in the oven for an hour and use a quality, food grade dial thermometer to read the temperature of the water. Keep trying various combinations of LOW wattage incandescent bulbs, in the 2 W to 25 W range, until you get the 115 deg F. temperature, but not more than 125 deg F., after an hour of "soaking."

The water temperature method is extremely accurate and is considerably cheaper than an electric thermostat that may or may not be as accurate. It is also an accurate method of checking a heater's commercial thermostat for accuracy.

— Lew Matt

TIPS

Banishing derailments

Use pushpins to find track issues: Every time you have a derailment , mark the spot with a pushpin. Over time, if you end up with three pushpins in close proximity, you likely have a track problem in that area.

If you have a track issue, replace the track. Repairing it seems to almost

always be a losing proposition, at least for me. (*We agree. – Ed.*)

Chalk for railcar issues: Every time a car derails, mark the car end that derailed with a chalk mark. If a car gets three marks, time to put it on the rip track and give it some serious going over.

Amazon sells a suitable white marking pencil: http://amzn.com/B0046IZBBK

— SeanM on the MRH website

GET $25 PER TIP

We pay $25 USD for each tip we publish. **So send in your modeling tips to Model Railroad Hobbyist** and we'll get your payment to you upon acceptance.

Just think, for only a few minutes effort, you could fund your next piece of rolling stock – or even pay for an entire train if you send in several tips and we publish them!

If you include any photos with your tip, we pay a bonus of $10 per photo we use with the tip. ■

Marker lights lenses made easy

I was completing an Sn3 PBL #6 RGS Goose for my friend Bill Busacca and looking to add colored lenses to the marker lamps on top of the cab. I decided to combine two products: Formula 560 Canopy Glue by Pacer (available from hobby shops catering to plastic modelers) and Createx Transparent Airbrush Colors from Createx Colors (available from some craft stores as well as Blick Art Materials).

To make the lenses, add a drop of the Createx Transparent Airbrush Color to

a drop or two of Formula 560 Canopy Glue, and mix thoroughly. Using a toothpick, pin or piece of small diameter wire, pick up a small amount of the mixture and wipe it across the casting's lens opening. The paint/glue mixture initially will be opaque but in a few hours dries to a richly colored transparent lens. That simple!

— Bill Adkins

Reader Feedback *(click here)*

The Amherst Railway Society Railroad Hobby Show

Our 2012 Show will be

January 28 & 29, 2012

Save the dates!

About The Show

Every year late in January or early in February, the Amherst Railway Society holds its Railroad Hobby Show at the Eastern States Exposition Fairgrounds (The home of The Big E) in West Springfield Massachusetts. More than 25,000 railfans and public attended the Show each of the past three years.

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!

Click to learn more ...

THE LITE *AND* NARROW:

People for the Railroad – A Layout Without People is a Ghost Town

Ramblings on Narrow Gauge and Branchline Modeling

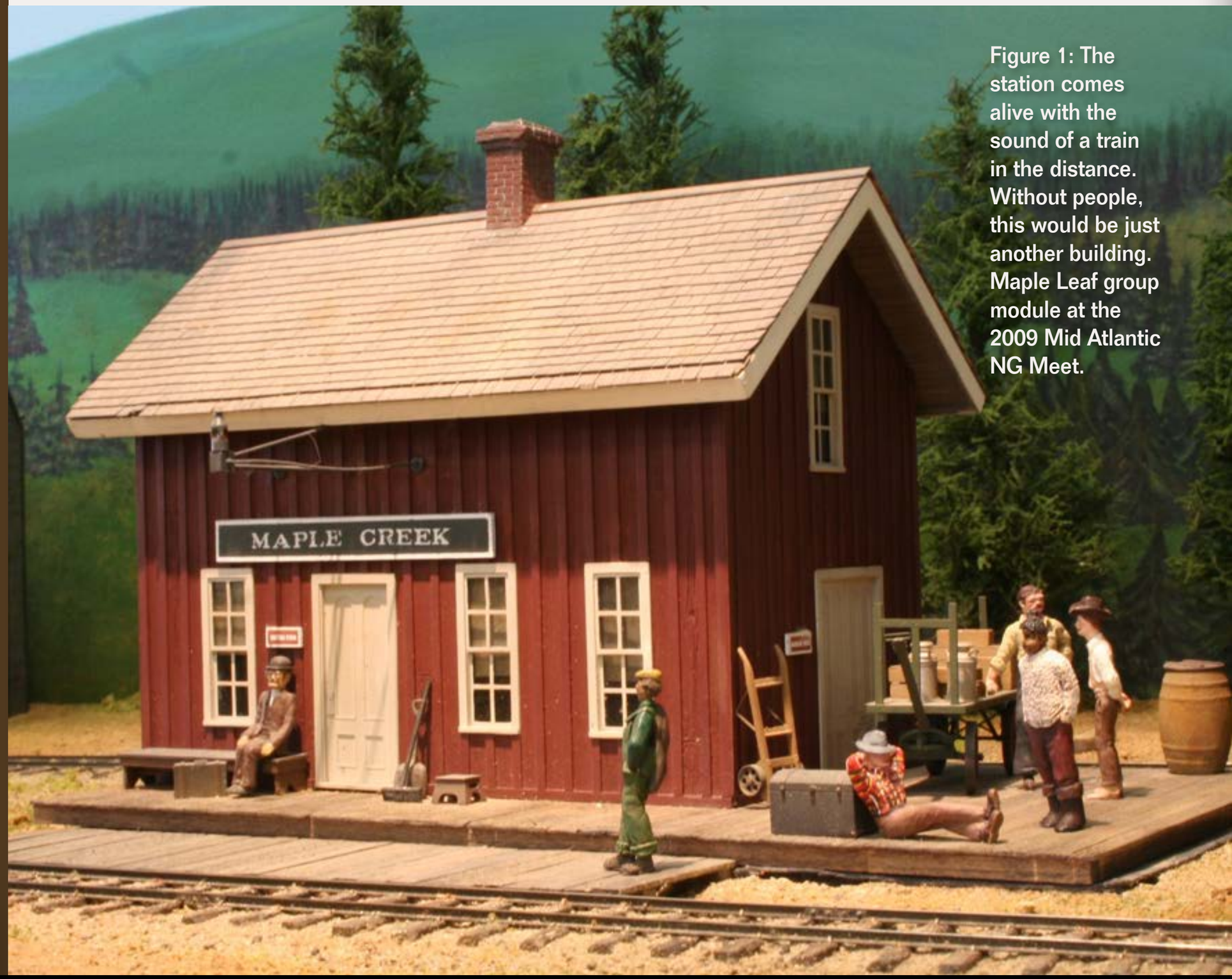


Figure 1: The station comes alive with the sound of a train in the distance. Without people, this would be just another building. Maple Leaf group module at the 2009 Mid Atlantic NG Meet.

About our narrow gauge and branchline columnist

Lew Matt is a published writer, photographer, and illustrator whose work has appeared in many model railroad hobby magazines.

Click here to learn more about Lew.

Reader Feedback
(click here)

Trains add the action to the model railroad, but scale people make it come alive. A village without people is a ghost town, so let's get the two-legged critters up and running ...

There is a lot of information on the Web and in the press about painting scale model figures, and those authors do produce great work using dark-to-light and light-to-dark shading, washes of color on color, dry brush, highlight wipes and washes, and numerous other techniques. These methods produce great sculptures, but most take at least an hour per figure, sometimes more. When you have 50 - 100 people to paint, how valuable is your time?

The cheapest way to purchase figures is in bulk. Individual painted castings cost about $4.00 (or more), while unpainted styrene people can be had for as little as $0.10 each when bought by the pound. The quality of the figure can range from highly-detailed, hand-sculpted masters cast in pewter or resin, with cast on details like individual fingers, eyebrows, and mustaches, to (old-die) injection-molded plastic and metal figures where the human features are almost

Figure 3: Four clear flat spray paints that protect the water-based acrylic paint from the alcohol weathering wash and further dirtying paints. From the left: automotive paint adhesive, Floquil flat coat, Dullcote and Krylon flat spray.

Figure 2: The O scale Woodlands Scenic mechanics line up to say hello in front of a 14T Heisler. The three on the left are fresh out of the box, and the others have been touched up and dirtied a bit, especially the hats. The engineer is a Phoenix metal casting in 1/43 with his lower extremities removed.

non-existent - I refer to these characters as the "blob" people.

Scale people are the actors of our scenes and dioramas and, as such, are subject to the rules of the theatre. The first rule of theatre is that all you see is perception, not reality. The rest of the rules refer back to rule number one! Put your finely-detailed scale people in the front of the crowd and the blobs in the back, and everyone will see scale people; no one will notice any blobs at all. Never use a blob as the center of action at any scene or put him/her in the front.

Blobs are nondescript and make great passengers behind translucent windows in passenger cars, working with their back to the viewer, standing in waiting rooms, shops and groceries, and patrons in restaurants – but waitresses, bartenders and shopkeepers shouldn't be blobs because they are focus points and are actually looked at, even in crowd scenes.

Scale people are available in three basic flavors - cast metal, cast resin and injection-molded plastic. You can find superior details in any of the manufacturing processes and you can

find blob people in any of the processes, too. Pewter models are now almost all lead-free, and resin castings are slowly replacing metal castings because they are getting cheaper and easier to produce every year. Probably the biggest producer of quality injection-molded figures is Preiser, with several Chinese manufacturers right on their heels.

Sizes of people can be very confusing. War-gamers have the best selection of characters on the market, but they size in millimeters, not scale. Train suppliers tell you the scale or more likely they say something like “suitable for use with O scale,” which usually means they are bigger than HO and smaller than G scale. Whatever scale you model in, you can find suitable figures in the scale above and below yours that can work on your layout. In O scale, there are several selections within the 1/4” = 1’-0” limits.

O scale comes in different flavors: 17/64”, 1/4”, and 7mm to the foot.

The proportions are also different, and cover 1/50, 1/48, 1/45 and 1/43. Vehicles and building doorways are eye measuring tools that tell us that a person is the correct height in that scale. Vehicles are frequently 1/50 (diecast) and 1/48 (plastic) and doorways are as tall as 1/43, too. Now add in the war-gamers’ and military modelers’ figures, and we have 27mm, 28mm, and 30mm figures too. (The 28mm means they measure 28mm from bottom of foot to forehead, about 5’-5” in O scale.)

In O scale, I have blended large S scale figures, 1/64, 3/16” = 1’-0” or short 28mm with the others, up to 1/43, 7mm or 17/64” = 1’-0” at 32mm. The success of the mix depends on where and how you are displaying the scale person. The bigger people always look better closer to the viewer, and the smaller people to the rear or away from the viewer. Place people and vehicles of the same size together in a scene; small O scale vehicles and small O scale people look great

Figure 4: A range of O scale figures in male and female. From the left: 1/43, 1/48, 1/50 and 28mm. The 28mm pewter war-game figures will have their bases removed by nibbling away with a wire cutter.

Figure 5: Taking people to meets for modular use requires careful organization of like-acting people for each modular scene to reduce the setup time. Quart and sandwich size Ziploc™ plastic bags and smaller craft size resealable crafts bags from Michaels, make excellent storage devices. Label each bag with a Sharpie marker.

Figure 6: Further organize your people by storing the labeled bags in compartmentalized carrying cases. The carrying cases are marked farm scenes, station scenes, workers, stores, etc. Store the bags with the labels facing up for easy reading. Keep figures for a small scene, like a postman and biting dog, together.

together. People in 1/43 look correct coming through a warehouse door, but look like a giant in an office doorway. Make the elements of the scene fit the picture.

I accidentally purchased a large bulk quantity of S scale figures for my O scale operation. Rather than discard them all, I selected the ones that looked the most like children and detailed them as kids, and gave away all the mothers, fathers, and grandparents in the box. It worked very credibly. N scale people can be HO or S scale children, too.

If the scale people you have don't fit your needs, then it's time to slice and dice. Cut off arms, legs, heads, hats, etc., and put them back together, like Dr. Frankenstein did, in the shape that suits your needs. Reposition arms to the front, and bend the body at the middle, and you have someone picking up a box. If you want to be OSHA-correct, bend their knees a little too.

Bulk-buying frequently means you get a dozen or two identical people. Take half of them to the slice-and-dice machine. Separate by sex, and put all the torsos, legs, arms and heads in separate containers, and mix and match

Figure 7: A die cast and plastic toy car in 1/50 proportion is perfect with the S scale figure to the left, the HO figure seated and the 1/48 O scale figure on the right. The S scale figure looks like a teenager and the HO figure represents a small boy in this O scale scene.

Figure 8: O scale, 1/48 people are in this scene with a 1/43 scale, plastic, AMT Corp., 1936 Ford Coupe, unbuilt kit. The figure to the left is injection molded, the figure to the right is cast metal and the gentleman with the tire is a "slice and dice" "blob" with his back to the viewer. Your attention keeps moving between the customer and the mechanic with the cloth, the blob only helps make the scene.

without a plan. You wind up with very interesting people for a crowd.

Sometimes it is the simple easy cut that looks the best. I have 55 identical "business suits" with arms at their sides. Wala! They become: several pairs of men, with and without hats, shaking hands, looking at their wristwatch, waving, reaching out with one or both arms, holding packages, hugging the suit lady, etc. With different paint jobs on the suits, you can't tell they originated from the same guy. Paint the guy and the girl hugging before you glue them together; it is so much easier.

All my figures have a straight pin surgically implanted into a foot or buttock as a holding device for painting. This painting pin will later be the mounting pin that holds the figure to the foam board of the layout. I use a seamstress' long straight pin, as it is cheaper and stronger than wire. Paint figures in groups of ten and hold the pins upright with pincher clothes pins. Leave the head of the pin on until you are ready

to mount the person on foam, then trim the pin to about 3/8."

After you have cleaned off all the flash and glued all the heads and limbs back on, it's time to paint the figures. The Matt family uses flat lacquer Caucasian color primer with water-base acrylic colors over, sealed with flat clear lacquer, then weathered with alcohol wash. The acrylic colors are applied as just plain painting, no shadows or highlights or anything fancy. My paint crew, aged 10 to 12, appreciates the simplicity.

I prime all of my figures with air-brushed Floquil Caucasian skin color, then, when they are dry; I randomly take about 10% of the figures and overspray them with Rustoleum dark brown primer. If an Oriental is needed for a scene, a very light wash of yellow ochre over the Floquil Caucasian color does a nice Far East job on the skin. Don't worry about the bright pink skin color; the weathering step at the end tones it down.

I paint some of the shirt fronts, collars and neckties, and the kids do the rest. Conservative colors are the norm, but every now and then some really wild color combos turn up. The 11-year-old painted a business suit "gotcha-pink" and then put red high heels on him. He said that it "takes all kinds". Not good on the farm, but in a crowd scene downtown, a few wild cards fit right in with the rest of the deck. Anyway, red Pradas can go with pink Gucci, ask anyone on Times Square.

Figure 9: This is the Matt family figure- and detail-painting team. Left is Tanner Jones, age 10, Morgaine Harris, age 12, and Bryce Harris, age 11. The table holds only a small sample of their work. Working as a team, they have painted over 500 figures and many other detail pieces.

Figure 10: A warehouse scene made up of Aristo Craft and two different Woodland Scenics' scene people. Not all the characters of the sets were used here. The red arrow points to a thin plastic base to which the two figures and the large and small boxes are glued to form a single mini-scene. This keeps everything together and speeds up the setup time when displaying a module.

When all the painted figures have been inspected and all skips and overpaints corrected, a dull or flat spray is used to cover everything. I have tried all the common clear flat paints and found the least shiny and most durable coating to be automotive paint adhesion primer. It is somewhat expensive but works great. This coating is tough enough to keep cast-metal people from chipping when stored together in the same bag.

The next-to-last step is weathering with a wash of gray, black, and/or

"I paint some of the shirt fronts, collars and neckties and the kids do the rest. Conservative colors are the norm, but every now and then some really wild color combos turn up."

“Be careful, if the figure does not have a seal coat of flat lacquer, the weathering will dissolve and ruin the acrylic paint job.”

brown shoe dye mixed with alcohol and liberally applied over all the figures. Workers may get an extra wash of Testors flat ’Namel black too. Be careful, if the figure does not have a seal coat of flat lacquer, the weathering will dissolve and ruin the acrylic paint job. Some really dirty people, like the coal miners, are lightly dry-brushed with grime. The butcher may get red-brown stains dry-brushed on his apron, and so on.

Now is the time to apply all of the character details. Use your artist color pencils with very fine wedge-shape points to add red lips, black or brown eyebrows, mustaches, and a black or dark blue mark for the eye. Even blobs come out looking like people with the suggestion of facial features. Less detail is more effective than too much. Use the pencils and Sharpie® markers to add details on the body and clothes. A silver or gold permanent marker makes great uniform buttons and belt buckles. Cut and shape the end of the marker with a razor blade to make a really fine point.

When you reach this stage of the game, you can stop singing that Barbara Streisand song, “People, Who Need People,” and get to work livening up the layout. If you are going to do some photography of your scenes for *Model Railroad Hobbyist,* Put lots of people in every scene and move them with you as you go around taking your pictures. (This is where the leg mounting pin comes in handy.) No one will ever know that those 100 people are all the population you own, unless they are wearing red Pradas with pink Gucci. ☑

“Even blobs come out looking like people with the suggestion of facial features. Less detail is more effective than too much.”

Reader Feedback *(click here)*

About our layouts columnist

Charlie Comstock became the MRH editor in the March 2011 issue.

Click here to learn more about Charlie.

Reader Feedback
(click here)

UP THE CREEK: Upper Bear Creek gets water!

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

Part 2 - Adding Envirotex-Lite® water to the creek bed ...

Figure 1: The Envirotex-Lite® water under the bridge is filled with reflections. The stones and the color variation in the bottom of the shallow creek help it seem deeper than its actual depth of a scale foot or less.

In last month's installment of Up the Creek I wrote about preparing the creek bed for a layer of Envirotex Lite® water (figure 2). This month I'll cover the water itself.

Casting-epoxy water

Envirotex Lite® is a two-part epoxy resin. The instructions say to mix equal volumes of resin and hardener, then stir thoroughly. I used a couple of 4 oz. paper cups to measure the resin and hardener, then poured them into a 12 oz. paper cup. Measure the volumes as exactly as possible, but don't use kitchen measuring cups – the Envirotex will render them unusable for cooking.

Two alternatives to Envirotex are Woodland Scenics' Realistic Water

Figure 2: The ready-for-water creek bed. The bottom is painted, and all paver sand, logs, and rocks are securely glued in place. I installed a dam across the front on the creek to keep the Envirotex from leaking out, sealing it with waxed paper so I could peel it off later.

Figure 3: I added a trace of green and brown acrylic craft paint to the water mix and I do mean only a trace! A little goes a long way. After mixing, the Envirotex will be quite foamy. Don't worry – the bubbles will disappear.

Figure 4: I'm CAREFULLY adding the "water" to the creek bed. Make sure it doesn't go anywhere water would be inappropriate.


Figure 3


Figure 2


Figure 4

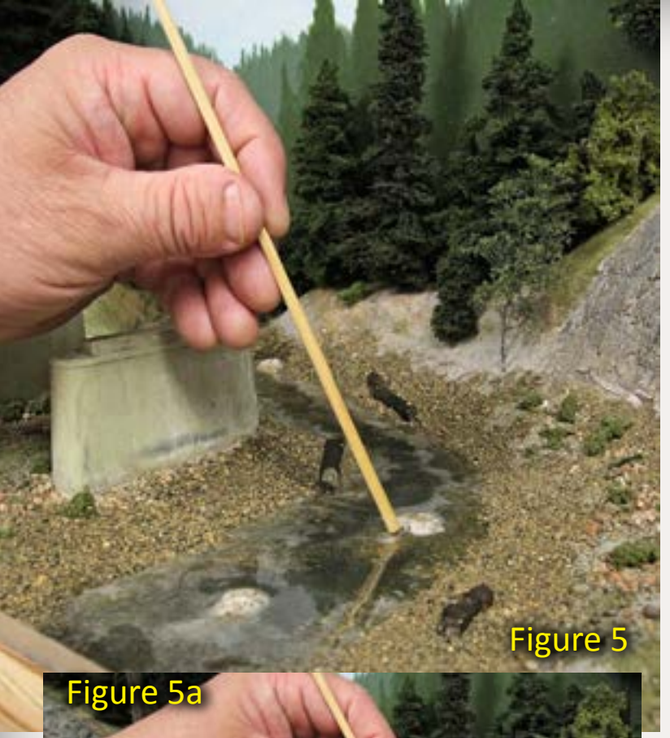


Figure 5


Figure 5a


Figure 5b


Figure 5c


Figure 5d

Figure 5: Envirotex is self-leveling. That means it will tend to flow everywhere until its surface is flat and level. It has an amazing ability to find even tiny pinholes in a creek or river bottom – and leak fresh Envirotex all over the floor. Be sure all holes are plugged.

Although it is self-leveling, it doesn't spread well as a very thin layer, so I help it to get friendly with the creek bed. The 1/8" uncoupling pick I used to mix it works well for this purpose. I coax it up to the creek banks and any other obstacles in the water.

If you look carefully you can see the foam (milky white bubbles) in the Envirotex at this point.

Figure 6: Once poured, coaxed, and given time for the bubbles to resolve, the creek looked like this. In this state, it is imperative that you keep it dust-free – any dust that settles on its surface will become a permanent part of the water.

and Unreal Details' Magic Water. I've heard good things about these products, however I chose Envirotex because my previous experiences with it were very positive.

Mix, tint, and pour

I used a 1/8" dowel (that was previously an uncoupling pick – hey, it was handy – to mix the parts together along with traces of coloring. Many things work to tint Envirotex; I chose to use greenish craft acrylic paint and Polly Scale roof brown. When it comes to tinting, use microscopic amounts. It is very easy to add too much. Mix the parts vigorously and thoroughly. If not mixed well, it won't harden and will leave a nasty, hard-to-clean up mess in your water feature. The foam visible in figure 3 is normal. Once poured, it will rise to the surface and disappear.

Note: I've used Envirotex, but not Envirotex Lite, in the past. The older version retained mixing-induced bubbles. However, exposure to carbon dioxide causes it to lose surface tension and allows the bubbles rise to the surface and pop. The directions suggest either waving a torch over the surface (which seems like a fire hazard) or gently blowing on the water to provide the CO_2. (which seems like a way to inhale epoxy vapors – a health hazard). Envirotex Lite® doesn't seem to need much help for the bubbles to rise and pop. It also is supposed to have much less vapor and odor than the previous product.

I poured the Envirotex, foam and all, into the creek bed. Perhaps "carefully dribbled" would be a better description (figure 4). I was careful when pouring – I didn't want this stuff anywhere except in the creek – no water on top of the rocks in the creek. It's best to pour in the middle of a wide spot, then spread it around than try


Figure 6

Figure 7


Figure 8


Figure 9

to pour close to details that aren't intended to become waterlogged. I wanted to pour a $^1/_8$" thick layer but the thickness varied a bit.

It took the water around three days to completely cure. Don't test this by touching the water with your finger – if it's not cured you may leave a permanent fingerprint! Instead, test the epoxy left inside the mixing container. When I could tap the leftover epoxy with the stirring stick without feeling any tackiness, I figured the water had frozen (cured).

Ripples

Most water isn't mirror-flat. Even a slight breeze or current causes ripples. Envirotex has an unrealistically mirror-like surface when cured. I used a small brush to paint some ripples in strategic locations.

Gloss medium goes on white but turns clear as it dries. It's available

Figure 7: Acrylic Gloss Gel Medium works well for building up transparent ripples on the Envirotex Lite® water.

Figure 8: I add gloss medium with a small brush.

Figure 9: It goes on white, but dries clear.

Figure 10. About 15 minutes after painting on the gloss medium ripples the white color is almost gone. I deliberately bent the creek around the bridge to disguise its joint with the wall.

A clipping from the

South Jackson Gazette

Water Under the Bridge!

While railroad officials of the Bear Creek & South Jackson wait impatiently, a crew of hydrologists from Hillmovers Construction worked feverishly to get the water flowing in upper Bear Creek. Said Charlie Comstock, superintendent of nearly everything, "The hydrology crew claimed they needed to remove the railroad bridge to install water in the creek, but I sure don't see why that was required. All I know is railroad operations are stopped dead in their tracks until that bridge is back in place."

Most of the local citizens, weren't happy with no trains running either. Horace Fithers summed up the mood when he said, "How ya gonna be a rail fan when there ain't nothin' on the rails to fan?"

There is hope, however, that the bridge outage will end soon and folks can get back to counting louvers on diesel battery boxes as the trains pass by.

The local kids didn't seem bothered by trains not running. In eager anticipation of a newly aquafied creek, the were reportedly buying record numbers of new bathing suits from Xavier Muney's Mercantile.

* Enjoy the Gazette? Read more at bcsjrr.com


Figure 10

in several viscosities – choose the thicker ones for painting ripples.

Let the gloss medium dry thoroughly before proceeding. Attempting static grass before this will result in grass growing out of your water! Oops ...

Figure 10 shows the “rippled” creek. The Envirotex has climbed over some of the little stones in the bottom of the shallow creek for some extra water detail.

Next month I’ll write about weathering and detailing the creek.

Reader Feedback *(click here)*

Figure 10

About this issue's prototype modeling columnist

Jack Burgess has pursued his passion, the Yosemite Valley Railroad, for more than 40 years. His model of this railroad is known around the world for its dedication to following its prototype as exactly as possible.

Jack has also written a book about the Yosemite Valley titled "Trains to Yosemite."

Photos and illustrations by the author unless otherwise credited.

GETTING REAL: Picking a Date to Model

Adventures in Prototype Modeling

Let the master of picking a date to model, Jack Burgess, take you step-by-step through the process and show you how it's done ...

Reader Feedback *(click here)*

Figure 1: Although Fred Stoes, the photographer of this image of YVRR No. 28 in the Merced yards, didn't record the month or even the year he took this photo, there are a number of clues. The two extra air pumps on the front pilot were added to the engine in early 1938 after a devastating flood in late 1937 which damaged miles of roadbed in the Merced River Canyon; they were used to provide air to air-actuated side-dump cars used in the reconstruction project. There is not yet a blackout visor on the headlight; those were added to YV engines in early 1942 after the start of World War II. Another clue is the spark arrestor on the stack. These spark arrestors weren't very effective, but were still installed on YV locomotives around June each year and removed in late September or so. Based on these clues, the photo was taken sometime between 1938 and the end of the summer of 1941. The most likely date is the summer of 1941.

There is no question that our hobby has seen a noticeable shift toward prototype modeling over the past three decades. Magazines are publishing more articles about prototype modeling and prototype-inspired layouts. Manufacturers have also followed this trend with the release of factory-painted diesel and steam locomotives with correct, railroad-specific details. The number of prototype modeling events and get-togethers has increased substantially over the years. Although freelancing and proto-freelancing are fine avenues to pursue in this hobby, more and more modelers are discovering the rewards of modeling a specific prototype.

There are a number of avenues to pursue within the framework of prototype modeling. Some hobbyists like a specific prototype but need - due to space constraints, limited modeling time, or other factors - to place it in a semi-freelanced setting. Others are constructing large layouts and need to be less restrictive during construction and less concerned about their prototype in conjunction with structures and freight car purchases, in order to get into operations early and maintain interest.

However, I suggest that, whether one models a specific prototype in a completely prototype setting or in a semi-freelanced setting, one also needs to select at least a specific year to model. It doesn't need to be a particular month (although I will advocate later that months are important too), but at least a year and general time of year or season.

Some modelers will immediately argue that being that constraining is defeating the purpose of the hobby which is to have fun! If you love F units and also SD70ACe units, and want them both on your layout, go ahead, since it's your layout. But I have found that picking a particular year to model, while maybe initially a difficult decision, can actually be very liberating.

For example, every month, magazines such as MRH highlight the newest locomotives, freight cars, and details available. If you haven't picked a year to model or even a couple of years, it is so easy to be continually buying the newest locomotive or freight car release just because it is factory-painted for your prototype or you like the color. But, if you have selected a specific year to model (and are willing to adhere to that decision), these new releases

Figure 2: Will Whittaker took this photo of a YV passenger train in July 1941. The train includes a YV steel 40-ft. RPO car, a heavyweight Pullman, a rented SP diner, and the YV's classic observation car on the end. Vegetation along the Merced River has not yet returned after the disastrous 1937 flood. Pullmans were operated only between Memorial Day and Labor Day, which was another factor in my decision to model August.

will no longer become distractions unless they fit your selected time-frame. That allows you to make sure that your hobby dollars are not spent on "impulse" items, similar to the snacks and trinkets along the check-out aisle at the convenience store, but are saved for items which contribute to your overall goals.

Picking a Year to Model

Picking a year to model can seem a very intimidating task. Many modelers love "the transition era" which allows them to model both steam and diesels. But what is the transition era for their prototype? Is it 1947 or 1953? I think we need to be more specific.

It was not long after I decided to model the Yosemite Valley Railroad back in 1967 that I realized that I needed to pick a specific month and date to model it. There were a number of factors which I considered. Expecting to scratchbuild all of the YV equipment that I would need suggested that I should focus on the late 1930s or early 1940s (the railroad was abandoned in 1945) since there were fewer prototype photos for earlier

Figure 3: The driver has the door ajar on his 1932 Ford pickup while he ran into the Bagby Store for a cold soda…maybe he was afraid that his pickup won't start again if he shut it down. Just beyond the store, Highway 49 crosses the YV tracks before climbing the far hillside. California highway route signs like the Highway 49 sign were originally black on white like the one here, but are now white on a green background. The truck has a 1939 California license plate.

Figure 4: This pair of icons helps reinforce both the date and location being modeled. The billboard is typical of advertisements of the 1930s and promotes Texaco, a brand popular in the west. Out on R Street, a family of migrant farm workers displaced from Oklahoma (you can tell from the license plate on the car) has suffered one more setback…another flat tire. Grandfather looks a little overdressed in his coat but maybe he is just too proud to remove it.

periods. Another major factor was the Yosemite Lumber Company which shipped logs on the YV from Incline to their lumber mill at Merced Falls. After starting operations in 1912, the lumber company unexpectedly shut down in 1927, started up again in 1929 but shut down again in 1930. It opened again in 1935 and then operated until 1942, when it was closed for good. Including this operation on my layout (and modeling sometime in the late 1930s or early 1940s) meant picking a year between 1935 and 1942. World War II began in September 1939, although the United States didn't enter the war until two years later. But the start of hostilities in Europe still created political

unrest in the U.S., so I selected 1939 to model.

Picking a year to model other prototypes could involve similar choices. Whether favorite locomotives are available commercially is typically a major factor for many modelers. Variations in traffic patterns such as the shutting down of an important industry can be very important. Changes in equipment such as the elimination of cabooses or adding TOFC service might be a factor. Mergers and lettering scheme changes can also be significant.

Others migrate toward favorite rail-fanning days or other factors.

If there are several factors to consider, make up a timeline for your prototype including when equipment was purchased and retired, when various changes were made, etc., and then study those years which most closely conform to your preferences.

If you are having a hard time selecting a year to model, another possible approach is to initially select a general period to model and then refine that selection as you get a better understanding of your prototype. More

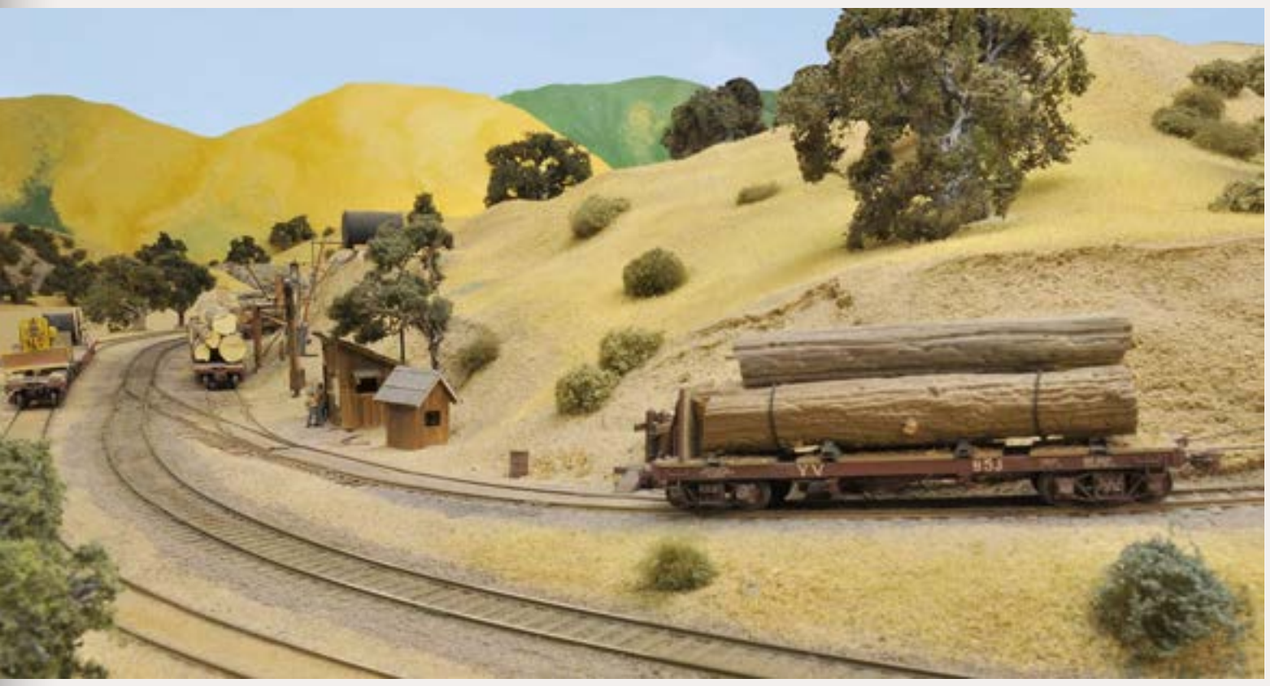


Figure 5: One of the reasons I picked 1939 to model was to be able to include the log trains which ran from bottom of the logging incline to the lumber mill 49 miles west. Here, a loaded log car rounds the turn at the bottom of the 8,300-foot-long incline and will roll into the loads track to the right of the mainline.

"The accuracy of the specific locomotives and freight cars we model may or may not be noticeable to the casual layout visitor. However, many of the details we incorporate into our scenes may be obvious to many visitors."

information might be found to further refine your selection.

Details Can Be Year-Specific

The accuracy of the specific locomotives and freight cars we model may or may not be noticeable to the causal layout visitor. However, some details we incorporate into our scenes are likely to be obvious to many visitors.

Let's start with a common year-specific detail that many of us can relate to—automobiles. While automobiles today seem to all look alike, many of us who grew up in the 1950s and 1960s can still easily distinguish a 1955 Chevy Bel Air from a 1965 Ford Fairlane. Many times, automobiles on a layout are one of the first keys to the year (or era) being modeled. With so many different choices of scale automobiles to choose from, it is easy to avoid using vehicles newer than your chosen modeling year. Older automobiles can obviously be very appropriate (especially during World War II, when the production of new automobiles was banned) and can be weathered and dented based on their age and use.

There are many other iconic details which can help visitors better understand the year we are trying to model. They can range from hoboes riding freight cars during the 1930s Depression years to patriotic posters from WWII, such as those which warn that "Loose Lips Sink Ships." Kermit Paul models the war years (March MRH), and included a scene on his layout with Bud Abbott and Lou Costello entertaining a crowd while encouraging them to buy War Bonds. Those modeling sometime in the early 1950s might consider adding roof-mounted television antennas to homes of lucky television owners. Those modeling late 1972 or early 1973 might include a long line of cars at gas stations during that time of gasoline rationing.

Such simple scenes can provide operators and visitors a direct link either to things they read about in History classes or even experienced first-hand. You know that you have connected with a visitor when you hear someone notice a scene and exclaim, "I remember that!"

Other details may seem fairly subtle, but are still date-specific like product advertisements and billboards. JL Innovative Design (www.jlinnovative.com) has over 100 billboards and 2400 poster signs covering the 1930s to the 1970s, which can reflect your year.

Road signs and striping are another ready indication of the time being modeled, since they have gradually changed over years. Originally, traffic STOP signs were yellow rather than our current-day red. The change from black-on-yellow STOP signs to white on red was officially changed nationwide in 1954, but California (and possibly some other states) had red STOP signs since the 1920s; California officially adopted red STOP signs in 1928. I didn't learn this until a few years ago and had to replace all of my original yellow ones with red ones.

Pavement striping has also changed. All centerline striping was originally white until the national standard was revised in 1971 to require yellow lines to separate lanes in opposite directions, although implementation took several years.

Changes in freight car trucks and the elimination of running boards are also year-specific. For example, arch bar trucks were outlawed in interchange service after August 1941. The "ban" on arch bar trucks gave the receiving railroad the right to refuse a car with such trucks, but did not require a receiving railroad to refuse to accept such a car in interchange service. Anyone modeling sometime after 1941 should limit cars with arch bar trucks to equipment which stayed online.

Although barely noticeable, I have installed year-specific license plates on all of the vehicles on my layout. A Google internet search will provide examples of license plates by state which can be downloaded by right-clicking the appropriate image. Although the downloaded images might be small and at a low resolution, they can easily be resized to scale at a smaller size, but with a higher resolution in Photoshop Elements. Open the image and select Image/Resize/Image Size. Check the Constraint Proportions checkbox and leave the Resample Image checkbox unchecked and then resize the image as needed to produce one in your scale. Print the resulting license plates on photographic paper to maintain resolution.

"While automobiles today seem to all look alike, many of us who grew up in the 1950s and 1960s can still easily distinguish a 1955 Chevy Bel Air from a 1965 Ford Fairlane."

"Just as rewarding is learning about what was going on historically at the same time as you model."

I also try to make sure that repack data stencils on my freight cars, if visible, are appropriate for my modeling year—repacking of trucks with bearings was required every 12 months. Speaking of subtle details, the calendars visible in buildings and cabooses are for August 1939 since I model a particular month.

How About a Season?

While there will always be modelers who can't be pinned down to less that at least a few years, it is more difficult to ignore the seasons. Some seasons are obvious choices by layout builders whether the fall season with eastern deciduous trees in their golden glory or late winter with leafless trees and some remaining snow and mud.

In much of California, spring means foothills covered by green wild grass. That grass continues to grow taller until the rains end in April, and then the grass starts turning a golden yellow. In the parts of the country with summer rains, summer means just the opposite with luscious green grass all summer long.

Even an urban switching railroad without any trees can have a general indication of the season being modeled - the sky on the backdrop. The color of the sky could reflect a bright spring sky, an overcast winter day, or even a muggy summer day.

The season being modeled can have other implications. I model August 1939 in Central California, and thus try to make sure that figures on the layout aren't wearing heavy coats. I also make sure that all of the vehicles on my layout have the side windows open since I model an era before automobile air conditioning.

Railroad traffic on many prototypes is also season-specific. On the YV, Pullmans were moved by the railroad from Merced to Yosemite National Park only during the summer months between Memorial Day and Labor Day. Log trains were terminated for the year at the beginning of the winter season, which shut down logging operations. On other railroads, summer months meant moving seasonal fruits and vegetables across the country.

The Fun of Modeling a Date

Selecting a year and season or month to model is not that important to some freelancers or even prototype modelers. It is also not surprising that, for many modelers, the challenge of picking a specific year to model is too much of a compromise and interferes with the "fun" of our hobby. But, to me, picking a specific month and year to model enhances both the challenges and rewards I receive from the hobby.

The challenges are finding information about the year I model and how it might impact my modeling efforts. With the Internet, this is not difficult as long as you know the questions to research. For example, you might not think about checking out the color of pavement markings, but discovering when changes were instigated is relatively easy.

Just as rewarding is learning about what was going on historically at the time you model. Some events actually affected our prototypes, and others are just great things to learn and to take into account as details or even trivial information. While History 101 was not a favorite subject during my high school years, history is now fascinating to me! Since picking 1939 as my modeling year, I learned that John Steinbeck's novel about the Joad family in *The Grapes of Wrath* was published in 1939. After more research about the migration of families such as the Joads from Oklahoma and other places affected by both the Dust Bowl and economic changes, I added a scene on my layout of a typical migrant family with their overloaded auto weighed down with everything they owned. I used a number of Dorothea Lange photos taken during the Depression for the Farm Security Administration as inspiration.

Many of the details I fret about probably go unnoticed by visitors and operators alike. But, my goal is to make sure that everything on the layout, from automobiles and figures and scenery, to billboards and signs, historically fits together seamlessly. I want operators to actually feel that they are traveling "back in time" to August 1939. In the summer months, I don't worry too much about the room temperature moving into the low 90s…after all, it is summer in central California. ... I suggest (in jest) that operators, if they find themselves waiting in a siding along with another engineer, talk about current events rather than what was on television last weekend. That means worrying if Germany might invade Poland, as newspapers suggest.

For me, in the end, it is all about personal satisfaction. I thoroughly enjoy building everything on my layout as close to my prototype as possible and also in a way which reflects August 1939 as close as possible. Give it some thought. ☑

Reader Feedback (click here)

About our DCC columnist

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

Click here to learn more about Bruce.

DCC Impulses: More of the Basics

Getting to know DCC!

Reader Feedback (click here)

Here's what you need to do to get going with DCC!

Well, here we are in the second month of this column. Glad to have you back!

You may have seen a sound-equipped loco like the gorgeous Blackstone HOn3 C-19 shown in Figure 1 at a store or on someone's layout. You may have purchased one and brought it home and been disappointed in the operation or sound control with DC. So now, you are thinking of converting to DCC.

At this juncture it is easy to get overwhelmed by the choices out there.

I came to DCC with little model railroading background, but lots of electronics and computer experience. That may have been an advantage. I wasn't tied to the DC ideas like: track polarity dictates loco direction or the need for block switches, etc.

In this column, I'm going to hit on a few of the points to get you started. Future columns will elaborate on some of them!

Choose a dealer

Many folks start their DCC trek talking to lots of friends or posting questions on an Internet chat group. They ask about systems, locos, manufacturers, etc.

While these are good questions, I suggest folks work from the opposite direction and find a dealer knowledgeable in DCC who is easy to communicate with. Yes, this may very well be a real search. Have them show you what they have done in DCC (and which person actually did it). Yes, you can do this by phone and email for distant dealers!

Why do this? Several reasons.

Would you buy a new car based on the suggestion of a friend? How about a recommendation from someone you have never met but who told you about it over the Internet? Wouldn't you want to test drive the car first? Well, DCC isn't as large an investment, dollar-wise, but you still want to be happy with its performance in your hand!

Figure 1: Blackstone HOn3 C-19 is typical of current generation of sound-equipped locos designed to run on DC and DCC. Photo courtesy Blackstone.

You will be working on converting locos, or purchasing new locos. You may need some help along the way.

You may have questions about layout design or modification. Sometimes a small change in track plan will make the DCC system easier or more reliable!

Once you have a relationship established, stick with that dealer. A couple of dollars saved with another dealer may wind up costing you more in the long run!

Layout design

Starting from scratch with a new layout is nice. You can wire it for DCC from the get-go and not have to worry. I have some wiring suggestions on my website (www.mrdccu.com/curriculum/basics/wiring.htm).

If you are converting a DC layout to DCC, you may or may not need to rewire it. Check out the suggestions on my website above, as well.

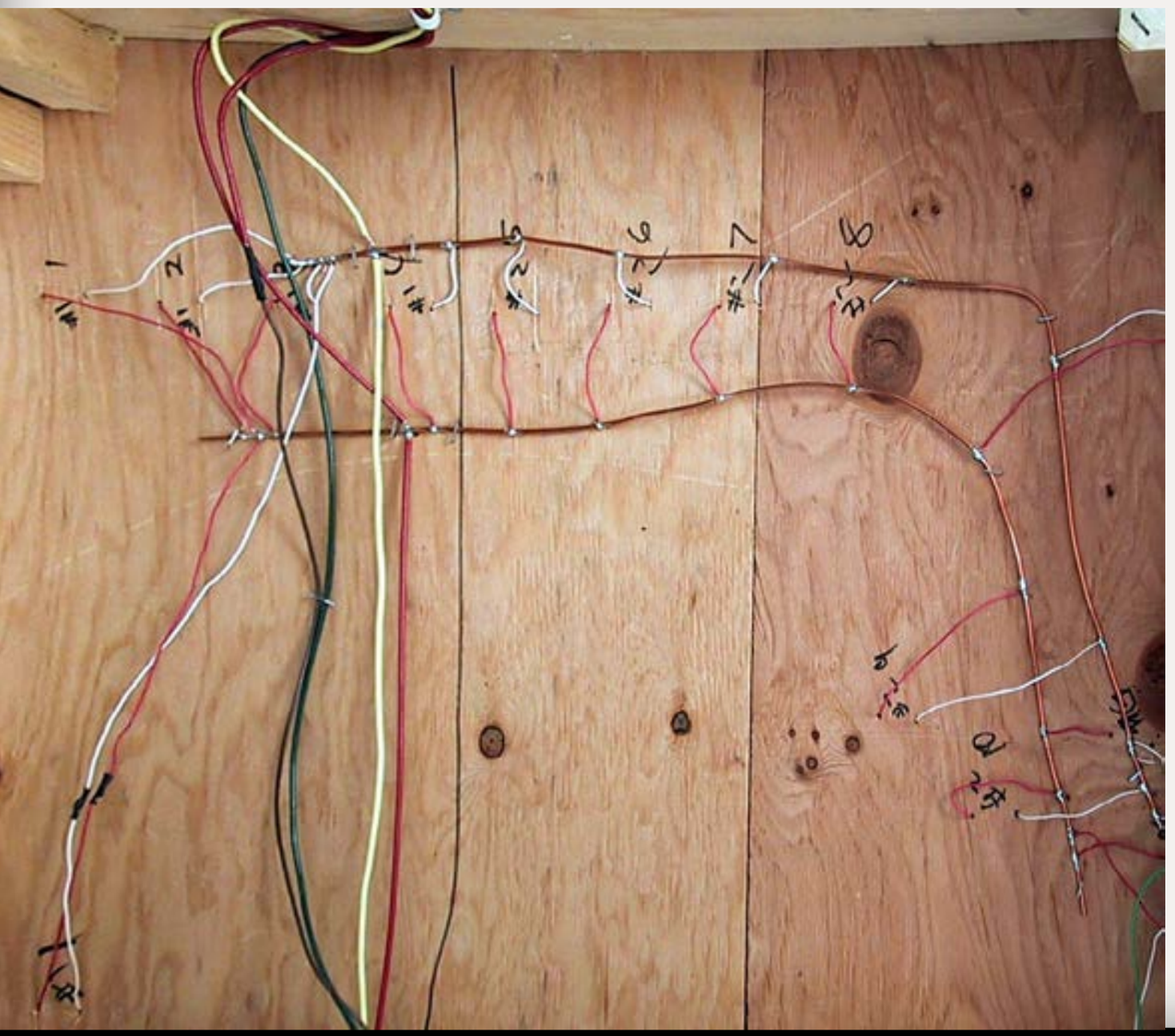


Figure 2: Underside of sectional club layout after DCC rewire. The DCC bus is the red and light colored (white or yellow).

Our sectional club designed and built our modules for DC and then tried to run them on DCC. The results were difficult, including the fact that we needed to mount the switch panel to the layout and interconnect all the blocks just to be able to run it. After several unsuccessful runs, we decided to rewire it.

Figure 2 shows one of the yard modules after the rewire. The track feeders are routed through the plywood and are wrapped and soldered to the bare sub-bus that was stapled to the plywood. The brown, black and green wires are an accessory bus, not related to DCC.

I present this as an example of DCC wiring practices. Above all, keep it simple and neat!

This wiring method worked here, because we were able to stand the modules up on their side and wire them that way with access to both sides. If this were a benchwork layout, I would have put some color codes on the bare bus wires.

System selection

One of the most common questions is “what system should I get?” I have repeatedly told folks that they need to answer that question for themselves.

DCC systems are like life partners: all have interesting features, but each has something you will have to “live with”.

One historical recommendation has been: find out what folks around you are using and buy that. Well, if you are in a club with DCC, there is some reason to select the same brand. You can then have a throttle to take to the club layout. However, as DCC matures, there are fewer and fewer “brand specific” issues. My personal layouts use a different brand than any of the clubs I’ve belonged to. That means that I have a throttle that I take with me to the clubs but cannot use it at home!

It might be tempting to purchase the least expensive set, “just to see.” However, I find that most folks who do that wind up frustrated. Spend a few more dollars up front!

A future column will delve into my views on different systems and their features and shortcomings. There are only two introductory level systems that I consistently recommend. They are similarly priced. They operate somewhat differently. I suggest you try both of them. Run trains and program some decoders before you decide. They are, alphabetically:

- Digitrax Zephyr – Figure 3
- NCE PowerCab – Figure 4

One obvious difference between the systems is that the Zephyr is a console and the PowerCab is a hand-held unit. Other systems are either significantly more expensive or have some serious limitations, to my thinking.

Figure 3: Digitrax Zephyr Xtra table mount starter system. Photo courtesy Digitrax.

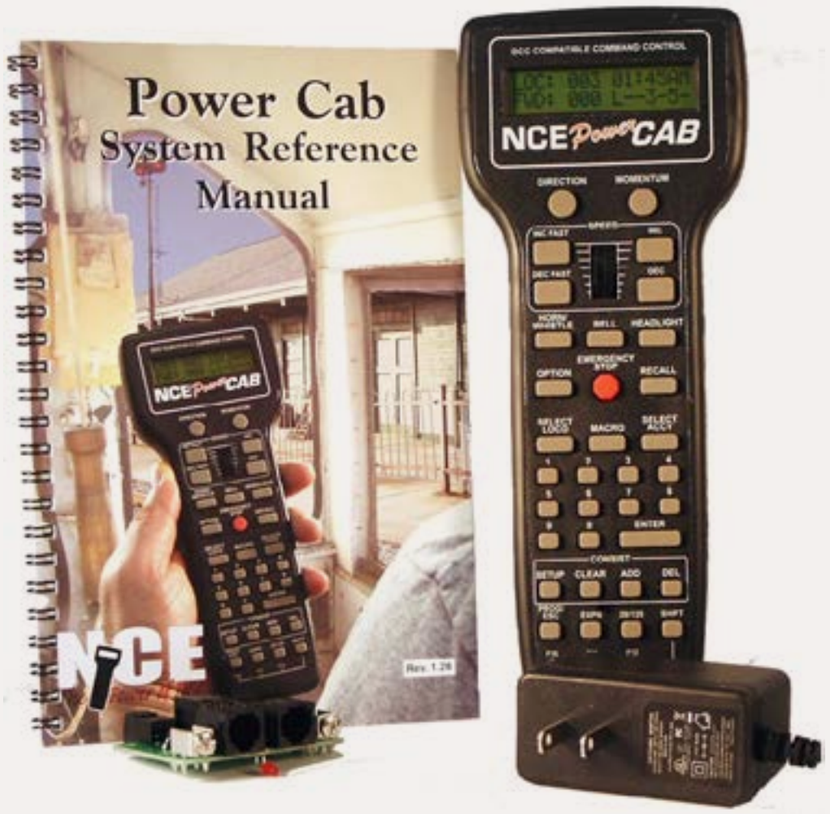


Figure 4: NCE PowerCab hand-held starter system. Photo courtesy NCE.

You need a loco to run

In college, they taught me the "scientific method". Part of that is to only change one variable at a time.

When folks buy their first DCC set and a decoder to take home and install in their favorite loco, they violate this. They don't have a proven system setup or a proven decoder installation.

I suggest you have a "known good" loco, whether it is yours or a friend's, new or used. Make sure you know its "name" (address).

This way, you can install your system and run and program the loco.

Once you have your system running on your layout, even if it is just a test track, then you can try your hand at decoder installation, if you wish!

First install

I know that you have that favorite loco that you are just itching to put sound into. Please DO NOT, at least for your first install. Let's walk a bit before we try to run a marathon!

There are many locos over the last decade that have been marketed as "DCC Ready". Some are. Many (especially early ones) are less so.

A good place to cut your teeth on installations is what I call:

Plug-n-run

These locos contain a socket to plug your decoder into. The socket may be either an 8-pin NMRA compliant socket (figure 5) or an industry-standard 9-pin socket, called a JST.

Some, like the Athearn shown in Figure 6, have BOTH plugs. In this case, there is a jumper plug on the JST to allow the loco to run on DC. In the photo, it is being removed – necessary before installing a decoder. In cases like this, I recommend that you plug in a JST decoder and be done. Here's why: the JST connection is more rigid (read reliable) than the 8-pin.

Locos that only have the 8-pin socket, like the Atlas shown in Figure 7, are easy to do, as well. You just remove the jumper plug from the 8-pin socket and plug the decoder in!

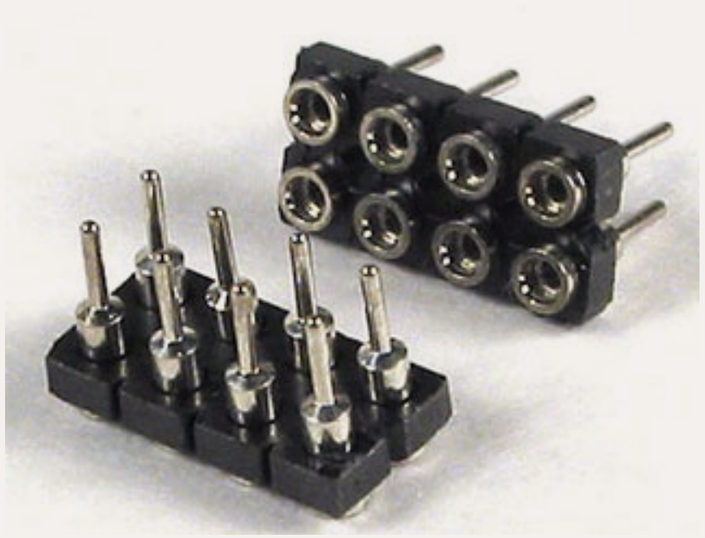


Figure 5: NMRA standard NEM-652 8-pin plugs, showing both male and female sides.

Be aware of the fact that many of the early boards from many manufacturers with either style of connectors had shorts in some of the boards. The jumper board masked these defects. When the decoder is installed in such boards, damage to the board or to the decoder may occur. To be safe, check for a lack of continuity (infinite resistance) between the motor wires (orange and gray) and any other

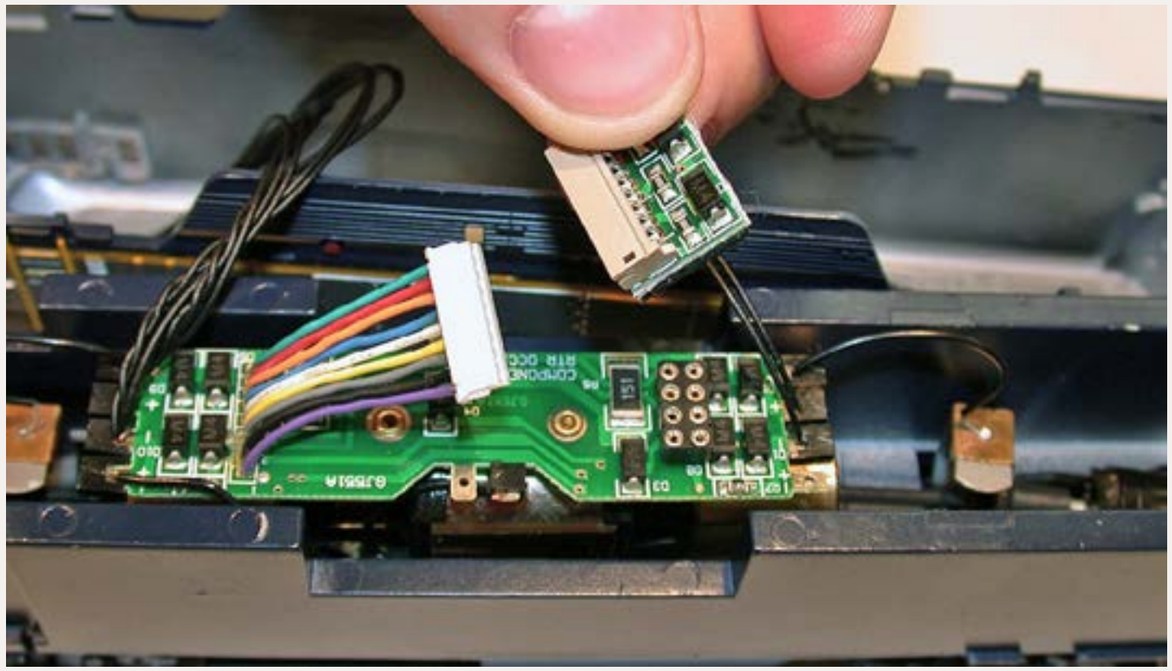


Figure 6: Athearn HO loco with both NEM-654 and JST connectors. Photo courtesy TCS.

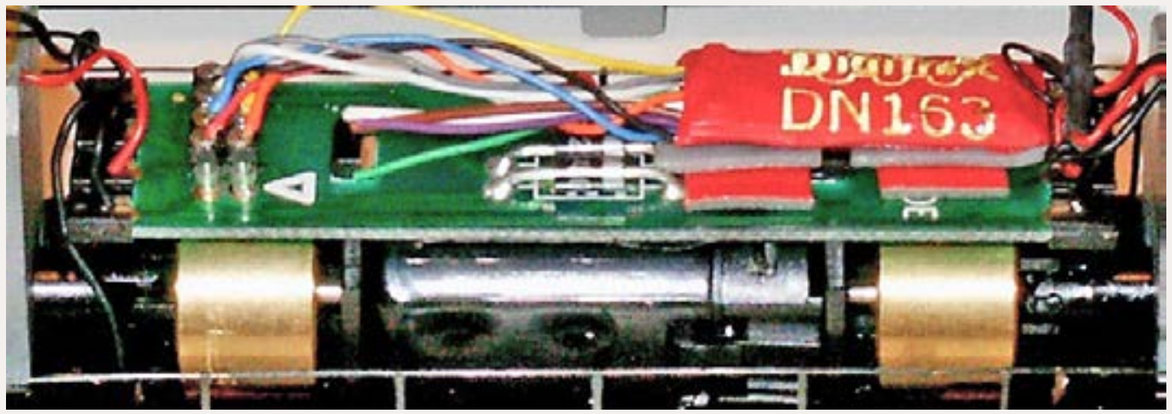


Figure 7: An Atlas HO diesel loco with a DN163PS decoder plugged into the board.

wires without the decoder or jumper installed. Of course the gray and orange wires will show continuity, as they have the motor connected between them.

I recommend a multi-meter for anybody working on the electrical portion of model railroading. You can pick one up for under $10 many places.

Selecting a decoder

Figure 7 shows an N-scale decoder plugged into an HO-scale loco. Is this okay? Absolutely!

The critical factor is the ability of the decoder to survive the current drawn by the motor and lights. Some decoders have strict limits. Others are a bit more forgiving.

You will always be safe if you measure the stall current of your loco and size your decoder accordingly. See my website: **www.mrdccu.com/curriculum/stall.htm**.

When you are sizing the decoder, remember to add up the current drawn by the motor and ALL the lights.

Other issues are:

- Does the decoder physically fit in the allotted space?
- Does the decoder have enough functions (light outputs) to fulfill my needs?
- Do the functions provide the desired special effects: strobe, Mars light, etc?

Installing in older locos

Okay, now you have cut your teeth on some plug-n-run locos. What about locos designed before DCC was so popular?

Some are unbelievably complex, such as the Kato NW-2, which requires complete disassembly and machining of the weight to install the decoder.

The venerable Blue Box Athearns that folks seem to have in abundance are rather straightforward. The installation requires good soldering skills and the willingness to disassemble the loco. That's a topic for a future column.

I find that getting the decoder installed such that we can run the motor is about half the job. The lighting takes up a lot of the time. Look to future columns about lighting concepts.

What about my brass?

Most older brass locos had minimal power pick-up. The most common design in old brass steam has the right rail picked up by the loco wheels

(frequently only the drivers) and the left rail picked up in the tender.

This results in very spotty DCC performance without adding pick-ups to the opposite rails. Not for the faint of heart. See what I installed in an O-scale loco in Figure 8.

Older locos also tend to have less efficient motors than the current crop, resulting in some with enormously large stall and running currents. Three pole motors are less responsive at low speed than the current five pole designs.

Add in the older gear towers and the result is a loco that needs a complete rebuild to run as it should on DCC.

Is it worth it? That is a question for you to decide.

If you have the background and tools to rebuild the loco, then the DCC install is fairly easy. If you are paying someone to do the work, expect to spend many hundreds of dollars.

Perhaps you may want to display your older treasures and run some newer locos on your DCC layout.

Early brass diesels have similar issues to the steamers.

Later brass diesels have more efficient motors and drive trains and frequently make good candidates for DCC.

I want sound!

I knew we would get back to that question, as that's where this column started.

The decoder part of a sound installation is not hard. It is basically the same as a motor and light install, except there is the added issue of the speaker.

Where it becomes tricky is the acoustic design necessary to get the sound out in an efficient and pleasing manner. Again, this will be covered in a future column or two.

You can't work through all that was presented here in a few weeks, so just be patient and I'll get to these topics soon.

Have fun on your pike (or someone else's) until next month! ☑

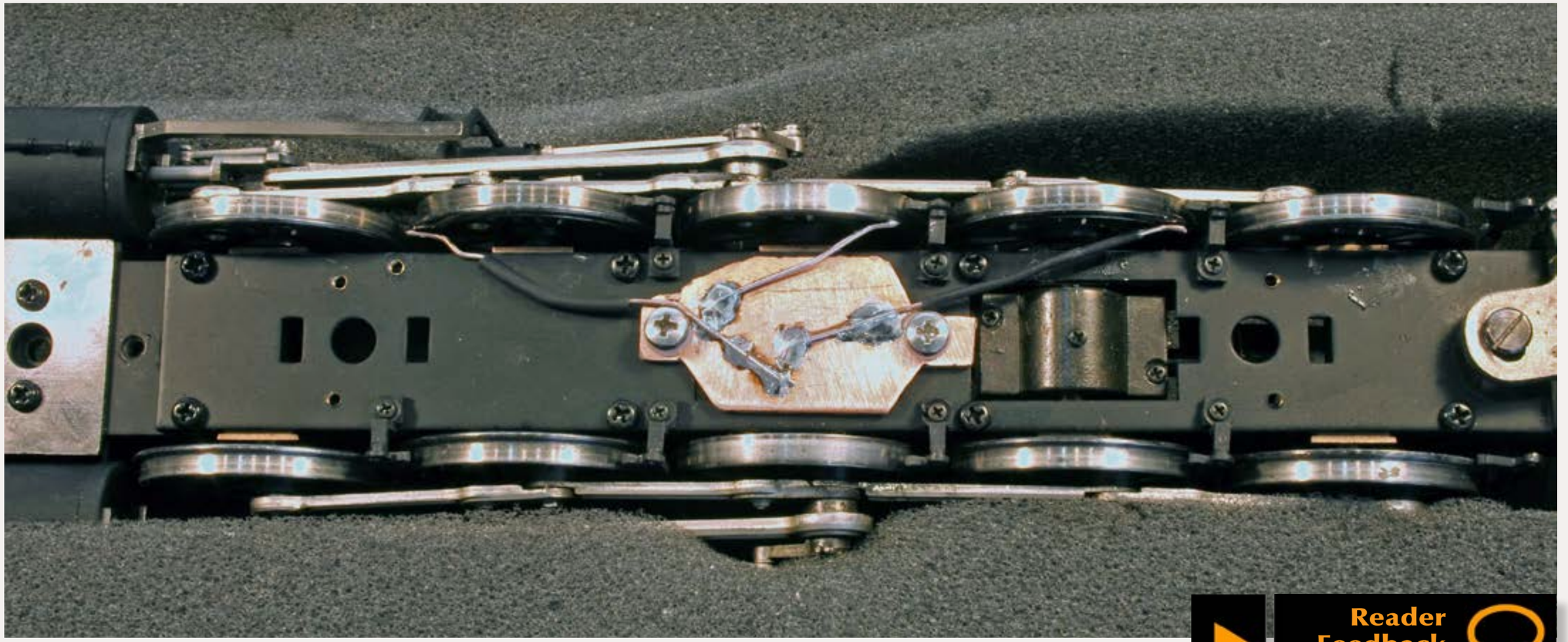
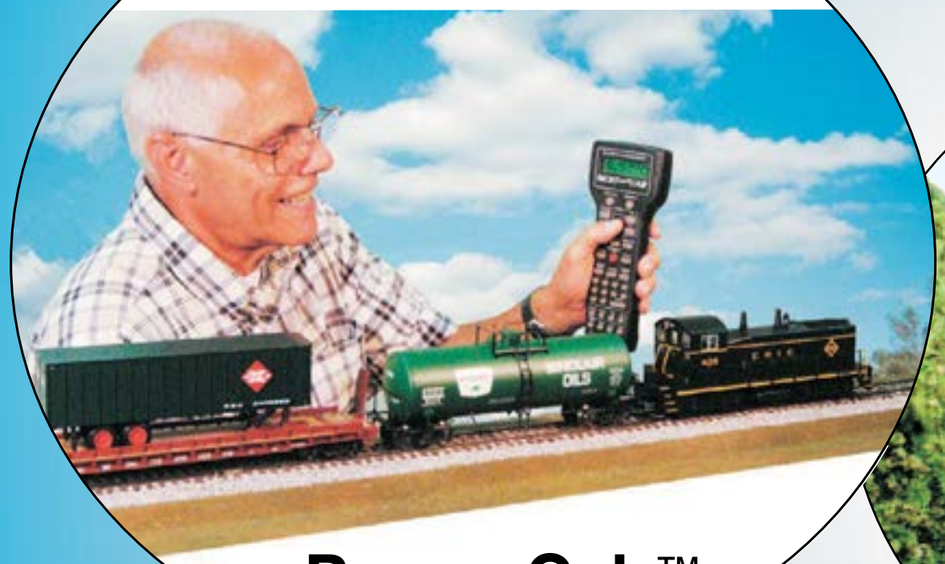


Figure 8: Opposite rail pick-up installed in an O-scale brass steam loco.

Reader Feedback *(click here)*

Discover the FUN of DCC!

Full Featured at an Entry Level Price



Power Cab™

SB3a™

Use your Home Equipment at the Club!

PH Pro™

The "Nothing Wasted Growth Path" all the way to Club Size

- **Extraordinary Performance • Radio or Tethered**
- **Highest Rated DCC Systems • Made in the U.S.A.**

Call or Email
for FREE Brochure
support@ncecorporation.com

585.265.0230
9am-4pm EST.
www.ncedcc.com

NCE
The Power of DCC

COMME-N-TARY: King Coal

Hauling Coal in N Scale

Modeling in the hobby's most eNgaging scale

About our N-scale columnist

John Drye is our N scale editor and columnist.

Click here to learn more about John.

Reader Feedback *(click here)*

Suggestions to improve the appearance and operations of loaded and empty N scale coal hoppers ...

Coal has always been strongly associated with American railroads. Almost from the beginning, coal was both a source of fuel and a source of revenue. Today, coal is no longer directly used as a source of locomotive fuel, but long strings of coal hoppers and gondolas still travel the rails.

One of the attractions of N scale railroading is that there is often space, either on a home layout or a modular setup, to operate prototypically-long strings of cars. It is not all that unusual to see a string of 50 or more hoppers on an NTRAK layout. Occasionally these trains grow to as many as 100 or more cars. Reliable operations are the key to running such long trains and there are some easy ways to improve the performance and looks of these miniature money makers.

N scalers have a wealth of models to choose from. Various manufacturers offer cars from the earliest all-steel 2-bay hoppers of the early

Figure 1: This shot of an out-of-the-box hopper by Atlas shows an example of the great models available in N scale. A little effort will go a long way towards improving both looks and performance.

20th century to the 100-ton gondolas of today's era. Most modelers have more than just a few coal cars in their collection.

This article will offer suggestions to enhance the look and operations of N scale coal cars, including ways to add weight to empty cars, adding internal detail, and enhancing the look of the coal load itself.

Weights for N Scale

The NMRA suggests standard weights for reliable freight car operation. Many cars, not just hoppers, come from the factory weighing a little less than these recommended amounts.

Prototype length (feet)	Recommended model weight (oz.)
33	0.87
40	0.95
50	1.06
60	1.18

A digital postal scale is useful for determining car weight. They are inexpensive and sufficiently accurate to measure car plus added weight.

Adding the additional weight is easy for a boxcar or a loaded hopper, since the material can be hidden inside the car or under the load. However, the interior of an empty coal car is visible to all. Fortunately, there are a few tricks that can be used to hide the weight in plain sight.

Figure 2: An inexpensive postal scale is excellent for measuring car weight. This one has the NMRA standards taped to the top for easy reference. Added weight in the form of sheet lead is weighed along with the car prior to installation.

One approach is to cut sheet lead to fit the slope sheets on the car (be careful, and be sure to wash your hands thoroughly afterwards). First, cut a piece of thin cardboard just larger than the end slope on the inside of the car. Test fit the cardboard and trim until the piece fits snugly into the car. Use this template to cut the lead to the same snug fit. Check the weight of the car plus the added lead. If the car is still too light, additional weight can be added to the bottom of the hoppers below the sheet lead.

Bowser provides a weight that fits the end slope sheets of its 2-bay 33-foot hoppers just like the sheet lead. This shape fits perfectly into the bottoms of these 33-foot cars, and can fit nicely into many other models of bottom-dump cars. This shaped weight can be replaced in models that will run loaded, where any old weight will do; and be placed in other empty cars.

Don't worry about how the sheet leads looks just yet; we will disguise its appearance with weathering and a bit of coal dust.

Once the car is weighted appropriately, check the wheel spacing with an NMRA gauge and the coupler trip pin height as well. These steps will go a long way towards reliable operations.

Bracing and Details

Many hoppers were constructed with some sort of internal bracing to reinforce the steel sides. This bracing is offered on some models, and can be easily added to those lacking it.

One example of such bracing is the PRR's 4-bay H21 hopper in its various versions. This car had five metal braces running across the car laterally. Many other cars, from all eras, include similar bracing. Reference to prototype photographs is the best way to determine the bracing on a particular car.

Whatever the prototype, the bracing can be installed by using styrene shapes cut to fit. For the PRR car, the

Figure 3: Sheet lead fitted to the slope sheets of a 2-bay hopper. Further weathering will disguise the appearance of this material.

prototype bracing is an interesting shape. Each brace has a cross section somewhat like the Greek capitol letter 'Iota'. Imagine a capital 'I' with a lower-case 'o' in the middle. Since this shape was difficult to recreate in N scale, the car uses an I-beam shape of about the same size. Other cars use similar shapes, so the compromise was worth it.

Cut the styrene beam to fit crosswise snugly inside the car. It is usually worthwhile to deliberately cut a bit oversize. Test fit and sand carefully to an exact fit. Glue the braces to the insides of the car with styrene cement and let dry. Once dry, paint the braces to match the car color. An exact color match isn't necessary if the cars are going to be weathered.

Some cars also use triangular sheet metal gussets in the bottom side corners of the hopper. These can be cut out of thin styrene sheet and installed the same way. Don't worry if the bracing gets bent a little. The same thing happens to the prototype. No surprise, with tons of coal crashing down on the bracing on a regular basis.

Coal Loads

Most coal hoppers include a nicely shaped plastic insert to represent the coal load. But it looks like, well; a plastic coal load. It is easy to improve the plastic look.

The solution is to affix a thin layer of scale coal to the top of the plastic casting to better represent the shiny/dusty look of prototype coal. There are many sources of such coal offered as scenery. Select your favorite brand and place a pile in a shallow container.

Remove the loads from the hoppers and place on a sheet of waxed paper. Take a large brush and cover the plastic loads with a coat of grimy black. Craft paint works just fine here. The paint should be thinned to the consistency of coffee or tea.

Figure 4: Sheet lead fitted to the bottom of a hopper. This 4-bay hopper 'borrows' the weight from a Bowser 2-bay, but sheet lead can be cut to fit any car.

Figure 5: Here is a top view of the cross-bracing on PRR's 4-bay hoppers. The figure also shows how weathering and a bit of coal can disguise the sheet lead weights below the bracing.

Take the plastic loads and dip into the pile of coal; make sure the plastic is covered completely. Paint as many loads as you can dip into the coal pile before the paint dries. Next, dribble thinned white glue (50% glue / 50% water, with a drop of liquid soap) onto the loads, just as if affixing ballast.

Once all this has dried, go back and fill in any missed spots with coal and glue. Clean up the sides of the castings with a craft knife, and the improved loads are ready to re-install.

In the 50s, a variety of coal sizes were hauled from the mines, from "lump" to "pea" coal. This technique can be used to recreate this variety by using different sizes of scale coal. Modern flood-loaders often dump uniform smaller lumps of coal that can be represented by using all 'pea' sized scale coal.

Weathering

Coal hoppers work hard for a living, and they usually show the results of that effort. They are grimy, rusted and often contain the remnants of the last load. This is good news for our weighted empties, since grime and a little coal can help hide our added weight in plain sight.

Whatever the original color of the car, prototype coal bays quickly turn a rusty, grimy shade of black. It is easy to cover the car interior with a light coat of grimy black when weathering the outsides of the cars. Quick, vertical passes with the airbrush do a good job of representing the uneven streaks often present on these cars.

Pastel chalks do a good job of representing the dusty, rusted appearance on both the outside and inside

of these cars. Exterior rust is usually streaked from top to bottom, especially along ribs. On the inside, dabbing several shades of rust with a stiff paintbrush creates a good representation of patchy rust.

Hoppers and gondolas usually retain a bit of their coal load after emptying. A little coal material sprinkled in the bottom of the hoppers and affixed with diluted white glue represents this residue and can help disguise the presence of the sheet lead inside the car. A light coat of clear matte finish will fix the rust and coal dust in place.

Today's modeler has a wealth of options for hauling coal from the mines, and empties back. A little work; adding weight to improve operations, along with adding details and weathering to improve appearance can create a great-looking, great-running train. ☑

Figure 7: This overhead view shows a 2-bay hopper with sheet lead on the hopper bottom, grimy black and rusty weathering, and the remains of the previous coal load. The coal and weathering almost completely hide the added weight, even from this angle.

Figure 6: Here is a Lehigh Valley 2-bay hopper with scenic coal glued to the top of the stock plastic load casting. The dusty sparkle of the scenic coal along with a little weathering greatly improves the appearance of the car.

Figure 8: Weighted, braced and weathered empty hoppers ready to return to the mines. From this normal viewing angle, the added weight in both cars is almost completely invisible.

A Beginner's Guide to Creative Effects for your Model Railroad

First Look

– by Jeff Shultz

While the title of this book calls it a "Beginner's Guide," that's not fully giving the book justice, since there are various techniques and effects in it that even more experienced model railroaders would be interested in.

Assisting in the creation of the book were Kermit Paul, whose Lone Pine & Tonopah RR served as either an inspiration or a testbed for many of the effects explained in the book, and Jim Wells of Fantasonics Engineering, a company dedicated to sound effects for model railroad layouts. MRH published a First Look on the Fantasonics "Scale Magic" CD soundtracks in the June 2011 issue.

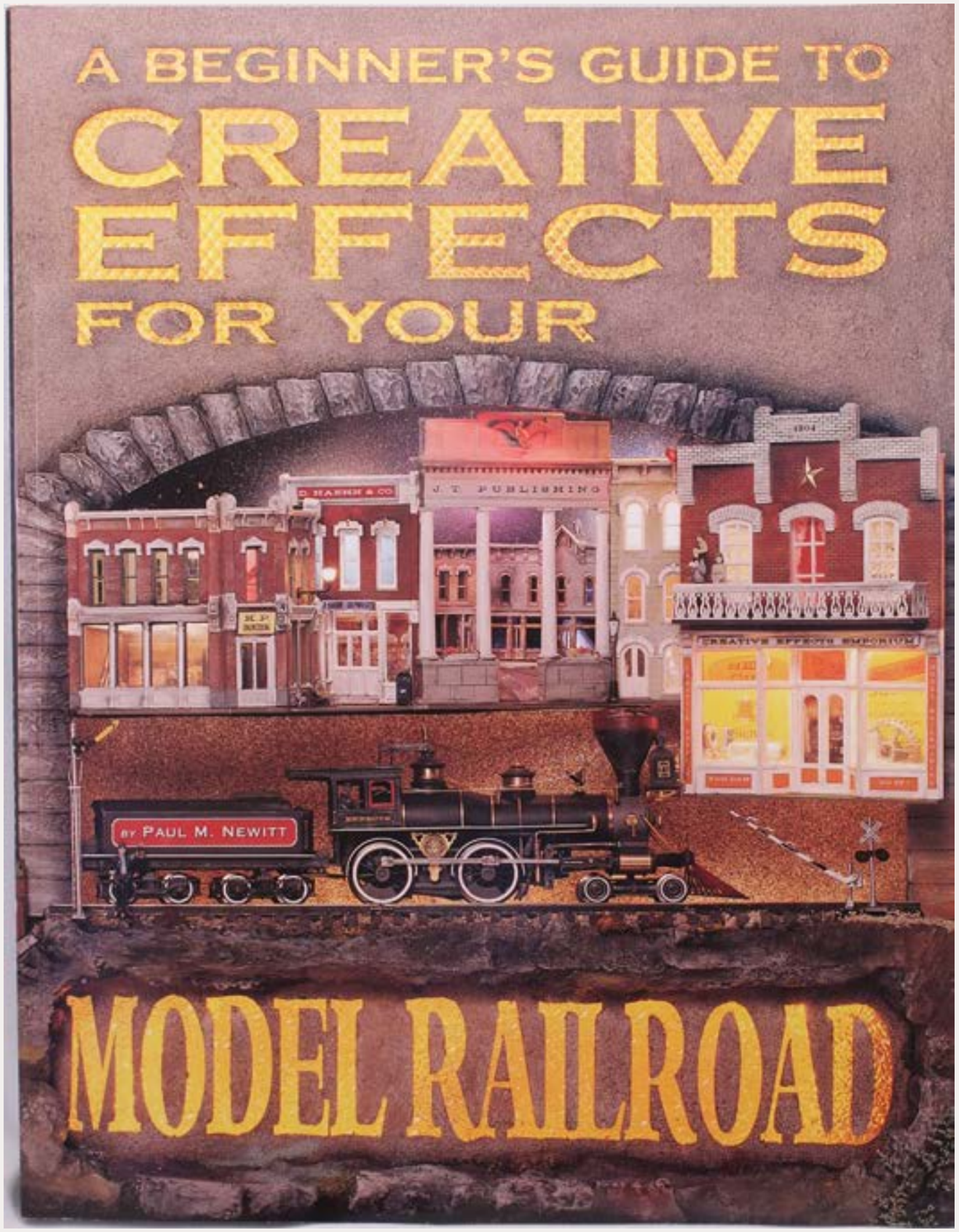


Figure 1: A Beginner's Guide To Creative Effects For Your Model Railroad. MSRP: $28.95.

A Beginner's Guide is a softcover 8½ x 11 book containing 200 pages and over 600 photographs, divided up into 10 chapters which are then divided up into sub-categories, over 60 of which are projects. The Table of Contents not only lists the chapters but also all of the sub-categories, making navigating through the book a simple process.

Page 200 is an Index and Product & Services guide, providing another method of finding what you are looking for in the book. Many of the projects use commonly available components, such as those produced by Circuitron and Miniatronics.

The first two chapters are an Electrical Primer and Wiring Techniques, which introduces a model railroader to everything from how to attach the wires to a power pack to wiring circuit boards to diodes and variable resistors. Basic electrical theory, troubleshooting, and the tools necessary for working with electrical wiring also are covered.

Reader Feedback (click here)

From there, the book goes into practical applications, starting with Chapter 3: Lighting Effects, which shows how to use incandescent lights, LEDs, fiber optics, and electroluminescent tape in various applications. Chapter 4 is on Track Effects, which includes everything from signaling and detection systems to grade crossings, operating turntables, and switch machines.

Chapter 5 is on the attention-getters – Animation Effects – and it covers electric motors, gearing and power transmission systems, magnets, and several practical applications such as conveyors, cranes, and road systems. Chapter 6 switches gears from the visual to the audible with Sound Effects, including locomotive sound effects (Surroundtraxx as well as other ready-to-install sound systems and boards are covered), and building your own sound system, which covers everything from selecting and placing speakers to creating and playing soundtracks.

Chapter 7 is Scenery Effects – using smoke, fog, mirrors, water, and polarized animation to add to the scenery experience on your layout. Chapter 8 finishes up on creating effects by explaining how to use lighting and color to create time of day and weather effects. Projects in this chapter include creating thunder and lightning effects.

Chapter 9 explains techniques for controlling all of these effects together, including how to incorporate them into the operating scheme of your layout. Various remote control systems and how DCC can be incorporated into controlling effects are covered. Chapter 10 contains four pages listing a large number of sources and resources, both in finding the materials with which to create the effects (the author recommends trying your local model train store/hobby shop first), as well as finding more information on the various topics. All of the sources are grouped according to what chapter they would fall under.

While the specific projects in the book tend to be demonstrated in HO scale – since that's the scale used by the Lone Pine & Tonopah – the techniques and ideas are "scale agnostic" – they can be applied to any scale you want. A Beginner's Guide To Creative Effects For Your Model Railroad is published by J-T Publishing and is available through local hobby and train stores as well as the locations listed on their website at modelrrcreativefx.com/modelrrcreativefx/index.html. MSRP: $28.95. ISBN 0976086409. ☑

Walthers' 2012 HO Reference Book

First Look

– by Jeff Shultz

2012 marks Walthers' 80th anniversary, and for companies that reach that age, their history and traditions become very important. One such tradition is the annual HO Reference Book, commonly referred to as the Walthers Catalog, filled with everything from the Walthers Santa Fe El Capitan passenger train ($69.98 to $79.98 per car) to Whistles Unlimited's Wood Train Whistles ($4.00 - $4.95 depending on size). And, as the saying goes, nearly everything in between. Seriously. Looking for a set of teenager figures? Page 639 has a set of six teenage girls from Preiser, as well as a few hundred other figures. A snowmobile? Page 721, from JL Innovative Design. Billboard graphics and signs? Check out the insert between pages 288 and 289, featuring a selection of signs from various periods in assorted sizes. Looking for one of those cute little Smart Fortwo cars? Pages 691 and 692, from Busch – in more colors than you thought possible. How about a Miller Hand Brake Lever? That's on page 900, from Bethlehem Car Works.

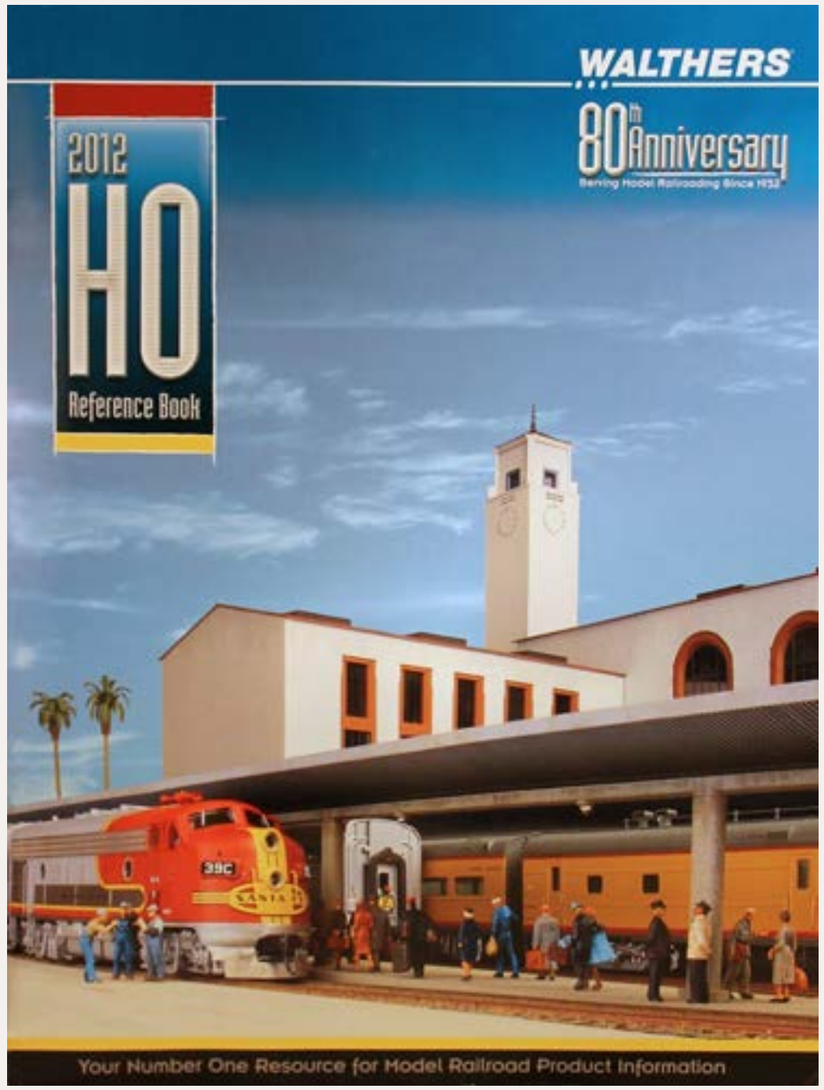


Figure 1: Walther's 2012 HO Reference Book.

With 23 separate sections of products and an index over 12 pages long, the HO Reference book is ideal for those times where you're looking for something – or just for an idea – and you don't know yet what it is. Or if you're just looking for a little inspiration, take in "The Magic Of Model Railroading" – 34 pages of high quality model railroading photos, each with its own story. For the history buffs, there are 6 pages titled "Along the Route" that detail important dates and events in Railroading, Model Railroading, or the Walthers company past.

The Walthers 2012 HO Reference Book is unmatched in its ability to introduce you to the most model railroading materials in one handy document, all of which, including the Reference Book, can be ordered through your local hobby shop, direct from Walthers, or from several of Model Railroad Hobbyist's advertisers. At 984 pages in length

The 2012 HO Reference Book is available for $15.95 MSRP.

Walthers also has the 2012 N & Z Reference Book, which should be available by the time you read this, also at an MSRP of $15.95. ☑

Reader Feedback (click here)

Kato Paint Removal

Reader Feedback (click here)

by Brian Banna

Since the advent of the internet with all its groups, the age old question has been asked countless times: "How do you remove paint from Kato models?" or "What is the best method to remove paint safely from Kato models?"

When Life Like P2K came along, I discovered that 91% isopropyl alcohol would allow easy removal of factory paint. The same is true for Atlas and Athearn. With Kato, no matter how long I let it soak or how hard I scrubbed, the paint base coat was quite difficult to remove.

I was determined to find the answer. I could see the 91% isopropyl was having some effect; I just needed more elbow grease. Then the thought came to me: why not enlist the help of power tools? From that moment on, Kato paint removal was no longer a challenge. I can now wisk the paint away.

Basically all you need is a container (not shown) large enough to hold your model, a Dremel tool, a Dremel #405 bristle brush, 91% isopropyl alcohol, and rubber gloves. Since I am right-handed, I use a rubber glove only on my left hand to handle the model in the alcohol, and my ungloved right hand manipulates the Dremel tool. I also use a breathing mask with replaceable filters from Home Depot (not shown). Safety glasses are recommended just in case you flick up some of the fluid.

Purchase the 91% alcohol at a drug store – make sure you get 91% and not 70%. The 70% does not work. The alcohol is safe on plastic; it does not melt it or cause it to become brittle. The #405 bristle brush works well and does not scratch the surface. I have tried brushes of the same material in other shapes and, although they work, they fling alcohol everywhere. The bristle brush does not fling. I use the Dremel tool on its lowest setting (figure 1).

In figure 2, I am stripping paint from a Kato Conrail GP35. After soaking the shell in alcohol for a few minutes, I begin removing the paint right away. But if you put the shell in the container full of alcohol and forget about

Figure 1

Figure 2

Figure 3

it, do not fret! I have accidentally left shells soaking in alcohol for over a year, and they come out just fine.

The undecorated model in the background of figure 3 used to be painted for Southern Pacific. As you can see, there's no paint left. Not in the grills, not in the door latches, not anywhere. This method, in my opinion, is simply the best. The only remnant you might see is a slight stain from the old paint on the plastic. No paint, mind you – just slightly stained. The details are untouched by an actual coat of paint (figure 3 previous page).

Figure 4 shows the container I use, with shells soaking in it. In the back is an Atlas GP7. Before even touching it, the paint started wisping off.

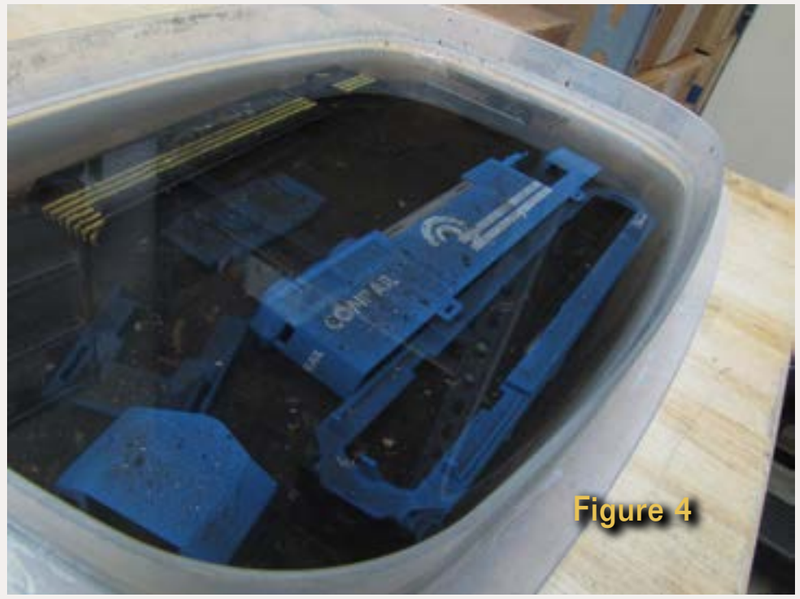


Figure 4

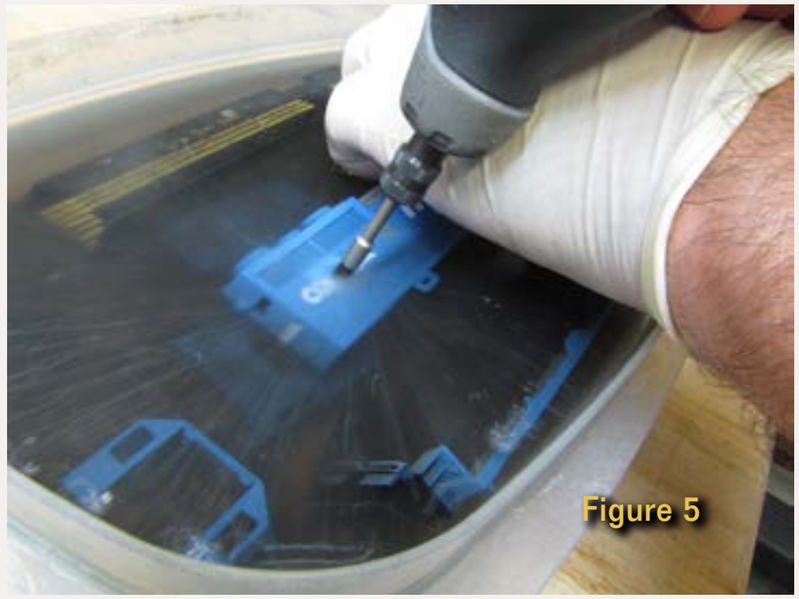


Figure 5

It's important to keep the model "wet" with this method. When I chuck the bristle brush in the motor tool, I leave the shank as long as possible. I prefer to work with the model slightly submerged in the alcohol. This keeps the model wet and the paint removal goes quickly. Do not run the brush dry on your model. This will burnish the paint and make it very difficult to remove. If you do not want to work with the model in the alcohol, then dip it back frequently. Just remember to keep the surface wet!


Figure 6

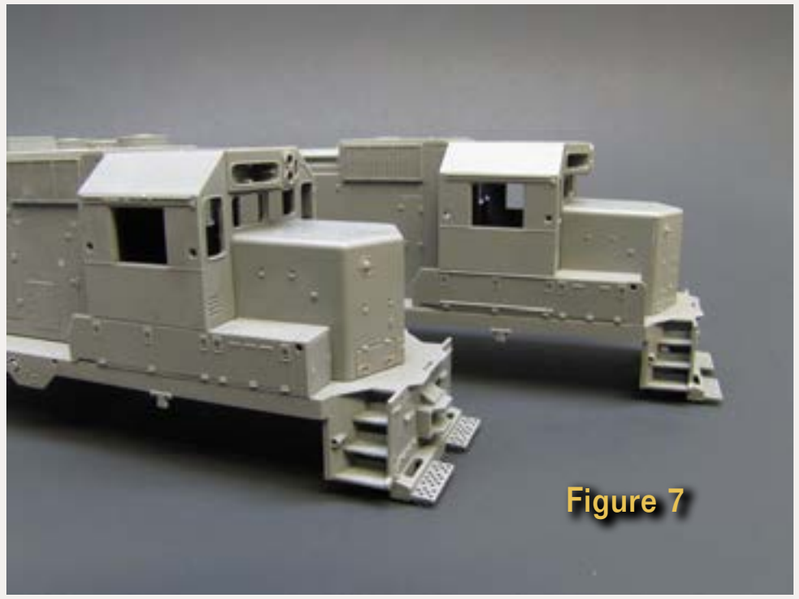


Figure 7

In figure 5, the photo the shell is just below the surface of the alcohol, and the brush is spinning away. The white streaks you see are bubbles and paint debris moving away from the spinning brush. The only time I apply extra pressure to the brush is when I am getting into the door latches or grills. Extra pressure isn't needed when running the brush over the doors and other flat surfaces (figure 5).

Figure 6 shows the shell with only about 10 to 20 seconds of scrubbing. The paint is coming off well, but there's still some inside the door latches. More pressure will remove the paint there, too.

The shell in the background in figure 7 is a virgin undecorated model, and the shell up front is one stripped using the method I have just explained.

So whether it be HO or N Scale, the next time you have a project that requires a Kato model, there is no need to wait till you can find an undecorated one. Get a decorated one and strip it! ☑

Reader Feedback
(click here)

Kitbashing a Central Valley 150' Pratt Truss Bridge

Reader Feedback *(click here)*

– by Tom Patterson
Photos by the author

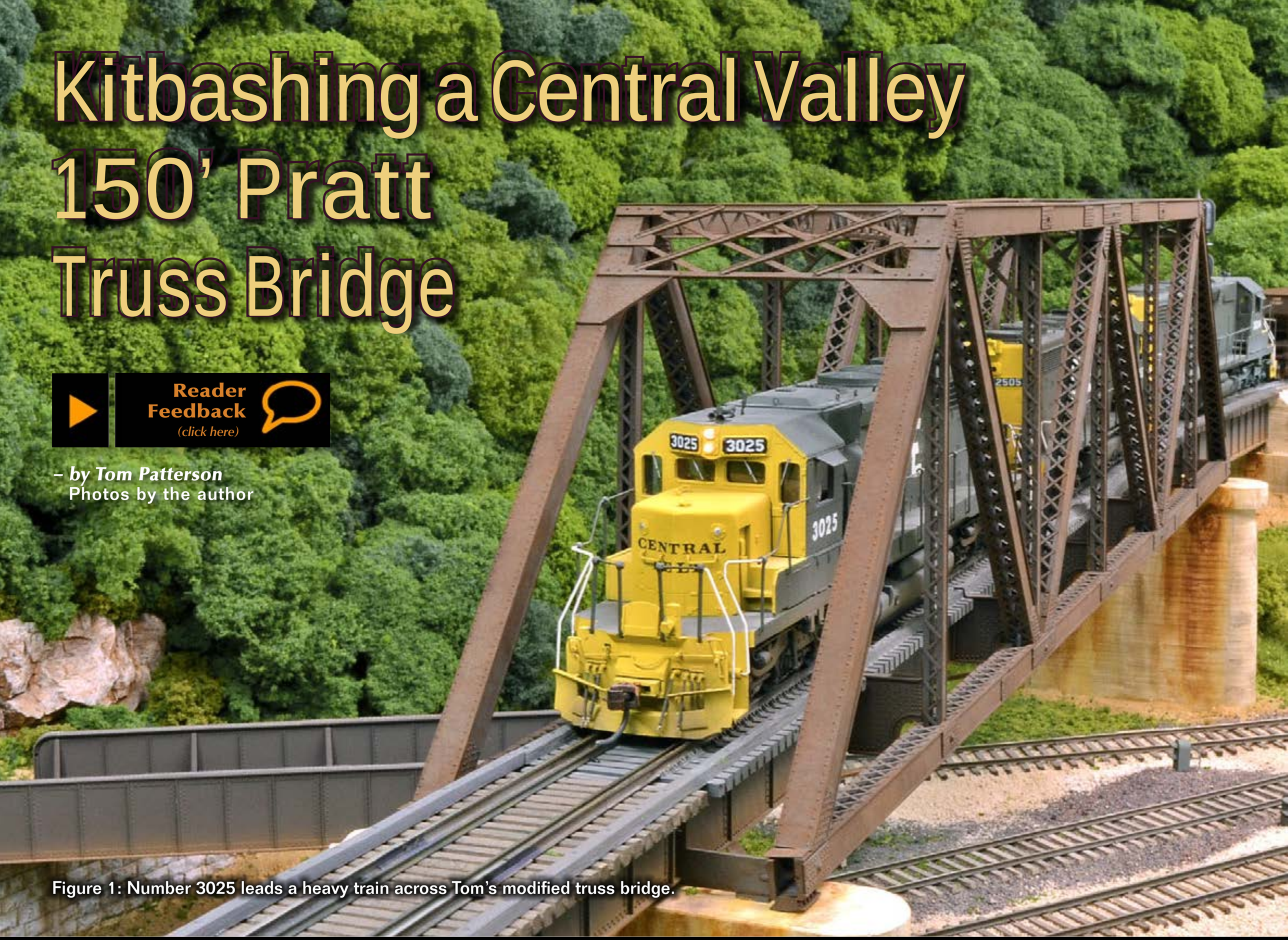


Figure 1: Number 3025 leads a heavy train across Tom's modified truss bridge.

Kitbashing a heavy duty truss bridge that is era appropriate.

The Central Valley Model Works 150' Pratt truss bridge is a beautiful model that can become a focal point on any layout. According to the Central Valley website, the model was copied from a 1903 Southern Pacific bridge at Piru, California. This design was used throughout the United States and many examples are still in existence.

The HO Central Valley kit was introduced in the mid 1980s and its fine detail has made it a fixture on many model railroads. The box girders in the kit are available separately and are a great for kit-bashing and scratch building.

I purchased the kit when it was introduced and installed it on my first layout. After several job related moves in the early '90s, I started my second layout and eventually installed the bridge on the main line at a location that has a 2.5% ruling grade (figure 2). Sometime later I learned that this design isn't appropriate for a heavy main line bridge constructed in the '30s.

Ever since I've been studying bridge photos and thinking of ways to modify this structure to represent a main line bridge on a coal hauling railroad set in the mid '70s. I stumbled across a photo of the Southern Pacific bridge at Winchester, Oregon on the CarrTracks website (www.carrtracks.com), featuring the photography of John Carr.

The Central Valley bridge closely resembles the Winchester bridge. Joe Fugate modeled this bridge on his Siskiyou Line layout (see photo below).

– Joe Fugate photo

I needed to change the diagonal bracing on the side panels and the portals at either end to get the look I wanted.

Girder Modifications

Start by removing the monofilament bracing in the inner two panels. If you built the bridge according to the directions, you can simply cut these at the bottom of either end and pull it through the webbing (figure 3). Next, remove the styrene bracing on the inner two panels of each side. Slightly depress one end until it comes free from the girder and then pull the brace out (figure 4).

Figure 2

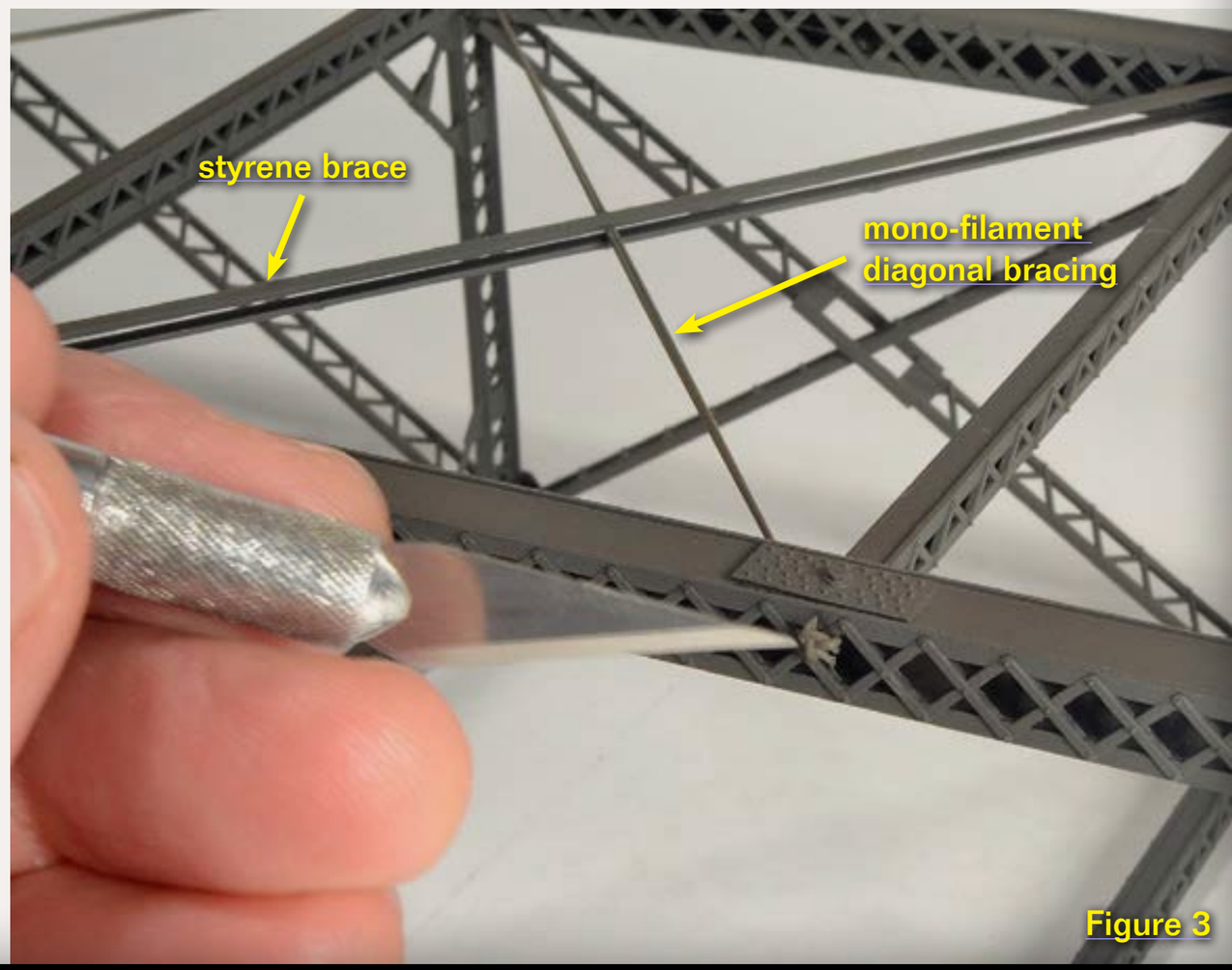


Figure 3

Figure 2: The bridge as originally constructed.

Figure 3: Cut monofilament at knot and pull through structure to remove.

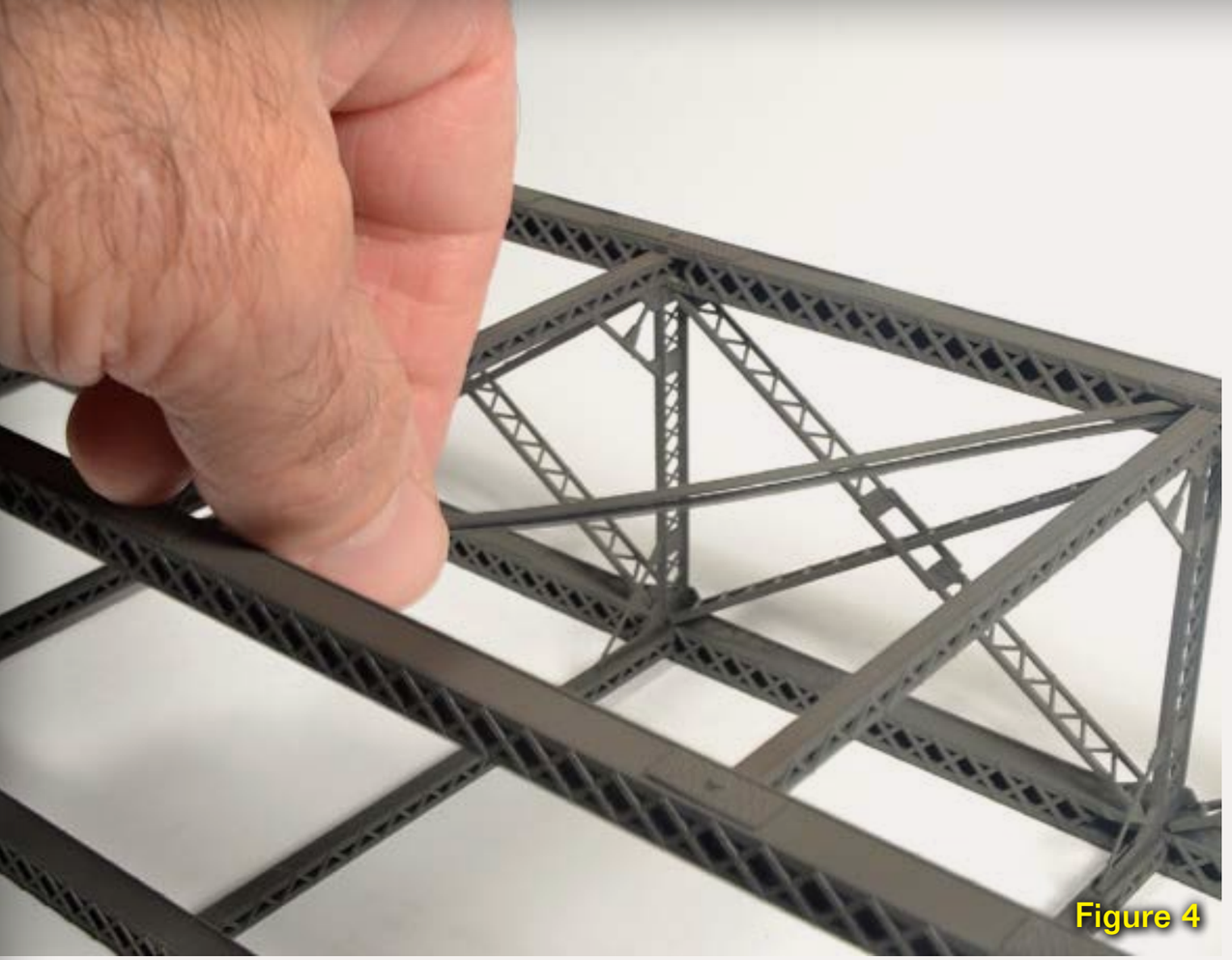


Figure 4

Figure 5 shows the bridge with all of the X-bracing removed and ready for installation of the new bracing.

Now the fun part starts, construction! Begin by cementing eight Central Valley C-C girders together. These will be placed diagonally in each of the eight side panels. Use the Central Valley truss assembly diagram to determine the length and angles of the girders (figure 6). If your diagram is missing, you can download it from the Central Valley website.

Be sure to cut the girders slightly longer than the length indicated on the assembly diagram as the length needed for each panel will vary ...

Use a small file to remove the web bracing from the top and bottom chords where the new diagonal brace will be installed (figures 7 and 8). Then test fit the new girders. File each end as necessary to get a good, tight fit- (figure 9). Note which end is the top, but don't glue it yet – more detail will be added before final installation. Repeat this process for all eight panels. Take your time, it is important for the girders to fit snugly without distorting the panels.

Figure 4: Gently depress and remove styrene bracing.

Figure 5: Bridge ready for installation of new diagonal girders.

Figure 6: Use Central Valley instructions to determine angle of cut for the new girders.

Figure 5

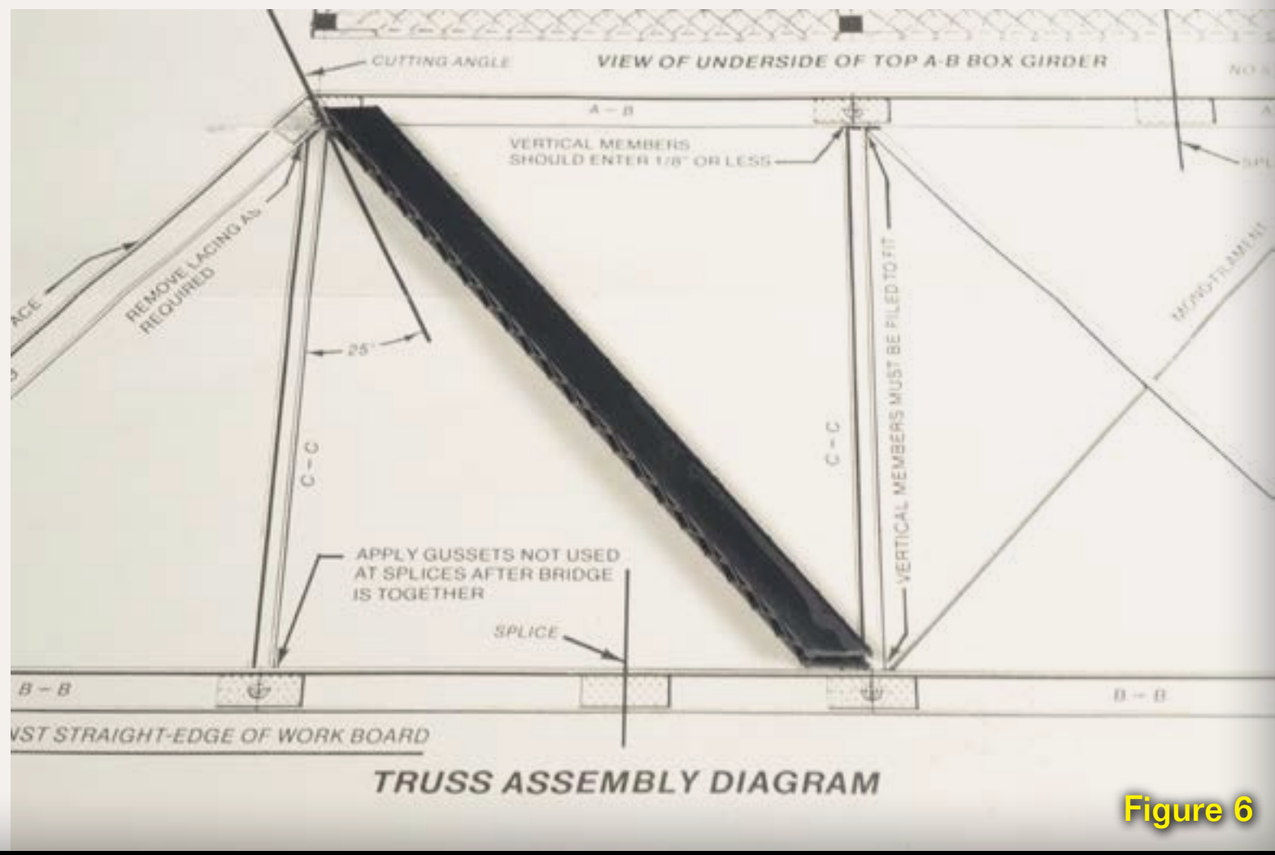


Figure 6

Figure 7

With the girders cut to size, it's time to add plates to the upper and lower ends of the top side of each girder. File off one section of the web bracing at the top and two sections at the bottom of each girder. Next, cut a piece of .010" styrene to match the width of the girders. I used Micro-Mark's rivet decals (see **Add Realistic Rivets to Your Models in the August 2011 MRH**) to add two rows of rivets – one on either side of the piece of styrene. The rivet detail sheet contains several sections of rivets that match the Central Valley rivet spacing exactly (figure 10). After plates have been added to all of the girders, refit them into the bridge and glue them in place. I installed plates on either side of the vertical center girder to cover the web bracing that was removed for installation of the original small girders that came with the kit.

Next, install gusset plates at either end of the new girders. As only one side of the bridge will be visible on my layout, I only installed gussets on the visible sides of the girders. I used the gusset plates from a second bridge kit. There aren't enough gusset plates in

Figure 7: Remove two sections of web bracing on top chord.

Figure 8: Remove two sections of web bracing on bottom chord.

Figure 9: File ends of girders for a good, tight fit

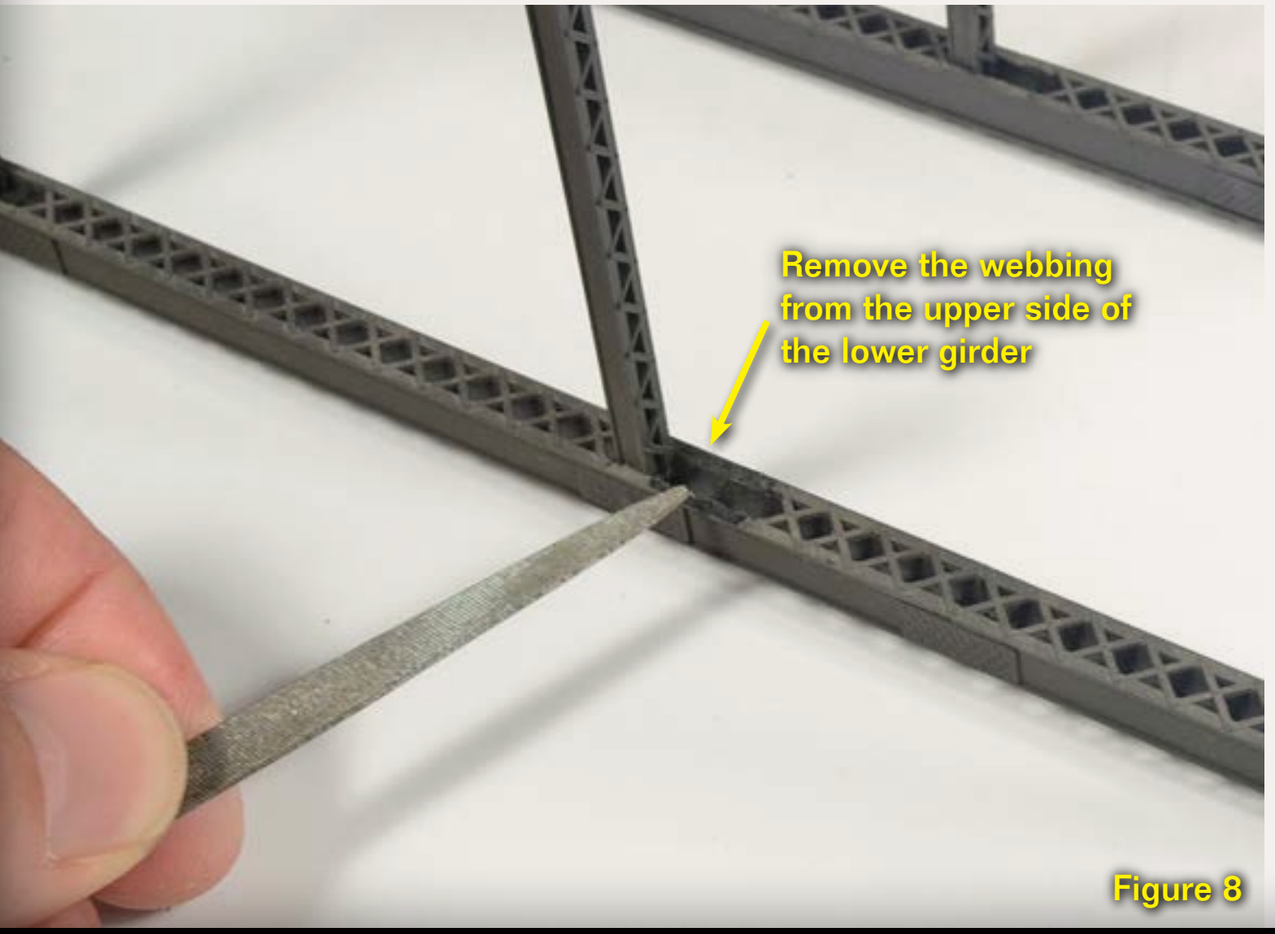


Figure 8

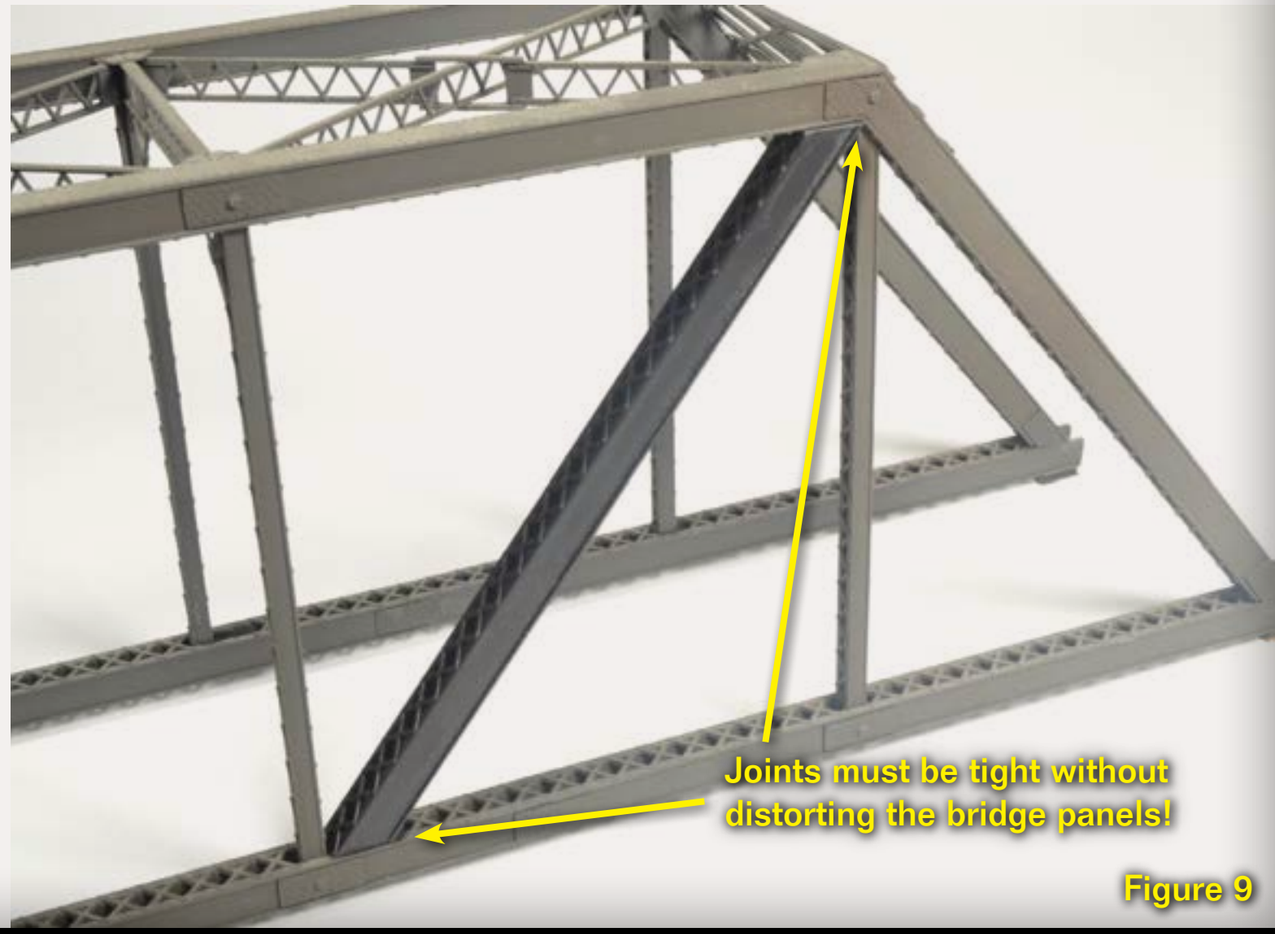


Figure 9

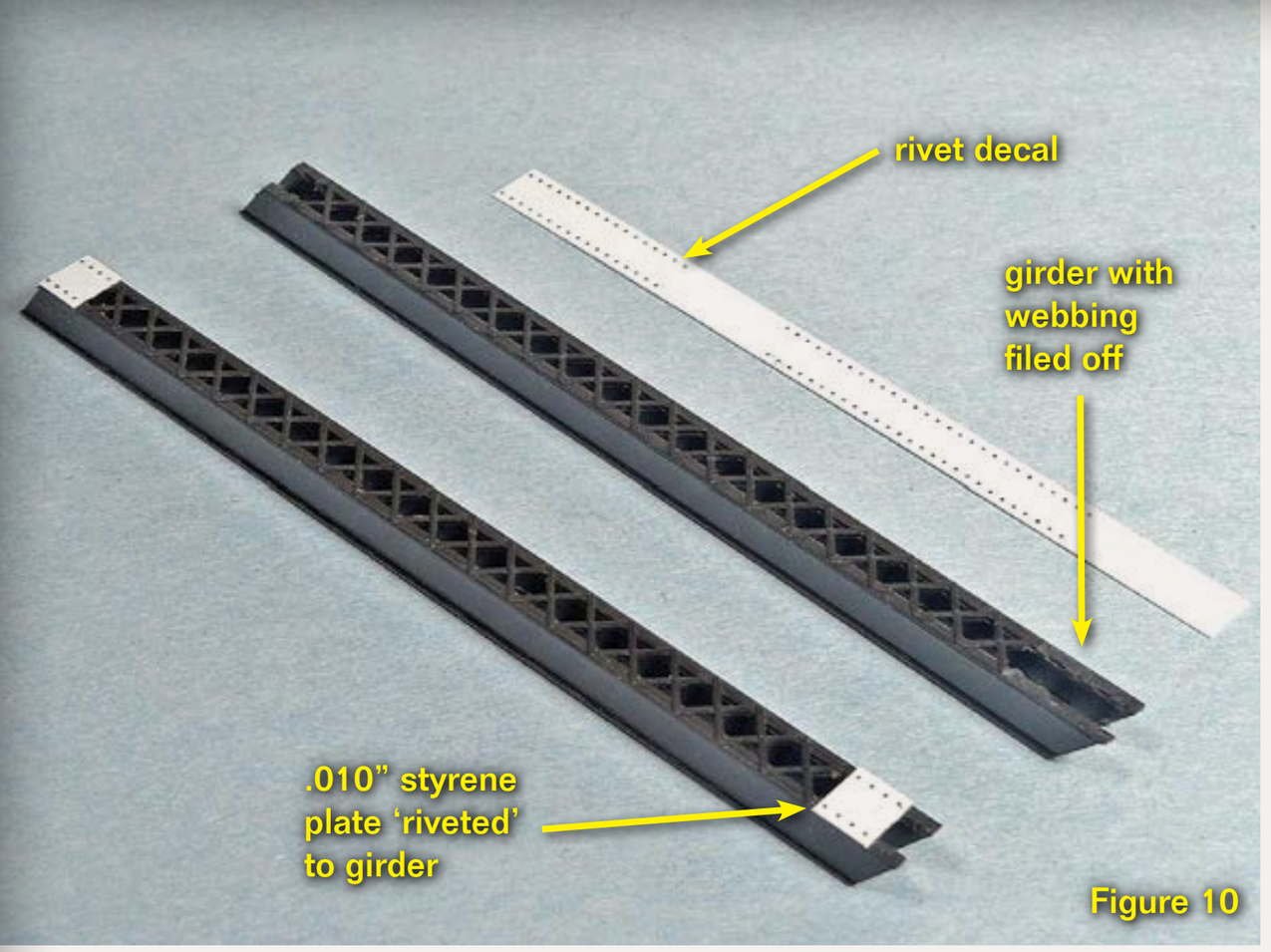


Figure 10

the second kit to cover all of the new girders, but more could be made using .010” styrene and rivet decals.

Remove the two smaller gusset plates on the outside of the bottom chord where the new girders meet and replace them with the longer gusset plates. Figure 11 shows the new girders with the ‘riveted’ plates and gussets installed.

Figure 10: Rivet strip with Micro-Mark Rivet decals, girder with web bracing removed and girder with new plates installed.

Figure 11: New girders with gusset plates and plates with rivets attached.

Figure 12: Remove existing portal with a #17 chisel blade.

New Portals

My original plan was to replace the Central Valley portals with solid ones similar to those on the bridge at Winchester. However, photo research of similar bridges showed the lattice-style portal was much more common. Also, the Central Valley portal is very attractive so I elected to modify the existing portals rather than replace them.

I had to remove the portals from my assembled bridge (figure 12). Be careful to avoid damaging either the portal or the surrounding area!


Figure 11


Figure 12

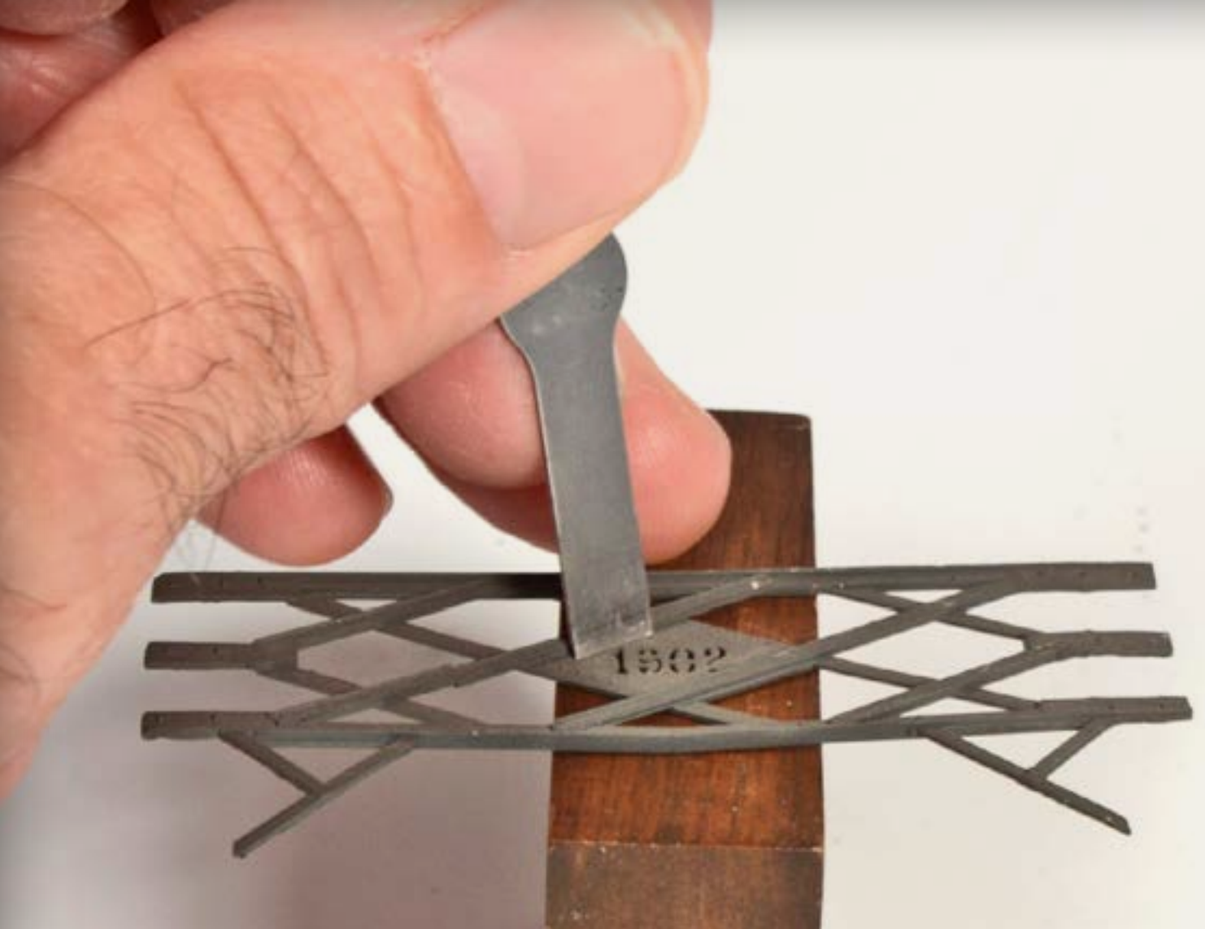


Figure 13

Figure 15

Cut the “1902” from the lattice using a sharp number 17 blade. Supporting the portal on a flat surface especially behind the “1902”, place the blade near the angle iron on each side and gently tap the end of the knife with a hammer (figure 13).

Carefully clean up any ragged edges with a small file. I used the portals from the spare kit I had, but you could used the ones removed if your were careful. Once the portals are cleaned up, attach them to the bridge in their normal locations.

Make two bottom braces for each portal by cutting pieces of .010” styrene measuring a scale 5’ x 5’. Cut each piece

Figure 14a

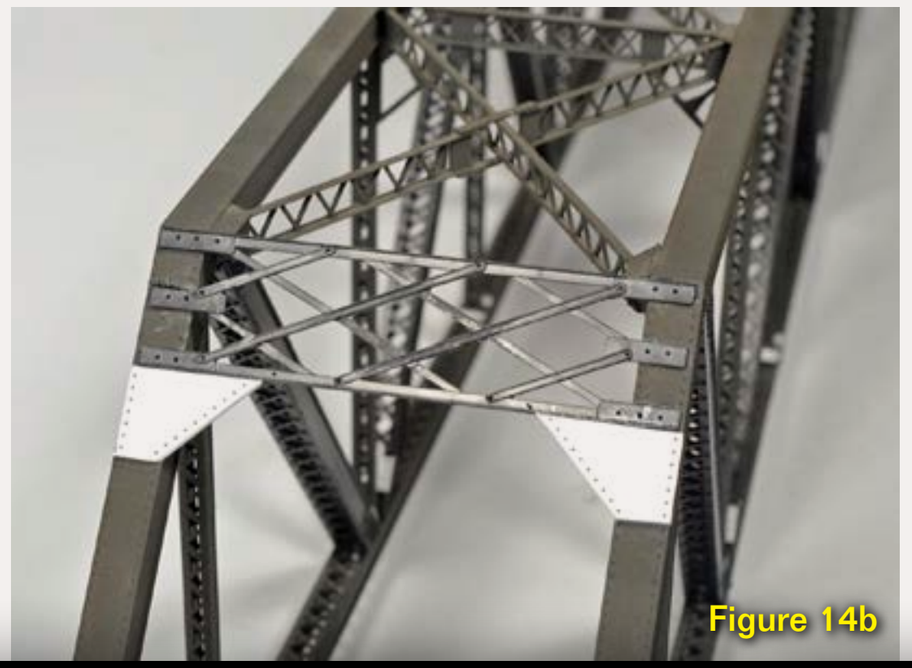


Figure 14b

Figure 13: Cut the “1902” plate from the center of the portal.

Figure 14: Completed portal with modifications.

Figure 15: Burnt umber and ivory black gouache, Solvaset, brush, cosmetic sponge and “dirty brown” wash used in the initial weathering step.

diagonally making four right triangles of equal size. Hold each triangle in place against the bottom of the portal and against the outside edge of the girder and mark where the inside of the girder intersects with the triangle. Remove this piece from the triangle.

Now remove the rivets from the girder where the bottom braces will be located and glue them in place. I added .010" x .030" styrene along the inside edge and the bottom of the braces to represent angle iron. Let the glue dry, then add rivet decals along the outside edge and the inside edge of each bottom plate (figures 14a and 14b).

Painting and Weathering

Wash the bridge with liquid soap and warm water to removes any oils left from your hands during construction prior to painting. In my case, this also removed several years of dust that had accumulated on the bridge while it was in service on my layout.

I mixed Floquil Grimy Black with a little Antique White and Mud for my base color, approximating the bridge's original color. After airbrushing the bridge, allow the paint to cure for 4-5 days. Then spray it with Testor's Dullcote to seal the Floquil base coat. This also provides a nice surface for the weathering process. Let this cure for another 4-5 days.

Figure 16: Tear the end of the cosmetic sponge so that you have an irregular surface. Completely soak the rough edge in the wash and then blot it on the palette to remove some of the color. Next, gently dab the sponge on the surface of the girder.

Figure 17

Figure 17: Using the cosmetic sponge on the girders creates natural randomness to the rust spots on the final bridge.

The first step in weathering is to apply a wash of burnt umber gouache mixed with a little ivory black gouache. I make the wash by pouring a small pool of Microscale Micro-Sol on a palette then adding small amounts of burnt umber and the ivory black acrylic paint until I get a dirty brown color. Figure 15 shows the approximate color of my wash along with the materials and tools used.

I use a technique to apply the wash that I picked up from Rich Divisio's Model Trains Weathered website. I also picked up how to use Micro-Sol to thin gouache and acrylic paints from the forums on Rich's website. Apply the wash to one surface, i.e. the lattice bracing on one side of a girder, and then dab the surface with a cosmetic sponge (figure 16). Dabbing the surface with the cosmetic sponge removes any brush marks and takes off just a little of the wash. This "applying" and "taking off" process can result in spectacular weathering effects.

I like to work from the inside out when applying a wash like this, beginning with the top cross members then working

Figure 18

Figure 18: Compare this photo to figure 2 to see how much stronger the bridge appears with the new girders. It now looks more like a bridge built for heavy traffic in the 1930's.

my way from the tops and bottoms of the inside girders to the inside faces of the girders. I apply the wash to the faces of the outside girders last.

Let the weathering dry for a day or two then make two more washes: burnt umber and Micro-Sol and burnt sienna and Micro-Sol. Using the cosmetic sponge, gently dab on the two colors in a random fashion on the sides of the girders and the girder tops to represent rust that has accumulated over the years. I went easy on the burnt sienna as I wanted to achieve the look of a bridge that hadn't been painted for some time yet wasn't quite at the point of needing to be repainted or replaced.

Finally I applied a wash of India ink and alcohol to the ties creating some color variation. Figures 17 and 18 show the effects of the weathering process.

Modifying the Central Valley bridge provided me with the opportunity to try a different weathering technique on an existing structure. I'm pleased with the results, and I hope you can use some the ideas presented here on one of your modeling projects in the future. ☑

Tom Patterson got his start in model railroading with a Lionel train set at Christmas back in the '60s. That train set eventually became part of his first layout. Tom reentered model railroading in the late '70s and has been working on his current layout, the HO scale Chesapeake, Wheeling and Erie Railroad, a free-lanced coal hauler set in West Virginia, for almost 20 years.

Tom and his wife have two grown children and live in Cincinnati, Ohio. They enjoy hiking, biking, reading and spending time with their family, which includes two rescue mutts and a large number of salt water fish.

BILL OF MATERIALS

Central Valley: shop.cvmw.com
150' HO scale Truss Bridge Kit
Box Girders (5)

Evergreen: evergreenscalemodels.com
.010 Sheet and .010" x .030" strip

Micro-Mark: www.micromark.com
Rivet decals #48985

Microscale Industries: microscale.com
Micro-Sol decal solvent, Item MI-2

Dick Blick: dickblick.com
Windsor and Newton Designer Gouache Artist's acrylic burnt umber, ivory black, burnt sienna

Reader Feedback (click here)

Improving Atlas #6 Crossovers

Reader Feedback (click here)

by Lou Venema

One of my modules needed a new crossover to make a passing siding out of the 2 main line tracks, with the tracks to be on a 2" spacing with no electrical path between the 2 main lines. My standard switches on the layout are Atlas code 83 #6, stock number 505 and 506. Unfortunately, when installed these switches do not support 2 inch centerlines. (See figure 1 – Standard configuration of 2 Atlas #6 RH turnouts in a crossover, however, the separation between the tracks is more than 2".)

There had to be some simple way to bring the mainlines closer together and to preserve most of the standard tie configuration. Here's my solution.

Laying one switch on top of the other, I found that I could get an alignment that came close to the required spacing. If I could cleanly remove the inside diverging rail from each switch I could slide the outside diverging rail back in its place and get my desired spacing.

The inside diverging rail is connected to the diverging rail from the points, under the frog. After messing with the switch a bit, I learned that these two pieces of rail are actually one piece. There's only a rail base under the frog, but full rails on each end. The rail base can be seen under the plastic frog. (See figure 2 – The bottom of the frog showing where the rail base goes under the frog between the end pieces of track.)

With the switch upside down, I removed the plastic between the first tie just past the frog on the diverging route, exposing the section of rail where it goes from full height to just the base. (See figure 3 – The plastic is removed and you can see the continuous piece of rail.)

Once room is made it is easy to cut the base piece from the rail and remove the entire piece of rail. (See figure 4 – This shows how the rail is cut allowing removal of the diverging track.)

Once the rail is cut the piece needs to be removed. Don't just yank it out. You will destroy the spikes on the ties and ruin the alignment for later when you put the crossover back together. Gently slide the rail out a bit until you can bend the tab of the rail down flat. Once it is flat you can slide the rail the rest of the way out. Do this on both switches. (See figure 5 next page – This is the view from the top of the switch showing the switch with the rail removed and the rail with the tab flattened. Note the spikes are still in good condition on the ties.)


Figure 2


Figure 3

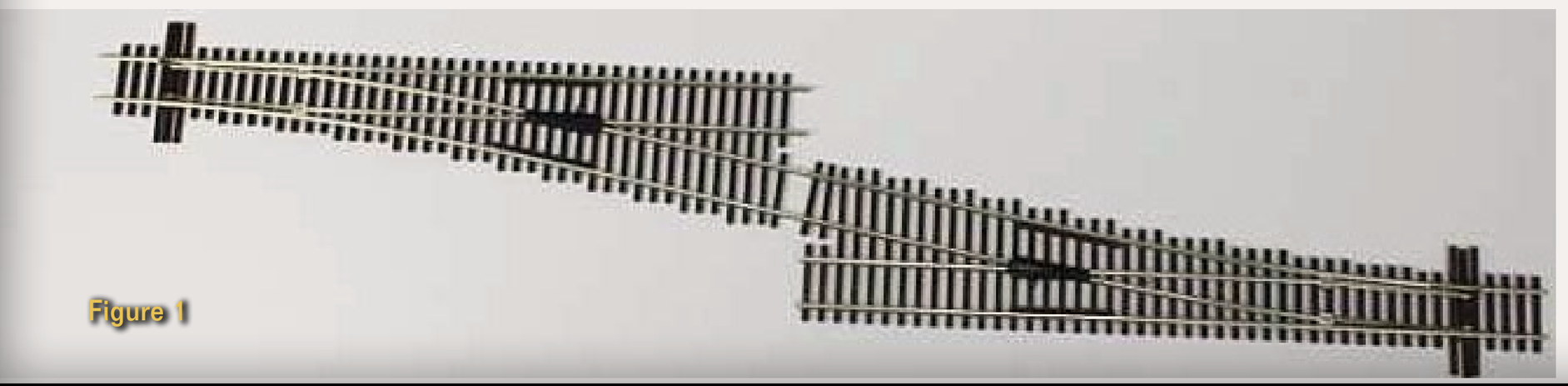


Figure 1

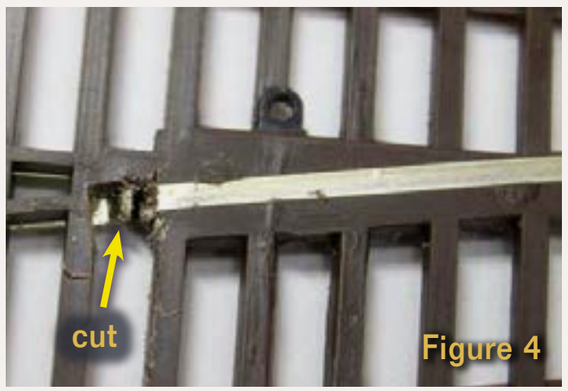


Figure 4

Be careful with the switches now as they are awkward to handle and somewhat fragile. The two switches are now ready for reconstruction. (See figure 6 – Here is how the switches should look before rebuilding the crossover.)

I slid the switches back together to see how they fit and to check the tracking. At this stage they allowed a track


Figure 5

spacing of 2 1/8". This was close but not good enough yet. Moving the switches around a bit showed that 5/8" needed to be removed from the outer diverging rail on each switch. This seemed like a lot to remove to gain only 1/8" so I checked 3 times just to be sure. Once I removed the 5/8" from the rail on each switch, they're ready to go back together – almost.

Before putting the switches back together again, some of the ties need to be trimmed. I placed one switch on top of the other to see where the ties needed to be cut. I tried to keep as much of the long switch ties as I could. Figure 7 shows where I made my cuts on the upper switch. The same ties need to be cut on the other switch. Once the switches have been put together, I did any final trimming of the ties and glued the ties with styrene cement to make a solid tie again. I found sometimes the ties do not line up perfectly – I remedied this by cutting the tie strip on the bottom to allow the ties to move around and be aligned. I cut the ties to allow the last 5 to move on the end of each switch. (See figure 7 – This shows how the ties were cut to make new long ties. It also shows the mismatch on the lower switch. The upper switch has the ties lined up again. Once the work is complete, the switches will be properly aligned. This will close the gap on the upper switch and allow them to be glued together.)

The outer diverging rail slides in to the spikes on the ties where the inner diverging rail used to be. Be careful not to remove the small bit of plastic on the frog where the rail used to be. This is necessary to keep the two switches electrically isolated. If you look carefully at Figure 7 you can see the plastic between the metal frog and the rail.

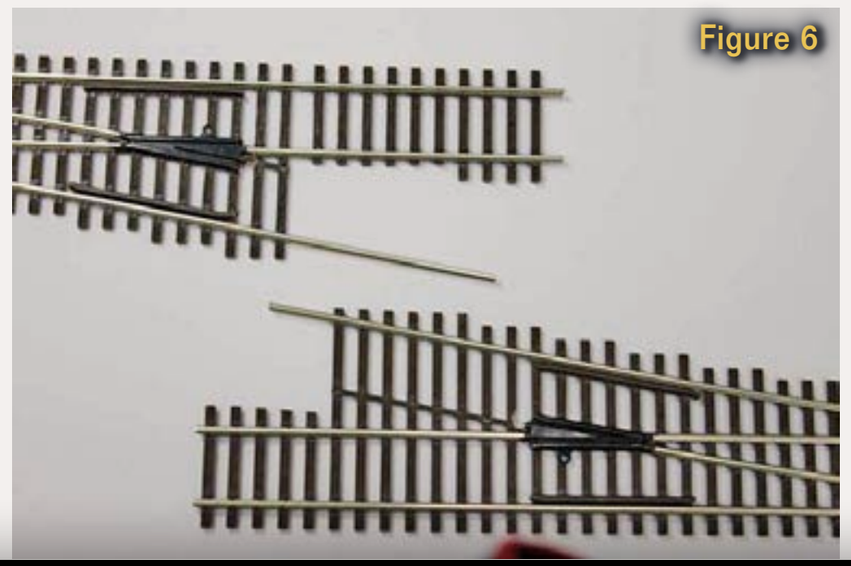


Figure 6

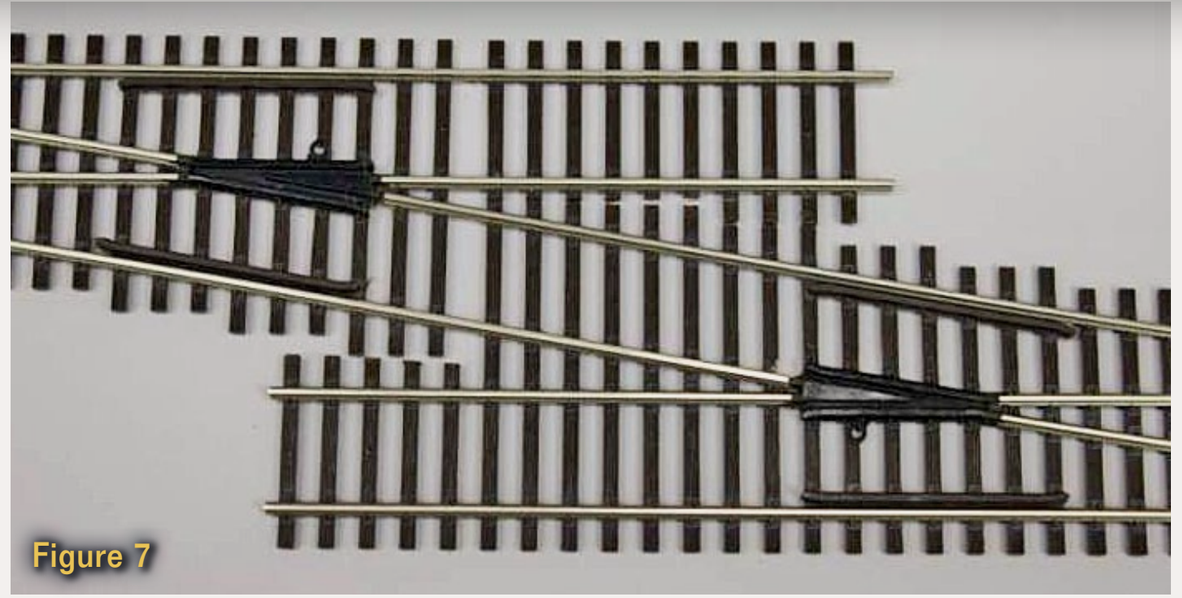


Figure 7

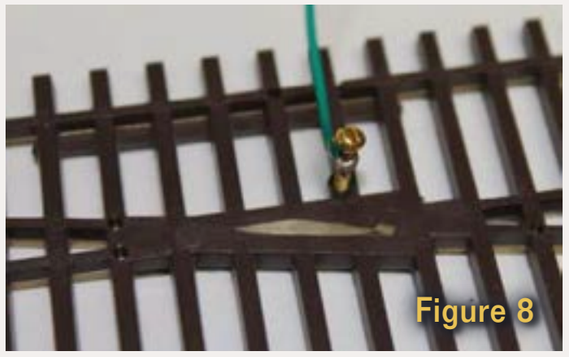


Figure 8

Before I place the crossover on the layout I add a feeder to power the frog. I solder a length of green 26 gauge wire to a brass 1-72 screw. I installed the screw in the hole by the frog from the bottom. I did not tap the hole, I just let the screw cut its own threads. I screw it in until the screw end is flush with the top of the tie and frog casting. Once I was happy with the fit of the screw, I cut off the head and drilled a hole in the track roadbed at the switch site to clear the wire and screw. (See figure 8 – View of the wiring to power the frog of the Atlas switch.)

I install the switches on my layout and secured the switches down as normal. I connected my point control mechanism and put the tracks in service! (See figure 9 – The realigned crossover ready for ballasting and traffic.) ☑

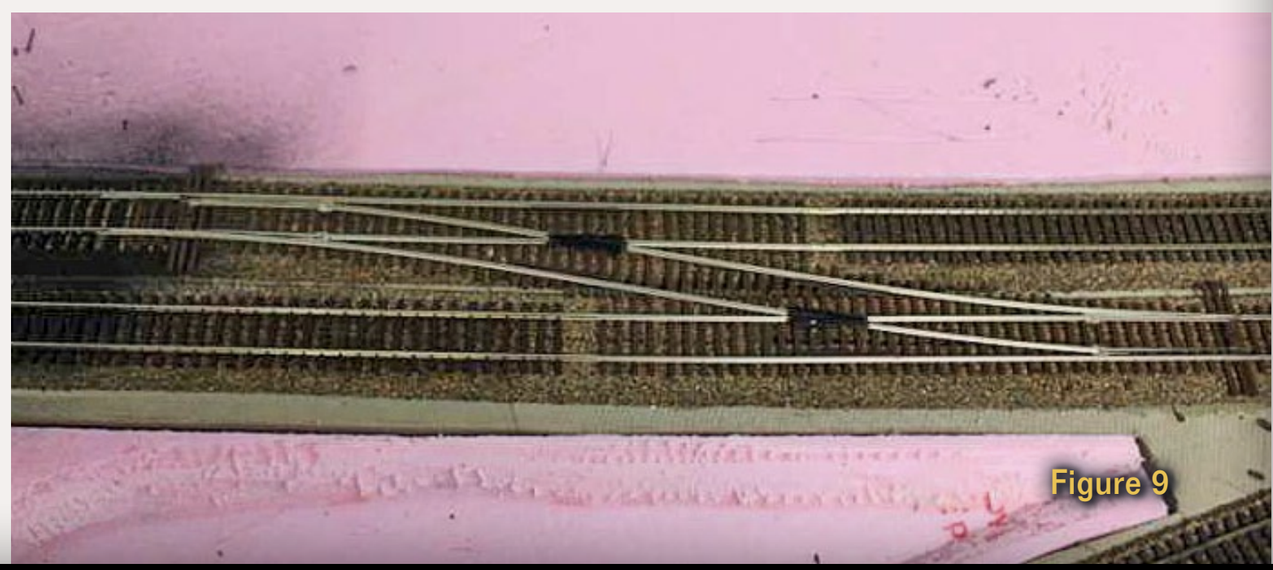


Figure 9

Rochester Coal Deliveries

– by David Karkoski

Photos by the author

Figure 1: Here's a collection of coal hoppers in the Peru, Indiana yard on the author's former Wabash layout. Various grades of coal are evident, from left to right: bottom row – slack and stoker; middle row – lump and egg; top row – nut, block, and mine run. The variety of loads gives realism and character to a group of hoppers. In this article, author David Karkoski describes his research into coal movements from the 1950s and how he models the various kinds of coal loads.

Reader Feedback (click here)

By taking a detailed look at coal freight patterns, you can give your coal trains a more realistic sense of purpose ...

Author David Karkoski has done considerable research of industries such as coal, grain, and lumber in the 1950s for his planned layout modeling Rochester, Indiana on the Nickel Plate Road.

Studying a specific industry's traffic patterns and applying them to our layout can pay great dividends.

Rather than just running generic coal loads, for instance, it becomes possible to model the specific movement of different grades of coal. The trains have a greater sense of realistic purpose and a more distinct personality. Any time you impart more purpose to the trains, you enhance the quality of run and get a more satisfying layout.

In this article, David presents his findings from studying prototype coal movement paperwork, and then he discusses the implications of what he learned on modeling coal movements on a model railroad. We believe you will find this insight can enhance how you model coal shipments on your own model railroad.

– The MRH Staff

Coal Movement Findings

Freight bills and Erie Interchange records which I found in the preserved Nickel Plate depot from Rochester Indiana are the source I used for the information presented in this article. These documents cover the year 1954.

I'm starting my review of railroad freight deliveries by looking at the freight bills for coal, a universal product delivered to most US towns in the 1950s. There are three coal dealers identified by the freight bills.

Chart 1 shows the tons of coal delivered monthly to each dealer. It clearly demonstrates the seasonal variation expected for a product used to heat homes and businesses.

Chart 2 shows the total tons of coal received annually by each retailer.

I found the information in the bills related to the grades of coal to be of interest, as coal is an open cargo noticed by operators and visitors alike. The 11,000 tons of coal delivered to Rochester was distributed across the coal grades Identified in Chart 3.

I could also see from the freight bills that the railroads delivered coal in the originating road's own cars, as there was only one carload not in a home-road car. Additionally, HM type hoppers predominated in the coal trade to Rochester, with only 11% of the deliveries in HT hoppers. Only one load was delivered to Consumers in a GS gondola.

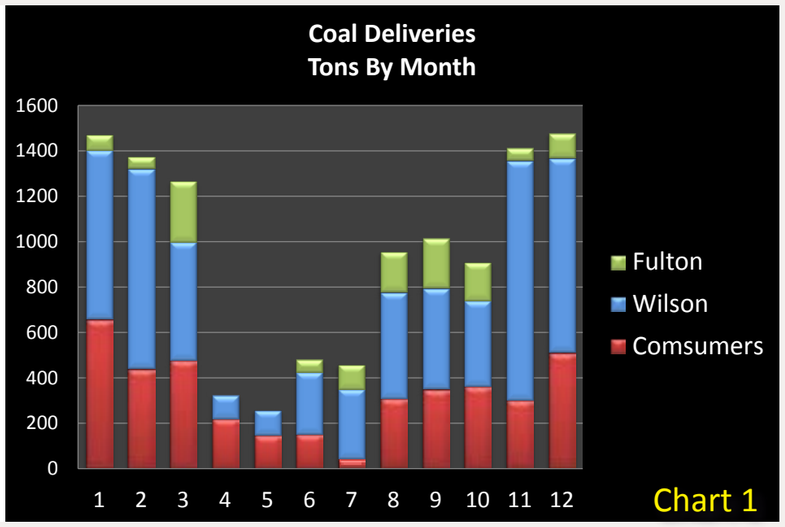
An unusual coal type is the "coal briquette", it accounted for 10 carloads in the year. The briquettes, essentially a jumbo size charcoal briquette, are created from coal fines bonded together using a binder and pressure.

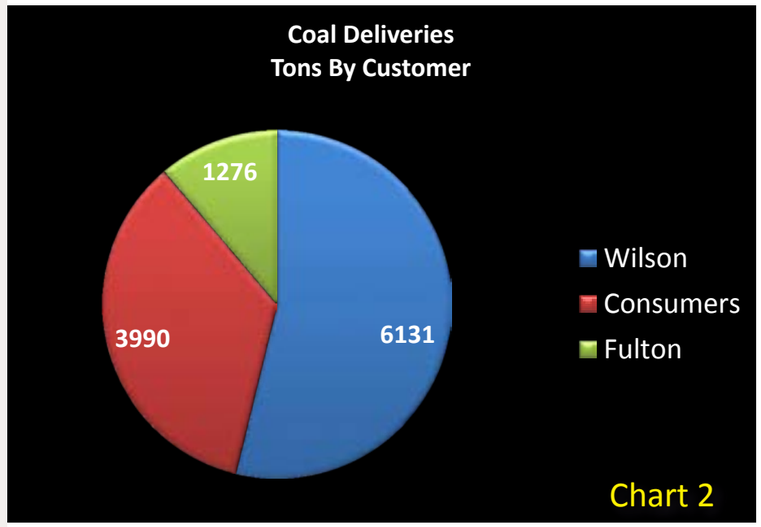
An early binder was asphalt; it must have made for a robust smoke when those briquettes were burned.

A coal briquette manufacturer would make an interesting addition to a model railroad. It's an industry I have never seen modeled.

Wilson Coal and Grain

Wilson Coal and Grain received the most coal deliveries. See Figures 2a and 3 next page for a typical Wilson bill and a photo simulating the delivery.





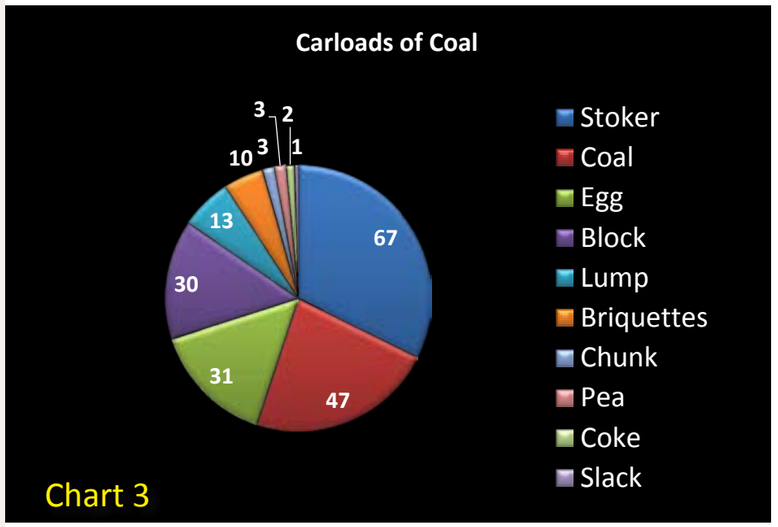


Chart 4 shows the breakdown of coal grades, clearly illustrating a variety of products getting delivered.

Chart 5 presents reporting marks of the cars delivering the products; it is predominated by B&O and L&N cars with a significant contribution from C&O and VGN.

Note that although Rochester is in Indiana, only 5% of the coal received came from there via C&EI.

Text continues on page 74.

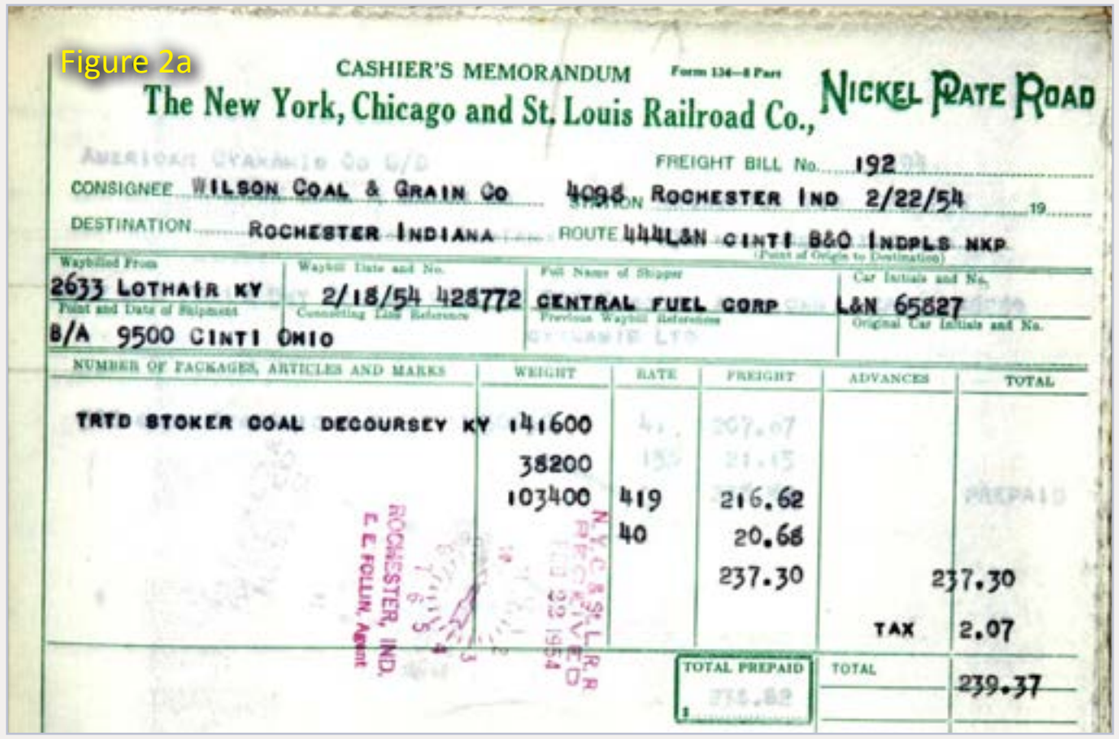


Figure 2a

CASHIER'S MEMORANDUM Form 124—E Part

The New York, Chicago and St. Louis Railroad Co., NICKEL PLATE ROAD

FREIGHT BILL No. 192

CONSIGNEE WILSON COAL & GRAIN CO 4096 STATION ROCHESTER IND 2/22/54 19

DESTINATION ROCHESTER INDIANA ROUTE 444L&N CINTI B&O INDPLS NKP (Point of Origin to Destination)

Waybilled From	Waybill Date and No.	Full Name of Shipper	Car Initials and No.
2633 LOTHAIR KY	2/18/54 428772	CENTRAL FUEL CORP	L&N 65827
Point and Date of Shipment B/A 9500 CINTI OHIO	Connecting Line Reference	Previous Waybill References	Original Car Initials and No.

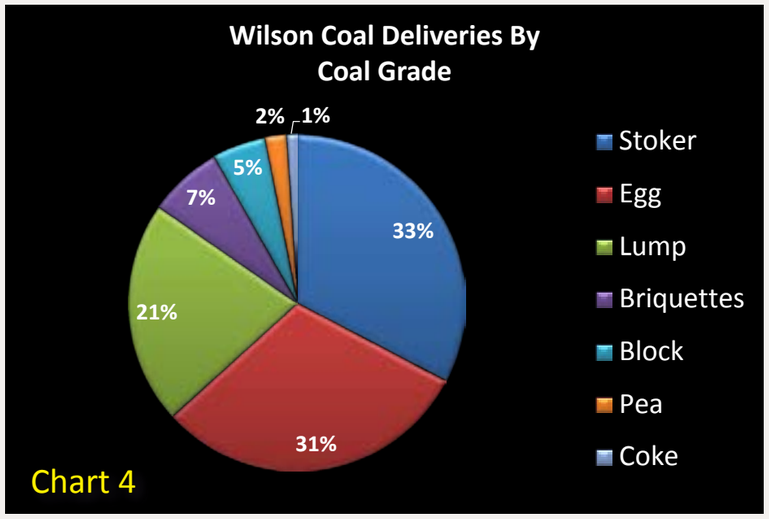
NUMBER OF PACKAGES, ARTICLES AND MARKS	WEIGHT	RATE	FREIGHT	ADVANCES	TOTAL
TRTD STOKER COAL DECOURSEY KY	141600				
	38200				
	103400	419	216.62		
		40	20.68		
			237.30		237.30
				TAX	2.07
			TOTAL PREPAID	TOTAL	239.37

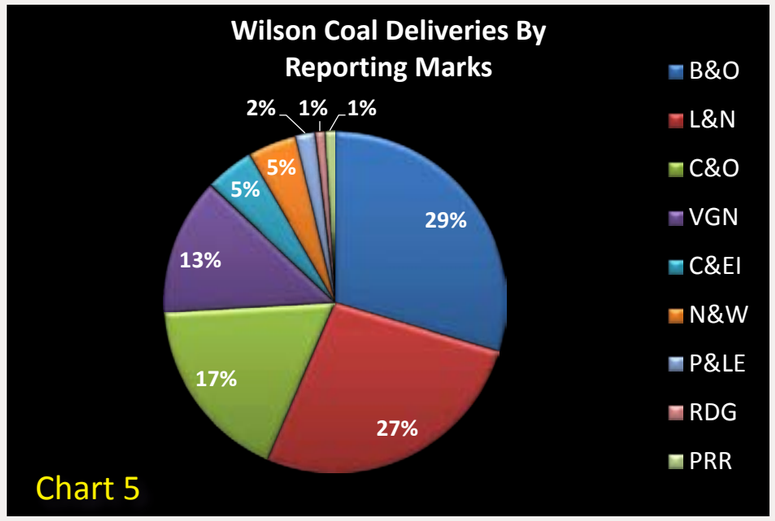
ROCHESTER, IND. E. E. FOLLIN, Agent

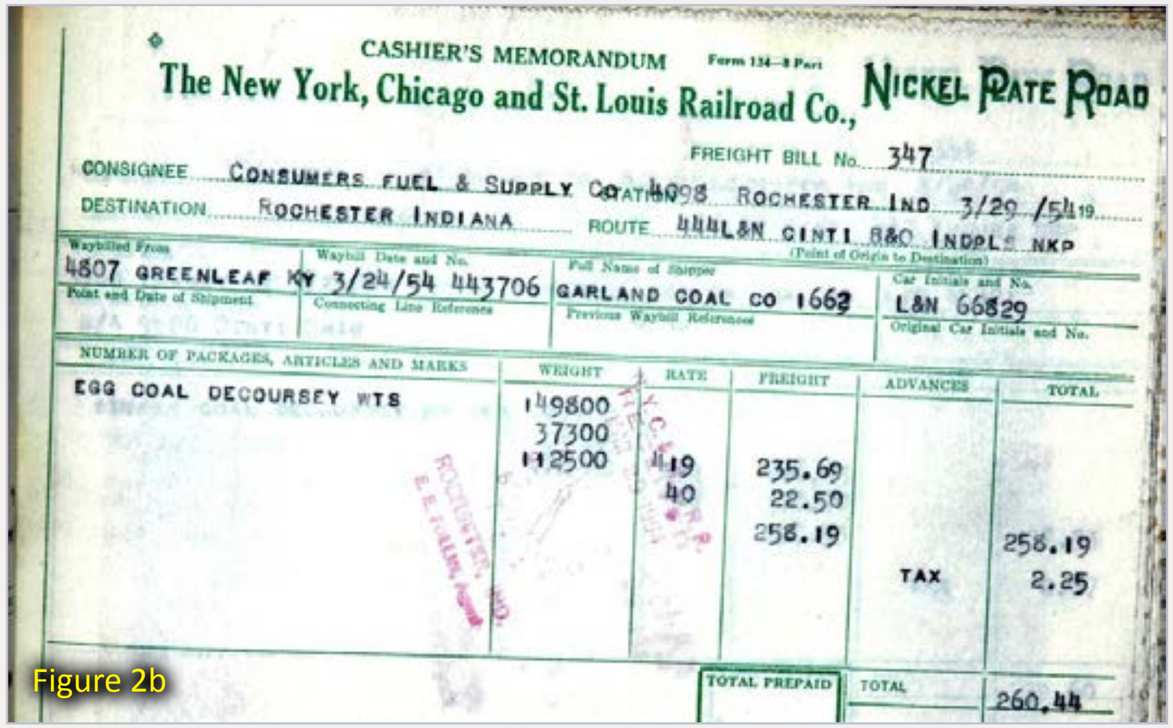
RECEIVED FEB 22 1954

Figure 3

Figures 2a and 3: During February, the peak of the heating season, L&N 65827 is spotted for unloading at Wilson's, four days after departing Lothair, KY. This load of stoker coal was originated on the L&N, routed via the B&O from Cincinnati to Indianapolis and then on to NKP rails for delivery.







CASHIER'S MEMORANDUM Form 134–S Part

The New York, Chicago and St. Louis Railroad Co., NICKEL PLATE ROAD

FREIGHT BILL No. 347

CONSIGNEE CONSUMERS FUEL & SUPPLY Co STATION 4098 ROCHESTER IND 3/29 /54 19

DESTINATION ROCHESTER INDIANA ROUTE 444 L&N CINTI B&O INDPLS NKP (Point of Origin to Destination)

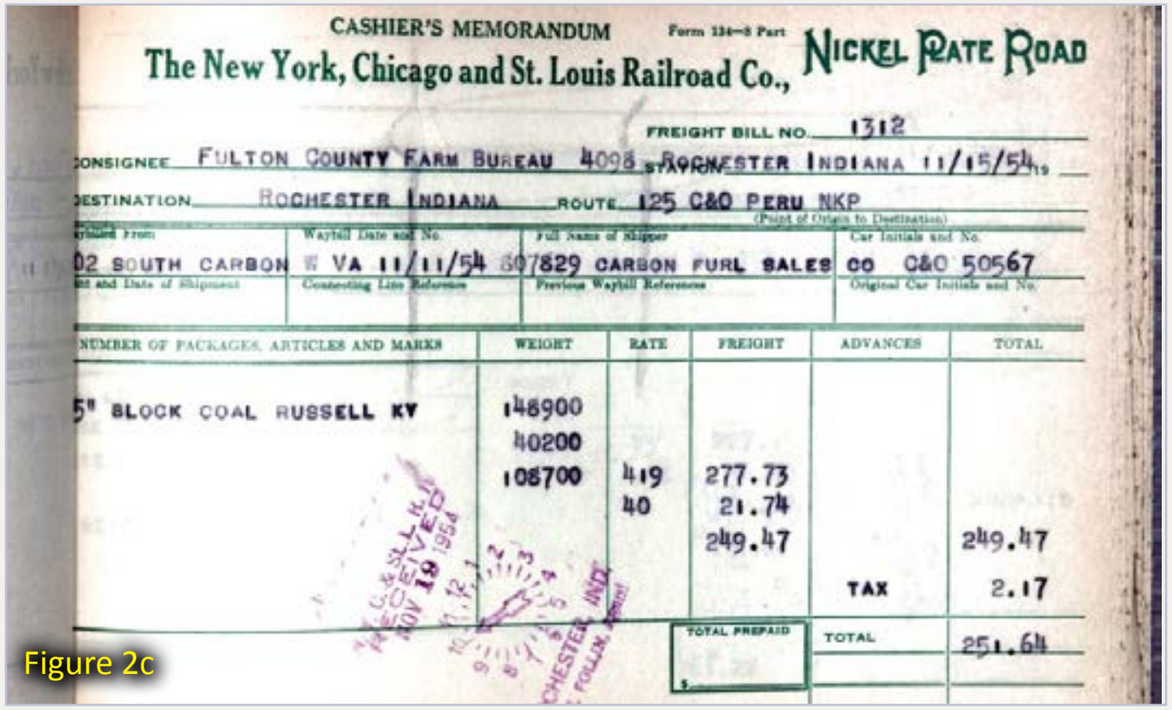
Waybilled From	Waybill Date and No.	Full Name of Shipper	Car Initials and No.
4807 GREENLEAF KY	3/24/54 443706	GARLAND COAL CO 1662	L&N 66829
Point and Date of Shipment	Connecting Line Reference	Previous Waybill Reference	Original Car Initials and No.

NUMBER OF PACKAGES, ARTICLES AND MARKS	WEIGHT	RATE	FREIGHT	ADVANCES	TOTAL
EGG COAL DECOURSEY WTS	149800				
	37300				
	112500	419	235.69		
		40	22.50		
			258.19		258.19
				TAX	2.25
			TOTAL PREPAID	TOTAL	260.44

Figure 2b

Figure 4

Figures 2b and 4: Spring is in the air in northern Indiana but the heating season is not quite over as 112000 pounds of egg coal arrives at Consumers Fuel & Supply. L&N 66829 followed the usual route for L&N traffic, departing Greenleaf, KY on 3/24/1954 and arriving at Rochester on 3/29/1954.



CASHIER'S MEMORANDUM Form 134–S Part

The New York, Chicago and St. Louis Railroad Co., NICKEL PLATE ROAD

FREIGHT BILL NO. 1312

CONSIGNEE FULTON COUNTY FARM BUREAU 4098 STATION ROCHESTER INDIANA 11/15/54 19

DESTINATION ROCHESTER INDIANA ROUTE 125 C&O PERU NKP (Point of Origin to Destination)

Waybilled From	Waybill Date and No.	Full Name of Shipper	Car Initials and No.
02 SOUTH CARBON	W VA 11/11/54 607829	CARBON FUEL SALES CO	C&O 50567
Point and Date of Shipment	Connecting Line Reference	Previous Waybill Reference	Original Car Initials and No.

NUMBER OF PACKAGES, ARTICLES AND MARKS	WEIGHT	RATE	FREIGHT	ADVANCES	TOTAL
5" BLOCK COAL RUSSELL KY	148900				
	40200				
	108700	419	277.73		
		40	21.74		
			249.47		249.47
				TAX	2.17
			TOTAL PREPAID	TOTAL	251.64

Figure 2c

Figure 5

Figures 2c and 5: C&O 50567 is handed over to the Erie for delivery to the Fulton County Farm Bureau in late fall. This C&O-originated load of block coal moved on to the NKP at Peru Indiana. 45% of all coal destined for Rochester was routed through Fostoria OH, another 45% through Indianapolis and only 10% passed.

Text continued from page 72.

Moreover, none of the retailers received any Illinois or Iowa coal.

Consumers Coal

Consumers received the second-greatest quantity of coal annually, a total of 76 carloads. See Figure 2a on the previous page for a typical Consumers bill.

Stoker and block coal dominated the coal grades as shown in Chart 6. Most strikingly, chart 7 indicates the coal came primarily in L&N cars with the C&O a distant second.

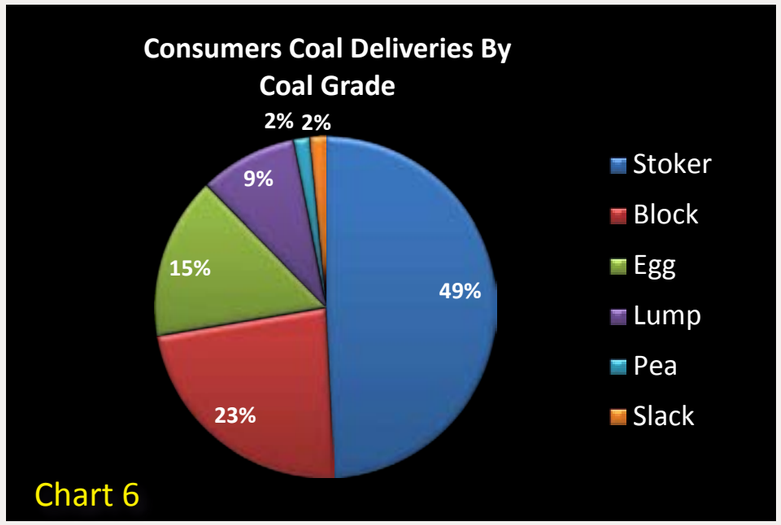
The limited number of road names delivering product to Consumers allowed me to drill down a little deeper into the deliveries.

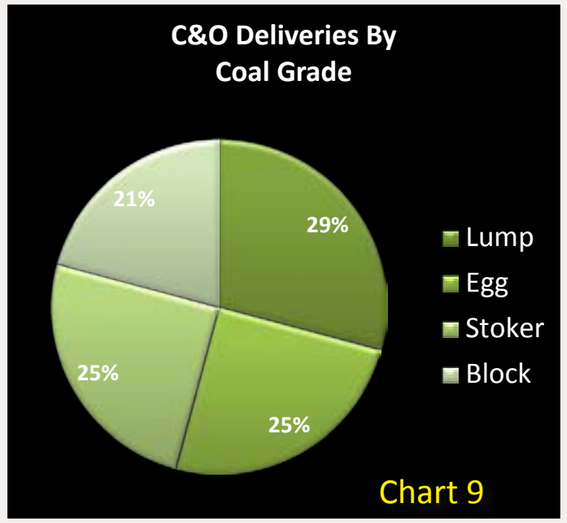
Charts 8, 9, and 10 break down the mix of products delivered by road name. The records show a significant difference between the grades and quantities of products delivered by the L&N and the C&O.

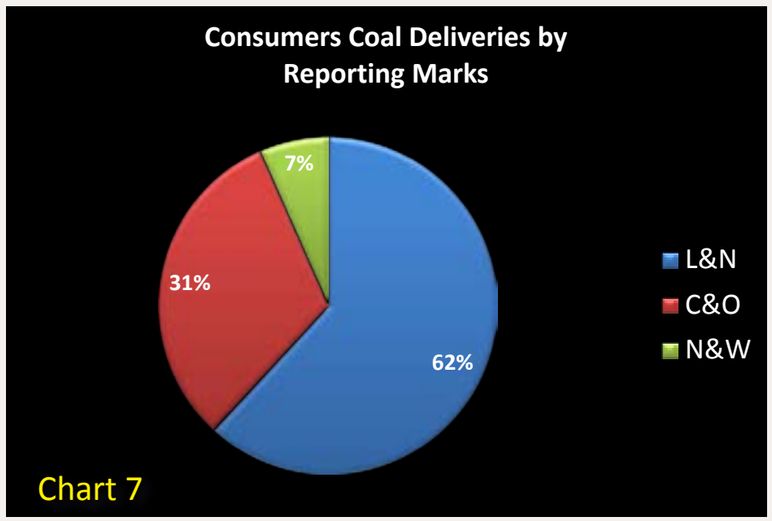
The comparison of Wilson to Consumers yields a very different operational feel. Wilson's traffic pattern has lots of road names and diverse coal grades, whereas Consumers has limited road names and products delivered. Not all coal retailers are the same, even those in the same town.

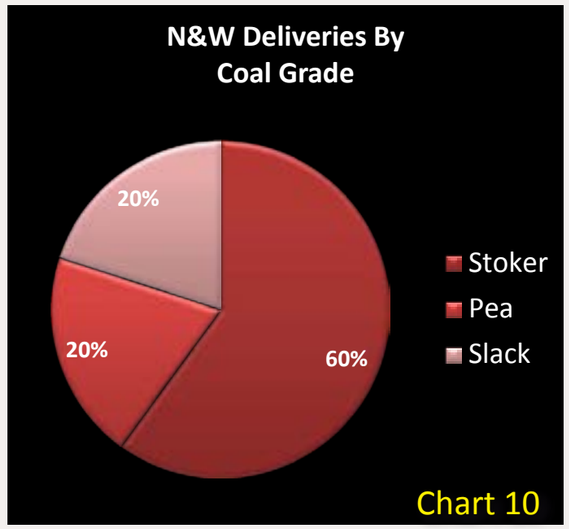
Fulton County Farm Bureau

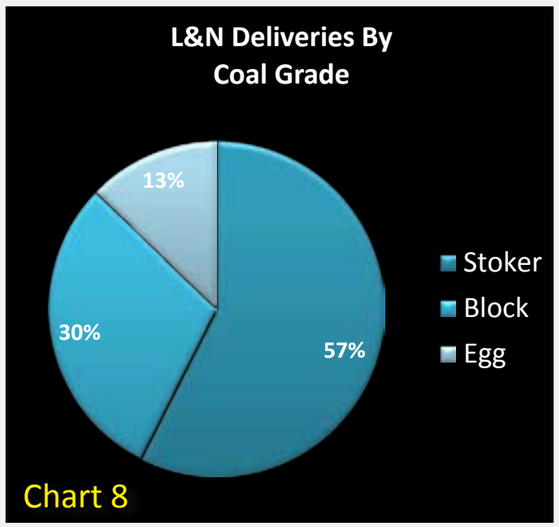
The Fulton County Farm Bureau, located on the Erie mainline to Chicago, is the third retailer shown in the prototype paperwork. Figures 2c and 5 on the previous page show a typical Fulton waybill, and what this











delivery may have looked like. The Farm Bureau must have received most of its coal directly off the Erie; the Nickel Plate deliveries must have been a secondary source of coal.

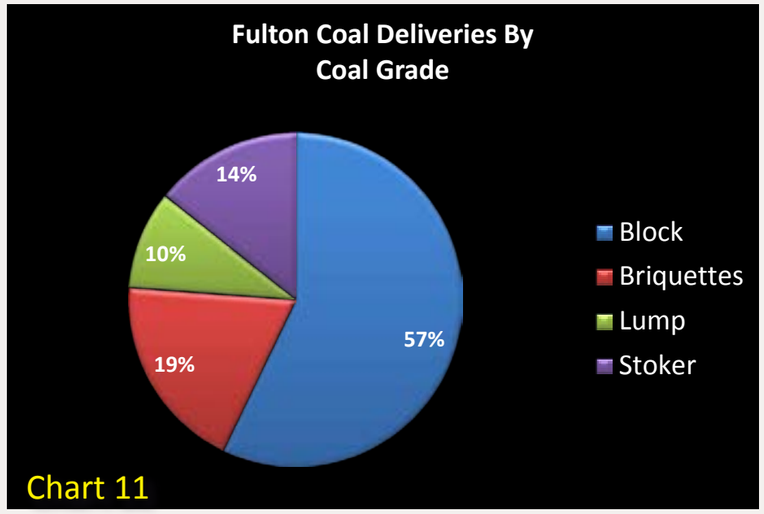
The delivered coal grades and cars seen in Chart 11 and Chart 12 present a picture of interchange traffic between the Erie and the Nickel Plate.

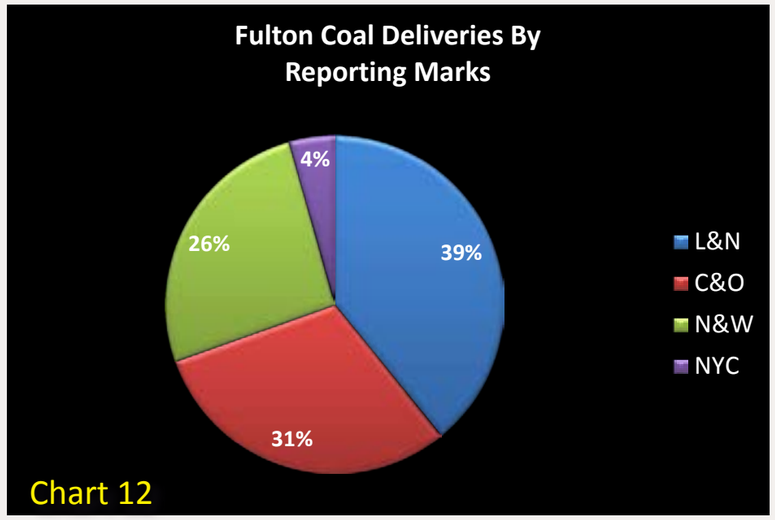
Interchanges are described as universal industries in that they can handle any type of traffic; in this case some of the interchange traffic is specific to the Farm Bureau.

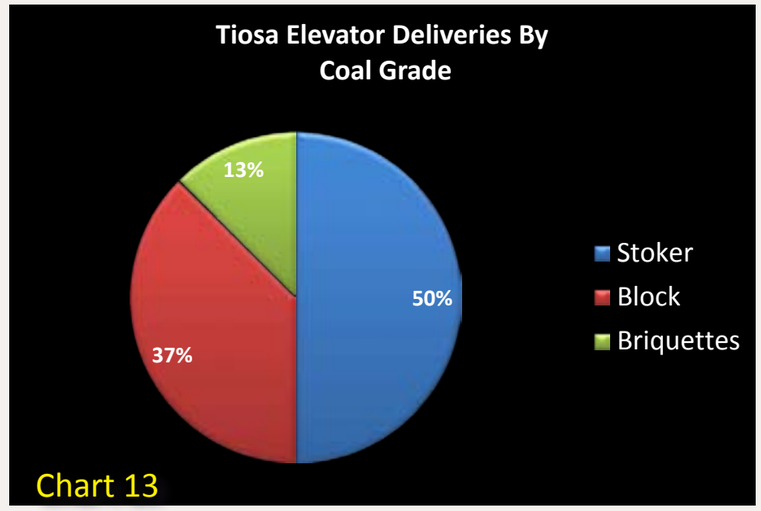
Tiosa Elevator

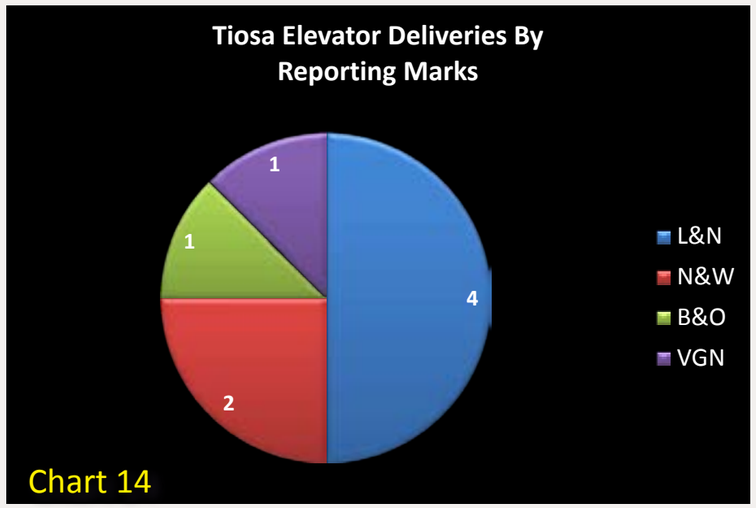
The town of Tiosa, Indiana (a rural village located north of Rochester on the NKP) had its freight deliveries billed through Rochester. The elevator appears to have been the only industry in the village and received coal deliveries in Aug. Sept., Nov., Jan. and Feb.

Charts 13 and 14 show Tiosa's receipts to be primarily stoker with some block coal. All deliveries came in HM hoppers.









Modeling Applications

When it comes to modeling coal traffic, notice that coal dealers are not the same. They vary in their mix of deliveries, both with respect to coal grades and in the reporting marks of the cars delivering the coal.

One dealer may have a large variety of grades and cars from different roads, whereas another will receive only a few grades from a limited number of roads. Also note a dealer does not have to be modeled, but can be served through an interchange.

Modeling a summer scenario means few coal deliveries. Modeling the fall, winter, or spring means frequent deliveries. It also pays to consider the direction of the coal loads. On the NKP, coal loads primarily arrived in Rochester on northward trains which made pickups from interchanges to the south. Empties, of course, were routed back to the south. You may want to adopt such a specific flow pattern for coal loads on your model railroad.

The distribution and mixes of coal grades can be adapted to both manual car card systems and computer-generated switch lists. Here are some specific notes on each of the four industries discussed to help in modeling this traffic.

Wilson Coal and Grain: A straight percent mix of deliveries can simulate the loads and roads for this dealer. For example, 29% of all deliveries would be in B&O cars and 33% of those cars would carry stoker coal. For modeling purposes, the road names involved need not be the same, but the percentages of roads/products could be used to guide your modeling. For example, 30% of the deliveries could be in PRR cars and 30% of those cars would be carrying stoker coal.

Consumers: For modeling purposes, this coal dealer has a limited mix of road names delivering product, each with a unique mix of coal grades. In Consumers case, 57% of the L&N cars carry stoker coal, 29% of the C&O cars carry lump coal, and so on. On your railroad the road names might be different, but the percentages of specific coal products delivered to your customer could hold.

Fulton County Farm Bureau: Modeling this industry only requires spotting a car at an interchange. Based upon the relationships in the charts, the traffic would be divided between three possible road names, and the cars would be loaded with block coal about two-thirds of the time. A couple of days after spotting to the interchange a car would be returned empty for backhaul. If you have an interchange, you can similarly route a coal load through it to a local industry for spotting.

Tiosa Elevator: This can be a simple modeling simulation using a spur off the main serving a small elevator, which is located between major towns. The elevator can receive a periodic coal delivery of either stoker or block coal.

Other modeling possibilities: Is it possible to extend the data on coal consumption to other modeling scenarios? Possibly, provided the climate and population is similar and that the majority of coal goes to heating.

This website shows the average temperatures for Rochester: www.usclimatedata.com/climate.php?location=USIN0567

Assuming a similar climate, a town twice as large as Rochester, whose 1950 population was 5000, might use twice as much coal, with twice the deliveries to each company in the town. It's also possible that such a town might have twice as many coal retailers, with each getting the same tonnage as the Rochester retailers.

In the event the climate is not the same, then you will need to creatively extrapolate temperature to coal use. It's probably safe to say the colder it is, the more coal needed to keep warm!

Modeling Different Varieties of Coal

In the lead photo to this article, I show the variety of coal grades in the hoppers located in my Peru, Indiana yard. Coal is an open load so it's more realistic and fun to model the correct grades of coal being delivered to your dealers. Here are the steps I use to model my loads.

Reader Feedback *(click here)*

STEP 1: Fashion the Base

I cut a base from 1/8" thick fiberboard, sized to drop into the top of the hopper (Figure 6). If required, I adjust the height of the base with a strip-wood spacer glued under the ends of the base.

Figure 6

At the beginning of January in 1960, at the age of 12, David Karkoski became a model railroader. He was completely smitten with the color centerfold photograph of Paul Larson's Mineral Point and Northern in the December 1959 issue of Model Railroader. David was a Revell model builder at the time, and the articles by Jack Work and Al Armitage in the same issue showed him that there was a lot more to model building than he had ever imagined.

From that time on, this hobby has been his primary recreational interest and has provided him with untold hours of entertainment and education, as well as allowing him to build a vast repertoire of skills.

STEP 2: Build Up the Coal Profile

I use Golden pumice-filled acrylic gel to build up the coal profile (Figure 7). To provide good adhesion with the base I butter the surface first with a thin coat of the gel (Figure 8). Next I apply a pile of the gel and shape it to the desired profile (Figure 9).

Figure 7


Figure 8


Figure 9

STEP 3: Once Dry, Spray Paint Black

I allow the gel medium to dry overnight (there will be some shrinkage as the acryic gel medium dries). I then spray paint the surface black (Figure 10).

Figure 10

Coal Load Bill of Materials

Smith and Son Ballast
13630 GAR Highway (Rt. 6)
Chardon OH 44024
Phone: 440-286-4890

Smith and Son ballast is also available from MRH Sponsor Scenic Express:

www.sceneryexpress.com/products.asp?dept=1107&pagenumber=4

Coal Varieties Available

Slack	#6501
Stoker	#6503
Nut	#6504
Egg	#6505
Lump	#6506
Elevator (Block)	#6507
Mine Run	#6509

Reader Feedback (click here)

STEP 4: Affix the Load Materials

I coat the surface with acrylic matte medium (Figure 11) and then sprinkle the coal on the wet surface. Fine coal will readily stick to this coating, larger material needs to be coaxed into position, especially along the edges. I apply enough material to cover the base and build up the final contour.

I use Smith and Son Ballast coal material (see the Bill of Materials for details). It comes in several sizes that represent the different grades of coal.

I adjust the coal along the edge to cover any exposed base or move material back from the edge to ensure that the base fits into the car. When satisfied, I saturate the load with matte medium (diluted 50:50) using an eyedropper (Figure 12). If necessary I will apply a second drizzle of diluted medium after the first is dry. I find that the larger coal textures require several coats of medium to create a satisfactory bond. ☑

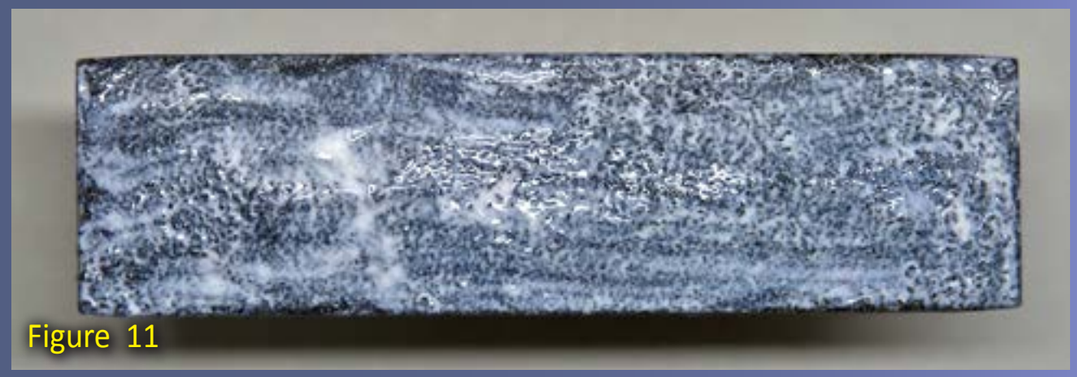


Figure 11

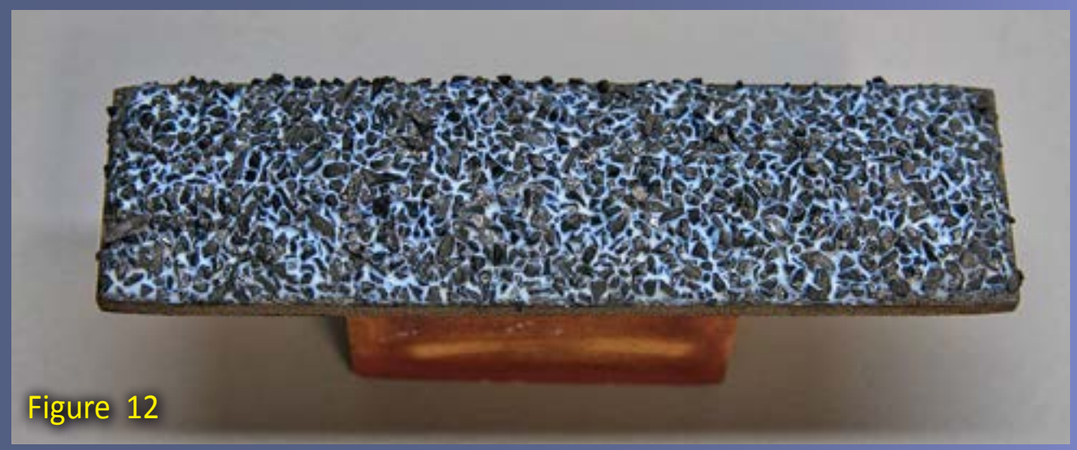


Figure 12

Making "Canvas" Cab Curtains for Steam Locos in Any Scale

– by Chad M. Zentz
Photos by the author

Figure 1: Chad detailed this Bachman Climax and used a canvas cab curtain fashioned from a discarded tea bag as part of the details. A canvas curtain adds a spirit of livability as it usually suggests cold and wet weather conditions for the crew.

Reader Feedback
(click here)

After enjoying a cup of tea, you can put it to use making curtain detail on your model railroad!

Detailing locomotives and cars is one of the most satisfying aspects of the hobby for me. I like fabricating anything from windshield wipers to brake chain rigging. I make a lot of my own parts, like shunting poles and "canvas" cab curtains for my steam locomotives. To me, the details make the difference. I also enjoy taking pictures of my trains, so the more realistic I can make them, the better my photos turn out.

This short article shows how I make the "canvas" cab curtains for steam locomotives. This is a very nice, but often overlooked detail of steam locomotives. This technique can be used for On30 (my current scale), HO, and N scale engines. I have made cab curtains in all of these scales with great success.

I tried different ways of getting realistic looking canvas cab shades, radiator covers, and cab curtains. I used paper towel and painted it, but it just wasn't quite right. Then someone suggested I try tissue paper. That looked better but was still a little off. I knew there had to be something better. One day as I sat brewing a cup of hot tea, I let the tea steep for a while. As I was ready to throw out the tea bag I noticed it was stained (as one would suspect) that brownish canvas color. I thought, hey, let's try this for my cab

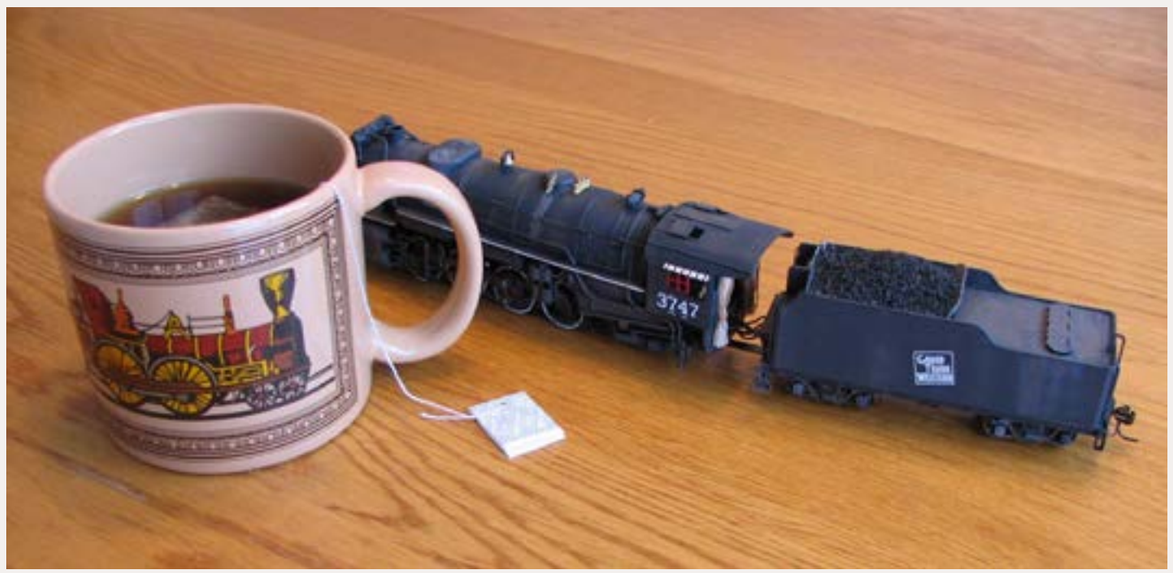


Figure 2: Sometimes relaxing with a hot cup of tea yields interesting inspiration. The used tea bag does remind one of scale canvas.

Figure 3: The dried and unwrapped used tea bag has the correct coloration, and along with the black sewing thread, is just waiting to be turned into a canvas curtain. The texture is suitable for O scale, HO scale and N scale locomotives.

curtains. So I fashioned one from this used tea bag and it had the look I had been searching for.

The first test subject was my HO scale Broadway 2-8-2. I had custom-painted and detailed the loco myself based on a Grand Trunk Western Prototype. It looked great! The next subject was an N scale 2-6-0 for a friend. And recently, I had made a set of curtains for my On30 Climax I had been weathering and detailing. The curtains were perfect for the final touch.

No matter what scale you are in, the process is the same. The tea bags can be used from hot tea or ice tea. They will still color the same.

The steps I follow are:

- First I brew the tea until it is good and dark. Once this is done I remove the tea bags. Then I remove the string and tab that are attached to the bag, along with the little staple that holds the string to the bag (figure 2).
- Next I carefully open the bag and dump out the tea leaves into the

trash, and rinse off the bag material under running water. I place the material in the microwave to dry (don't tell my wife). I find 30-40 seconds usually does the trick (figure 3 previous page).

- Once dry, I roll the material lengthwise. For N scale, you will need less material, as It is possible to get two curtains out of one bag (figure 4).
- After the material is rolled, I tie it in the center. I use fine black or tan nylon thread for N scale, and regular cotton or polyester black or tan thread for HO and O scale. I bought some embroidery thread in a natural or ecru color for my On30 Climax because it looks more like rope.
- Once tied in the center, I make at least two more tie-offs equally spaced from the center. This will vary, based on the scale of the model. My dimensions are based on my HO scale model, but are also close for On30. The two ties closest to the center tie are 1/4" to 3/8" apart. The two lower tie offs are about 1/2" from the second tie offs. I adjust these to where I think they look good. Just remember, you want the puffiness of the curtain to show (figure 5).
- With the tie-offs attached, I place the curtain in the cab doorway with the center tie-off in the center of the doorway. Next I bend the curtain to the form of the doorway. I generally have some excess curtain material, so I just trim off the bottom level or just above the cab floor.
- Next I secure the curtain to the cab. I used CA adhesive, as I don't want them to come off, and I want them to dry quickly. If you want to be able to remove them, paper rubber cement or some tacky white glue would allow easy removal and ease of clean up for your locomotive.

The cab curtain gives my locos a very noticeable detail in a minimal amount of time (figures 6 and 7). I make a typical curtain in less than 40 minutes and enjoy a great cup of tea while doing it! ☑

Article continues on the next page ...

Figure 4: The tea bag is trimmed to fit the opening and then it is rolled up in a loose bundle.

Figure 5: Tie the roll starting in the center and work your way to the outside. Use at least two more ties on either side of the center.

Figure 6: The rolled and tied off cab curtain is ready to install in your locomotive. The ends will be trimmed in place after installation.

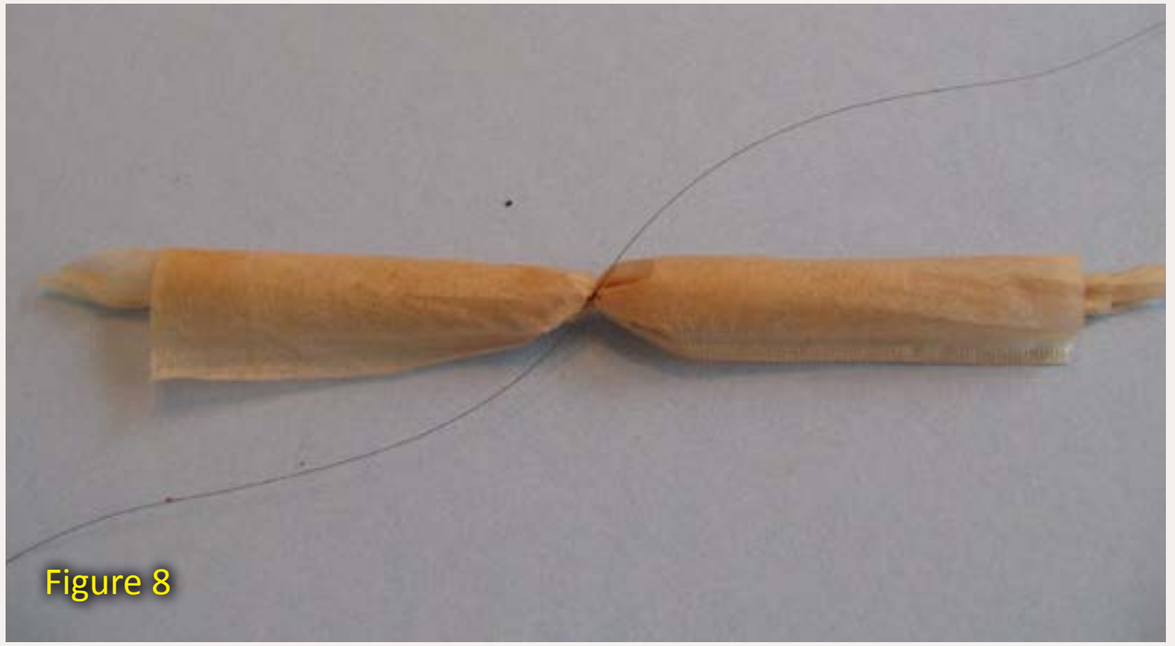


Figure 8: Two cab curtains may be made from one tea bag in N scale. Even in this small scale, the tea bag's texture is appropriate for the use.

Figure 7: A cab curtain is installed into the cab of an N Scale locomotive. The crew will be appreciative when the rain and snow blow.

Chad Zentz and his wife Lisa have two sons, Liam and Aiden.

Chad has been in the model train hobby for over 15 years and does custom weathering and painting, train repairs, and DCC installations for Hobby Recycling. Chad does the special run weathered cars for Fiffer Hobby Supply. His custom weathered cars have been sold worldwide: Australia, United Kingdom, Germany, Belgium, Sweden, and Canada.

Chad currently models in On30 but also models in N and HO.

"On30 seems to be where I've found my niche. I enjoy all trains and have modeled everything from Interurban to modern freight. One of the aspects I enjoy is doing the research. Learning is one thing we should never tire of."

Chad also enjoys collecting antique railroad tools, photography, computers, and music.

Chad wrote "Grand Trunk Western's Steel Water Tanks" that appeared in the Oct. 2009 issue of *Railroad Model Craftsman*.

– by M.R. Snell

Photos by the author

Recycling – The 35 Dollar Challenge – Part 2

Matt Snell continues his pursuit of modeling 5 modern era rail cars in HO for $35. In this installment, Matt models an "IPD" car.

Reader Feedback *(click here)*

In our first installment we purchased five inexpensive cars with the idea of turning them into railcars acquired secondhand for a regional railroad – the fictitious Nebraska Gateway System. After making several simple mechanical and aesthetic improvements we are now ready to take them from stock models to customized secondhand cars using a variety of techniques to transform them.

The first car to undergo the transformation will be HCRC 807, an Athearn boxcar factory decorated in the scheme of the Hillsdale County Railroad, one of many "IPD" (Incentive-Per-Diem) boxcars of the 1970's and 1980's. Under the IPD program a daily fee was paid to the owner of the equipment irregardless of who was using it. This allowed equipment to be loaded to any consignee without regard to routing, similar to the manner Railboxes operate in. Investment groups would purchase the actual boxcar, then team up with a smaller road for the use of their

Figure 27: This installment's finished car on the layout.

name and reporting marks to fulfill the AAR's interchange requirements. In exchange the road received a portion of the profits, helping the bottom line of many struggling shortlines.

As the economy deteriorated so did the IPD program, causing many of these cars to show up in various second hand fleets, some even going on to third or fourth owners. The Hillsdale County boxcar is a prime example of an IPD car soldiering on and I based the treatment this car would receive on HS 10195, an ex-Corinth and Counce boxcar. Photographed in 2010, this boxcar still wears the C and C livery with only the reporting marks and road number changed, carrying a name that has been defunct since the 1990's. Replicating this treatment would allow me to display a modified version of the former owner's livery, creating a unique car with a history.

Figure 28: IPD cars were common throughout the 1980s, wearing liveries of shortlines and regional roads. Some even still exist today, making this type of car suitable for a 30 year timespan.

Figure 29: This ex-Corinth & Counce boxcar still remains in its former owners full livery. Only the reporting mark and number indicate it is now owned by the H&S.

STEP 1: Distressing the Lettering

Figure 30: One method to distress factory lettering is by wet sanding it with 1000 or 1500 grit sandpaper.

The first step in transforming this model from factory fresh into a car with 30 years of mileage was to distress the lettering, making it look chipped, faded, and worn off in spots. There are several methods for distressing or removing factory applied lettering and one of my favorites is wet sanding. Unlike chemicals, wet sanding allows excellent control over the areas being worked on with no worry of solvents running to areas of a model that should remain untouched. Wet sanding also allows you to remove exactly the amount of factory print you wish, completely controlled by the pressure applied to the sandpaper, the method of sanding, and number of passes you make over the lettering. On the downside wet sanding can also cause a haze in the factory painted surface so care must be exercised to sand only the lettering or graphics rather than a wide area of the model.

To distress a model by wet sanding begin by cutting several thin (1/4” or less) strips of 1000 or 1500 grit auto body sandpaper, folding each strip over itself several times until the thin paper is semi-rigid. Thoroughly wet down the body of the model as well as the sandpaper, then make several light passes over the factory printing you wish to distress, holding the sandpaper at a slight angle while sanding in tiny circles. Creating variations in the amount of distress requires only increasing or decreasing the pressure on the sandpaper and the number of passes over a specific area. The lighter the pressure – the lighter the distress. The heavier the pressure – the more distress along with the chance that you may also inadvertently remove some of the factory paint. With a little practice you’ll soon find that all sorts of interesting effects can be created, useful for both rolling stock and structures alike.

Figure 31: Thin sandpaper can become very rigid and allow excellent control when it is cut into thin strips and folded over upon itself.

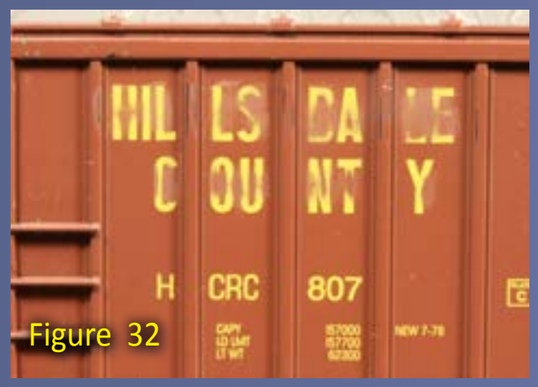


Figure 32

Figure 33

Figures 32-33: Varying the amount of distress of the car’s graphics can create the look of aged, faded, or flaking paint.

STEP 2: Weathering the Car and Changing the Reporting Marks

Once the HILLSDALE COUNTY lettering and logo had been distressed it was time to weather the car, further making it reflect its age. Weathering can be done using any method you are comfortable with including paint or chalks. I chose a mixture of black and brown chalk powders which allowed me to blend the hazy areas left from sanding with the shinier surfaces of the car sides, evening out the paint texture. Once the weathering was complete the chalk was sealed with Testor's Dullcote, preventing it from damage as I moved on to the next step – changing the reporting marks.

Cars acquired secondhand are often pressed into service with only a change of reportings marks. While the lettering is always changed to the acquiring road's, the numbering of a car is left to the discretion of the roads fleet manager. A visit trackside will yield countless examples of cars with small paint patches or decals with new letters, numbers, or both, in as many variations of color, size, and font as one can imagine. Bearing this in mind I chose to only change the reporting marks to those of the Nebraska Gateway, while leaving the factory applied car number intact to save work.

Figure 34

Figure 35

Figures 34-35: Several methods are used by the prototype when changing reporting marks. One method is to paint over the old markings and a second is to apply a colored sticker, sometimes closely matching the color of the car.

STEP 3: Trim Film and Decals

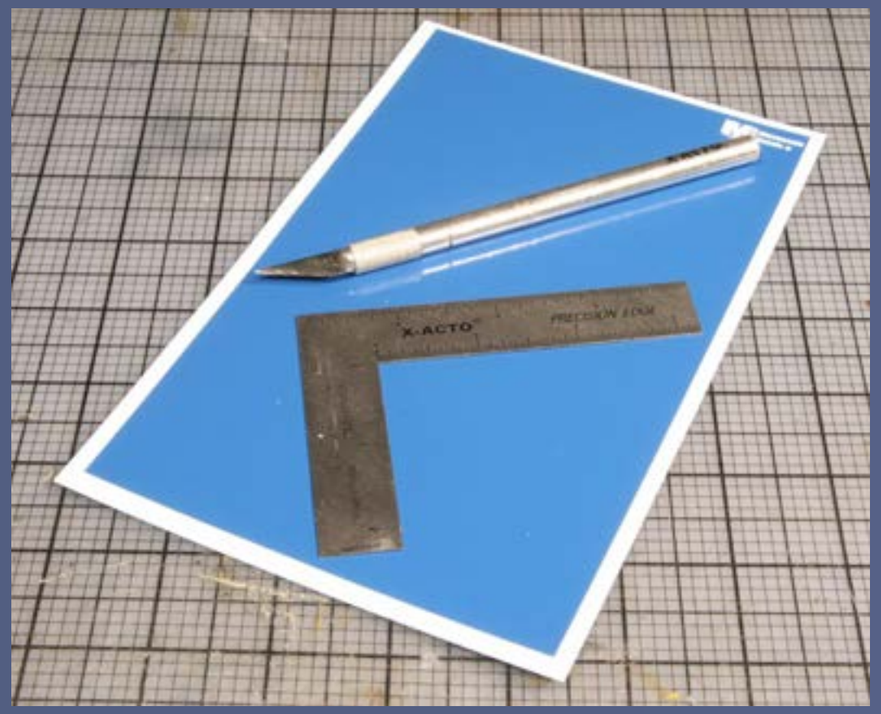


Figure 36: Several tools required for successfully working with trim film are a cutting mat, a straight edge, and a sharp #11 blade.

There are several methods for applying 'patch paint' on a piece of model rolling stock including masking and painting the car or using decal trim film which can be much faster and easier. Manufactured by Microscale, trim film is a sheet of decal film manufactured with a solid color applied evenly across it rather than the standard model decals we use which are clear with colored printing applied in selected spots. It can be cut to any size or shape we may need. One common use for trim film is to make anti-glare panels for locomotive hoods and a second is for patching freight car reporting marks. In fact the techniques used here can also be used to expand fleets of factory decorated cars such as tank cars and coal hoppers when a great number of cars are required for unit trains and the like.

While trim film is made of the same material as a standard model decal it also requires a slightly different technique as the color can easily flake along cut edges. The use of a cutting mat, a sharp (preferably new) X-Acto #11 blade, and a straight edge are requirements when using trim film. Colored trim film also differs from the standard Microscale decals we normally use that have the film molded close to the printing. Colored trim film from Microscale has a clear film extending beyond the colored layer, and the first step is to trim the sheet along the colored edge, removing and discarding the clear border.

To create a 'patch' for the reporting marks or number of a car begin by choosing an appropriate alpha-numeric decal set for the new markings. There are literally dozens of fonts, colors, and sizes of alpha-numeric decals available allowing us to create almost any look. In modeling this boxcar I felt that a stencil style would be appropriate, further reinforcing the secondhand nature of the car. Next calculate the height of the patch you'll need by measuring the height of the new markings you wish to apply against the factory markings. The patch should completely cover the factory markings and also be tall enough that the new markings will fit comfortably onto the patch.

Figure 37: There are dozens or sizes, colors, and font styles of alpha-numeric decals to choose from and using a stencil style can reinforce the impression that a car was hastily relettered and placed into service.

STEP 3: Trim Film and Decals *Continued ...*

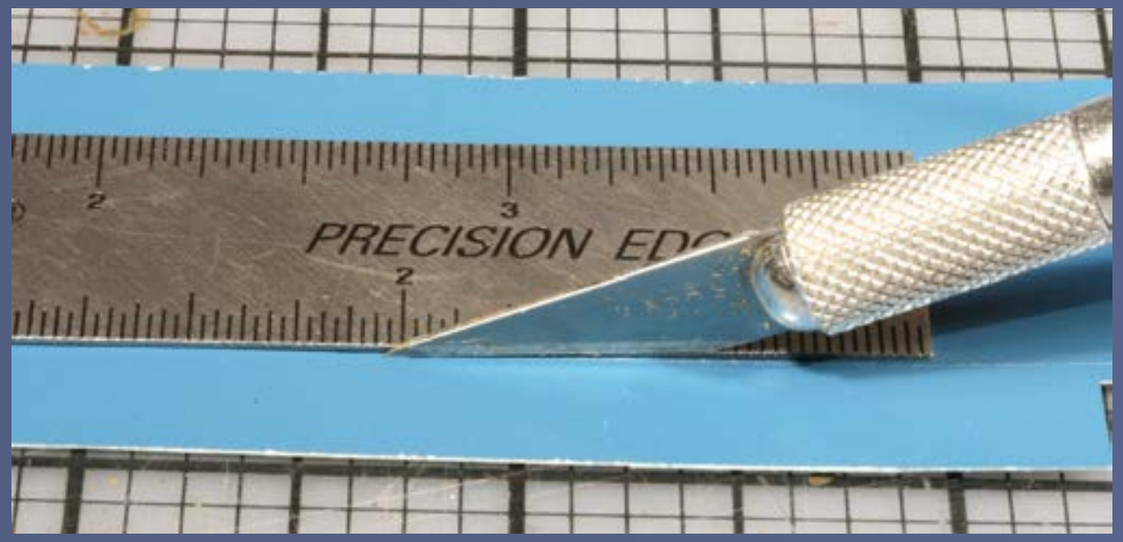


Figure 38: Placing the knife blade flat along the surface of the film will help to prevent chipping along the cut edge.

Now place the sheet of trim film and straight edge onto the cutting mat using the grid built into the surface of the mat to insure a square alignment. Carefully cut through the film with the blade placed flush along the surface of the film rather than at an angle which can cause the film to chip along the cut edge. When you are finished you'll be left with a long strip of film that is the correct height and can be further cut down into individual pieces the correct length for application on the model. There may even be some leftover material that is already the correct height for additional car projects.

Figure 39: One tip when cutting patches for reporting marks is to cut a strip much longer than needed. This will reduce the amount of cuts required, leaving enough for the opposite side of the car or for future projects.

Figure 40: Once the trim film has been cut to the correct height the long strip of film can once again be cut down into individual patches correctly proportioned for application on the model.

STEP 3: Trim Film and Decals *Continued ...*

While many of us have used decals before, applying trim film patches is slightly different than what we're used to. Normally a decal completes a model rather than providing a surface to add to, thus we must turn the decal patch into an extension of the factory paint. To further complicate matters we're applying the decal film to a weathered rough surface, rather than the gloss surface recommended by every decal manufacturer. One tip to insure that the decal patch will adhere properly to the model's surface is by only placing the film onto flat surfaces, such as the space between the exterior ribs of this boxcar. A second is to use a decal setting solution such as Microsol to soften the decal film and help it adhere to the surface.

Figure 41: Four tools required for any successful decal application are sharp scissors, a dull hobby knife to position the decal, a decal setting solution to allow the decal to conform to imperfections in the surface, and a small brush to apply the setting solution.

One excellent method for applying the small film patches is to wet the area the patch will be applied to by brushing a small amount of Microsol onto the surface of the model, leaving a wet (but not dripping wet) surface to apply the film onto. Next wet the small film patch with water, as you normally would any decal, then remove the paper backing and place it onto the wet area of the model. Carefully slide it onto the model positioning it with a dull hobby knife then apply another thin coating of Microsol over the top of the decal film.

It is extremely important that any air trapped under the film is removed or else it may bubble or even lift off as we apply the second decal on top of it. After the application of Microsol you'll see the film begin to crackle as it softens. Any air trapped under the film can be 'brushed out' using a medium bristle brush. Brush gently over the top of the decal film working from the middle of the patch outwards, brushing the excess Microsol from the decal film while flattening the decal film out, taking care not to stretch it out of shape. As the film patch dries the residual crinkling across the surface should disappear and the decal will be firmly adhered to the surface of the model ready for the addition the new letters or numbers, placing a decal over a decal.

Figure 42

Figure 43

Figures 42-43: An interesting effect can be created by placing trim film directly over factory printing that has not been made smooth with the paint surface. The relief of the raised printing will show through the trim film, leaving a ghost effect such as the 'BIG BLUE' showing through on this ex-CSX boxcar.

STEP 3: Trim Film and Decals *Continued ...*

Now it's time to add the new owner's reporting marks using an alpha-numeric decal set. As mentioned earlier there are literally dozens of alpha-numeric decals available however one important thing to remember is all decals are not created equal. Decals are generally manufactured two different ways – large manufacturers such as Microscale use a screened printing process while smaller manufacturers may use a conventional printing process. So why is it important to know how decals are made?

The first reason is many decals are printed onto a solid sheet of clear film, rather than the Microscale style in which the film closely hugs the edges of the printing. A project such as this requires a bare minimum of clear decal film surrounding the printed characters and knowing which style of decal you are using will determine how closely you must trim around the printing.

Figure 44: Decals printed onto a solid sheet of clear film should be trimmed close to the printed characters, leaving a minimum of clear film surrounding the characters.

The second reason is how we handle them, from cutting to application on the model. Many smaller manufacturers print using a variation of an ALPS printer which creates a decal that is prone to scratching. No matter how well we have painted or detailed a model it can be easily ruined by applying a decal that is damaged. To prevent scratching while also exercising excellent control of the placement of the individual decal letters or numbers I suggest the following tried and true procedure:

1. After the decal has been cut from the sheet dampen one finger then place the decal face down on that finger.

2. Spread water over the backing sheet then wait 15-20 seconds and slide the paper backing from the decal.

3. Carefully slide a dull hobby knife between the decal and your finger, picking the decal up with the knife then placing it exactly where you want it on the model.

4. Once the decal is in place on the model apply a thin coating of Microsol over the decal to help it settle and adhere to the surface.

5. While the decal is still wet brush any air or excess setting solution from under the decal.

6. When placing decals side-by-side allow the first to fully dry before adding the second. This will prevent the first from shifting from its location if it is not completely dry.

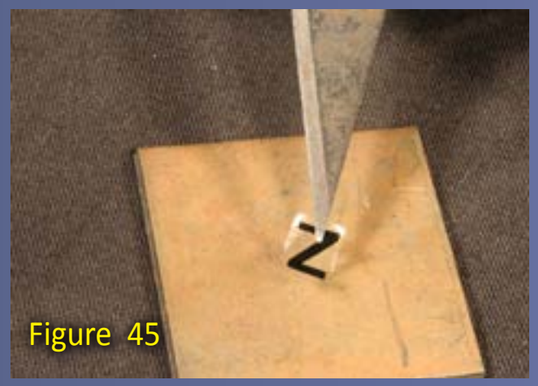


Figure 45

Figure 46

Figure 45: Using a dull hobby knife to pick up a decal allows excellent control when placing the decal onto the model.

Figure 46: A tip for quality decal application is to use a setting solution to soften the decal film, allowing it to conform to imperfections in the surface.

STEP 4: Reporting Marks

Figure 47

Figure 49

Figure 48

Figure 50

Figures 47-48: The new reporting marks applied to secondhand cars are not always neatly applied. This ex-CNW hopper now wearing HLMX markings illustrates marks both on and off the patches applied over the CNW markings and this can be easily replicated on a model, creating an interesting effect.

Figures 49-50: While we often focus on the sides of a car the ends also contain reporting marks that can be changed the same way, just employing smaller patches.

STEP 4: Reporting Marks *Continued ...*

Figure 51: The addition of COTS stencils, ACI labels or wheel inspection dots can be used to date a car to a specific era. The conspicuity striping applied to this boxcar dates the era of this car to 2005 – present.

Now we have a customized car that shows both its new ownership and origins but does it truly represent the era it is destined to be used in? Over time regulations for freight car markings have changed and while it is our choice to either include or exclude older style markings we should always include the markings for the era a car is being modeled for. Fortunately the addition of COTS stencils (the small black and white rectangles found on the right side of the car), ACI labels (Automatic Car Identification labels resemble colored bar-codes), or conspicuity striping can all be done with a minimum of effort using various decal sets. In the case of the ex-Hillsdale box I added a 3-part COTS stencil and yellow 4"x18" striping, broadcasting that this car with a 1978 build date was alive and well in the post 2005 era. Below is a listing of decals (available from Microscale) for several mandated freight car markings along with the approximate eras each was used in:

- MC-4280 ACI Labels 1967-1977 (Although this system was discontinued many ACI labels lasted through the 1990's until cars were rebuilt, repainted, or scrapped)
- MC-5002 COTS stencils single panel 1970's
- MC 5003 COTS stencils 2 panel 1980's
- MC-5012 Wheel Inspection Dots 1980's (Although no longer required these could be seen into the 1990's)
- MC-5004 COTS stencils 3 panel 1990-present
- MC-4389 Conspicuity Striping – 2005+ (Mandated on new or rebuilt cars beginning in 2005 these yellow stripes are being applied to older equipment as it is shopped for repair or repainting.)

M.R. (Matt) Snell has been a model railroader and railfan for 30 years. His interest in railroading grew while growing up in New Jersey surrounded by freight and passenger rail lines.

Presently residing in Ohio, Matt and his wife Debie share the hobby, modeling the area he grew up in: north-central Jersey.

Their "Conrail New Jersey Division" layout has been featured in *Great Model Railroads, Rail Model Journal,* and in the Allen Keller *Great Model Railroads* DVD series. Matt has had articles in *Railroad Model Craftsman*, *RailModel Journal*, *Scale Rails* and *Model Railroader*, as well as online at railroad.net.

STEP 5: Sealing the Decals and Weathering

With the reporting marks changed and the mandated markings modernized we're in the home stretch however we must complete two last steps to make the car look good while giving longevity to the finish. One issue encountered with a project like this, utilizing a car that has already been weathered, is that any addition whether graphics or parts now stands out boldly against the surface of the car. Making a trip back to the weathering shop, a few light passes of black chalk powder over each decal toned down the bold look of the new graphics, blending everything together. Now the entire model could now be sealed with Testor's Dullcote, protecting both the decals and weathering from damage as the model was handled in the future.

As this portion of the challenge has proven a good looking unique car really can be created with a minimum of expense or effort. Best of all we can try out some new techniques without fear of ruining an expensive model! Join me in our next and final installment where we will build upon what we've already learned while exploring several additional treatments that can be used to create unique secondhand cars!. ☑

Reader Feedback (click here)

Figure 52: The finished car.

Model Railroad Hobbyist news™

November 2011

Reader Feedback (click here)

The Old Yardmaster

The latest model railroad news, products, and events

We're happy to report more than 400 people attended the Fine Scale Model Railroader Expo held last month in Peabody, Massachusetts. In addition to outstanding models and specialized clinics, a major attraction for many was visiting George Sellio's legendary Franklin & South Manchester layout…

Jason Shron, president of Rapido Trains, says he has always had an MLW FP4A locomotive on his "to-do" list, but it would need to have a perfectly shaped nose. Shron, and plenty of other manufacturers, know from experience that getting a diesel nose right is a task easier said than done. Shron concluded that the only way to insure his model would have a "perfect nose job" would be to hire a high-tech specialty firm to electronically scan a full sized prototype – which is exactly what he did. We'll have more details about the project next month including a report on the unique "Nose Party" held on November 7th at Exporail, Canada's national railway museum in Montreal while CN's beautifully restored FPA4 #6765 was being scanned…

The RPM Conference, formerly known as the Naperville Meet, may get its old name back. After moving to nearby Lisle, Illinois, for this year's event, owner Joe D'Elia, says he'll bring the conference back to its original location in Naperville which is currently undergoing a major remodeling and will reopen in the Spring as a Marriot Hotel. D'Elia made the announcement last month during the 2011 meet which was attended by more than 350 prototype modelers…

Sergent Engineering has been experiencing manufacturing difficulty of some specialty items produced by high-speed 3D printing technology. The problem has delayed the introduction of several new products including the type H coupler. Meanwhile, founder Frank Sergent says he has plenty of inventory available of their diecast HO scale standard type E couplers. For further details or to place a direct order visit sergentengineering.com…

MRH extends congratulations to BLMA CEO Craig Martyn on his selection to represent the United States at the International Young Entrepreneur Summit held in Nice, France October 31 to November 2, 2011. The YES conference brings elite young entrepreneurs from the world's leading economies in a three-day gathering that runs parallel to the G20 Economic Summit. Martyn said *"I am extremely excited to represent the United States, promote BLMA Models and the Model Train Industry at this year's G20 YES."* Twenty-six year old Martyn founded BLMA in his father's garage at age 15…

After years of being a mile or two apart, InterMountain has consolidated its administrative and manufacturing operations at 1224 Boston Avenue, Longmont, Colorado. The firm's mailing address continues to be PO Box 839, Longmont, CO 80502-0839…

A current list of Stan Rydarowicz' conversion kits for HO scale refrigerator cars is available at sunshinekits.com/stanpage.html. The conversion kits include correct resin ends, sides and or roofs to be added to an InterMountain core (not supplied) to model prototypically accurate PFE, FGE, NRF, ART, URT, and MDT reefers. Several decal sets produced by Jerry Glow specifically for Stan's conversion kits are included in the list…

Westerfield Models has been purchased by Andrew Dahm of Golden, Colorado. The new owner is a long-time modeler and has been involved in major restoration work at the Colorado Railroad Museum for many years. Current plans call for production of Westerfield kits to be on line by the beginning of 2012…

Hurricane Irene shut down Deluxe Innovation with both their building and inventory suffering heavy damage. Owner Dave Ferrari has found a suitable new facility and expects to begin shipping to customers within the next few weeks. The new address is 140 Greenwood Ave. Suite 2A, Midland Park, NJ 07432-1462.

The new phone number is 201-857-5880. The company website remains **delux-einnovations.com**…

Bob Chaparro, the enthusiastic moderator of Model Railroads of Southern California, says a self-guided tour of operating layouts in the Ventura-Santa Barbara area is scheduled for November 19, and a high desert tour above Cajon Pass (Hesperia and Victorville area) will take place in February. Bob is looking for layout owners in the Orange County area interested in showing their layouts next spring – tentatively scheduled for sometime in April or May. For additional details on all tours contact Bob at **chiefbobbb@verizon.net**...

Kadee Quality Products recently made the evening news on Medford ABC affiliate TV station KDRV. For a brief tour inside the Kadee factory go to **kdrv.com/page/226703**…

Although Peach Creek Shops has closed its traditional storefront in Laurel, Maryland, the company continues as an online business catering to steel mill modelers. Owner John Glaab maintains a specialty inventory of steel ingots, bottle cars, ingot cars, valves, figures, Walthers steel related items, and Tillig HOn30 track and switches including two new HO/HOn30 crossings. For more information visit **peachcreekshops.com**….

"Take a Model Train to Work Day" is scheduled for Friday, November 18, 2011. Promoted nationally by the The World's Greatest Hobby Association, the annual event is intended to stimulate public awareness and interest in model railroading, especially during the hobby's peak season that culminates in the December holidays. For more information visit **greatesthobby.com**...

Robert A. Buck, co-founder of the Amherst Railway Society Railroad Hobby Show, passed away October 12, 2011. Bob Buck was a charter member, president, and program manager of Amherst Railway Society for many years. Beginning more than 30 years ago as a three-hour event in a university classroom, the annual Amherst Show held in nearby West Springfield, Massachusetts, regularly attracts more than 25,000 visitors over a two-day period. More than $300,000 generated by the Amherst Show has been donated to railroad historical societies and museums. Bob Buck operated Tuckers Hardware in his hometown of Warren, Massachusetts for many years and later established Tucker's Hobbies. He was involved in numerous civic activities and was a long-time sponsor of the Springfield Symphony Orchestra...

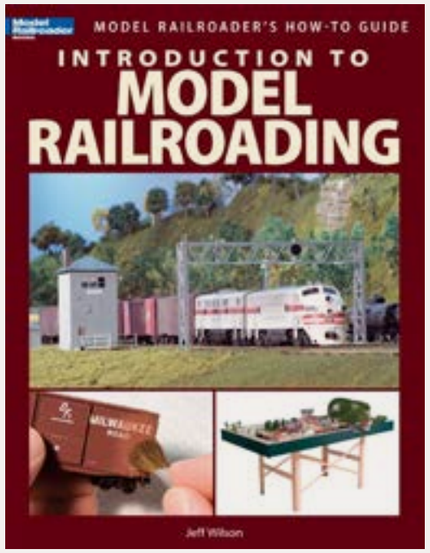
Arthur Dubin, a successful Chicago architect with a passion for trains, died of natural causes October 3. He was 88. Arthur Dubin authored several important railroad themed books including *"Some Classic Trains"* and *"More Classic Trains."* Also *"Pullman Paint & Lettering Notebook: A Guide to the Colors Used on Pullman Cars from 1933-1969."* Several articles by Dubin appeared in Trains and Classic Trains magazines. Arthur Dubin studied architecture at the University of Michigan and was a partner in an architectural firm started by his father. Over the years he was able to merge his passions – his firm designed projects for the Chicago and Northwestern Railway, the Chicago Transit Authority, and Washington D.C., Metro. Dubin collected archival materials about trains, including photos, timetables and brochures, which have since been donated to museums including the Smithsonian Institution; the Abraham Lincoln Presidential Library in Springfield, Illinois; the Donnelley and Lee Library; and the California State Railroad Museum in Sacramento…

John Parker, founder of San Juan Car Company, passed away October 20 at the age of 65. Parker's early introduction to the model railroad industry began as a teenager when he worked for the legendary Cliff Grandt, founder of Grandt Line. John co-founded R/Robb Ltd. with Cliff's son Robert, as well as Reeds Hobby Shop in Oakland, which was later sold to Parker's close friend John Engstrom, who relocated the business to the San Diego area. Parker founded San Juan Car Company in Union City, California, in 1987, and in 1998 moved the company to Durango, Colorado, a place close to John's heart since his first pilgrimage to the area while in his teens. Friends and family will remember John for his love of all things narrow gauge, and for his perseverance in recreating that passion in the form of exquisite commercial models. John Parker was inducted into the National Narrow Gauge Hall of Fame in 2010. Although he was the inspiration and driving force behind the family business, John had made arrangements in recent months to insure that San Juan Car Company would continue to operate…

NEW PRODUCTS FOR ALL SCALES

Scotty Mason (**scottymason.com**) has released a new DVD titled *"Making Model Trees, Volume 1"* in which he demonstrates the use of several commercial products such as Super Trees, plastic trees from Noch, Heki and Woodland Scenics, as well as natural material like peppergrass, wild oregano, meadow sweet, and sagebrush. The DVD is available from the above website at $29.95 each.

Dutchess & Hudson Valley Railroad is the latest DVD in Fos Scale Models (**foslimited.com**) Masters & Builders series of layout tours and instructional videos. In addition to a detailed study of the D&HV, the one-hour video covers operations, round robin group activities, and instructional information on making trees, roads, and more. The DVD is available direct at $29.95.



"Introduction to Model Railroading" is the latest new book from **Kalmbach Publishing** (kalmbach.com). Beginning with the fundamentals of choosing a scale and the benefits of selecting a theme, veteran author, and proven modeler, Jeff Wilson uses common-sense text plus an abundance of photos to explain how to develop a layout plan, construct bench work and roadbed, and install track and turnouts. Wiring and the pros and cons of DC versus DCC are explained for the novice. Additional chapters cover structures, the fundamentals of scenery, and the selection of appropriate motive power and rolling stock. Helpful sidebars cover such things as soldering, the NMRA, prototype resources, and the Whyte system of classifying steam locomotives. Although interest in passenger equipment has increased significantly in recent years, only one passenger car is illustrated while couplers, for example, get 17 photos. Also missing is an index that would prove handy, especially for newcomers to the hobby. All in all this is a valuable, up-to-date guide for beginners. The 96-page, soft-cover, 8.25" x 10.75" book is priced at $19.95.

Morning Sun Books (morningsunbooks.com) has released three new all-color books including *"Lehigh Valley-5 In Color"*, by Mike Bednar, which documents local freights over the LV system in the 1950s, '60s and '70s; and *"Pennsylvania Railroad Facilities In Color"*, subtitled *"Volume 15: Buckeye Division, Columbus Union Depot and West"*, by Robert J. Yanosey. Profuse illustrations show the varied stations, towers, yards, and other facilities the PRR utilized on the two main routes that separated west of the Columbus district. The third publication released is *"Indiana Harbor Belt Railroad In Color"*. Co-authored by Samuel Beck and Bill Gustason, the book illustrates the unglamorous task of switching and transferring freight from one railroad to another that was the daily bread and butter of this reliable home-bound Chicago terminal railroad. The new books are priced at $59.95 each and can be ordered from the above website or by calling 610-683-8566.

RP CYC Publishing Company (rpcycpub.com) released Railway Prototype Cyclopedia, Volume 23, late last month at the RPM Conference in Lisle, Illinois. The new volume of the soft-cover publication features in-depth studies of mid-century composite 40'-6" boxcars, Bethlehem-design 52'-6" 70-ton drop-end gondola cars, and non-Pennsylvania Railroad wagon-top box and automobile Cars. The publication is priced at $29.95. Be forewarned that RPCs often sell out quickly.

Xuron has introduced a new adjustable wire stripper that is designed to quickly and easily strip wire sizes between 10 and 26 AWG. The tool features a thumb-adjustable cam that sets the tool to the appropriate wire size without the need for additional tightening or loosening. Once positioned, the cam retains its setting until reset by the user. Xuron tools are available from most hobby dealers

O SCALE PRODUCT NEWS

3rd Rail division of Sunset Models (3rdrail.com) has imported an O scale model of EMD's FL-9, the first dual powered diesel/electric locomotive. Developed for regular service between New York City and Boston, the prototype used a 3rd rail electric pickup from Manhattan until out of the Park Avenue tunnel where it switched -- on the fly -- to its 1800 horsepower 16-cylinder diesel power plant. The ready-to-run O scale model features an ABS body, horizontal motor drive, and full cab interior. It is available decorated for New Haven, Metro North, Penn Central, and Amtrak. Visit the above website for pricing and availability information.

Atlas O (atlaso.com) will release both 2-rail and 3-rail versions of EMD F-3 Phase II diesel units in the 2nd quarter of 2012. In addition to the Chicago North Western livery shown above, O scale ready-to-run models will be offered for Burlington, Great Northern, Jersey Central, MKT, Union Pacific, and Western Maryland. Powered units will have an MSRP of $499.95, unpowered at $219.95. Options include QSI® sound systems.

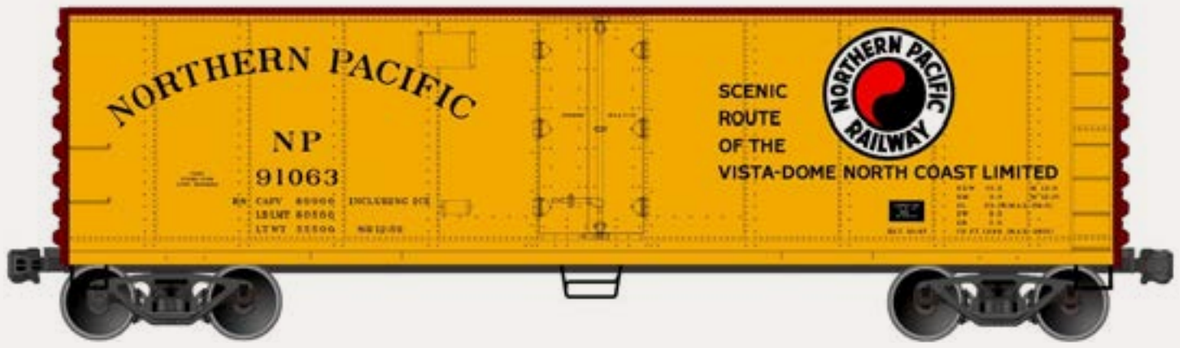
Additional long-range projects underway at Atlas O include a Master® series 42’ coil steel car and a Trainman® series 62’ bulkhead flat car decorated for BNSF, Canadian Pacific, Illinois Central, Union Pacific, and Trailer Train-TTX.

New O scale products scheduled for release in December from **N.J.International** (njinternational.com) include a Pennsylvania Railroad dual-head position-light signals with a clipped lower backround. Item 3047 is priced at $69.99. Also coming is a color position light signal for Amtrak Northeast Corridor (former PRR). Item No. 3149 is $69.99.

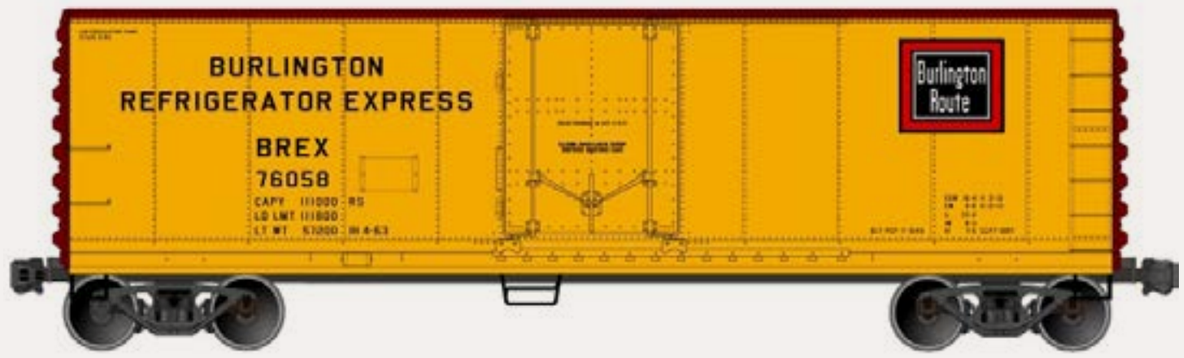
Rusty Stumps Scale Models (rustystumps.com) has introduced a craftsman kit for a small jail. Called the Hoosegow, the kit features aged brick walls with detail on both the exterior and interior surfaces, jail bars on the cell windows and interior partition, double-hung windows in the office, and a removable roof for those who want to detail the interior. A unique foundation allows the model to be built on flat ground or a slight hill. Additional features include a resin cast stove pipe, two bunks in the cell, real cedar shake shingles, and an appropriate JAIL sign for the front. The foot print of the finished model is approximately 2.25” x 4.25”. Included is a 64-page instruction manual with photos and assembly suggestions. The O scale kit is available now at $59.95 plus shipping and handling.

HO SCALE PRODUCT NEWS

The big news from **Accurail** (accurail.com) this month is the release of HO scale kits for two new steel refrigerator cars. In addition to a standard hinged-door version (8300 series, circa 1949), the newly-tooled American-made kits will also be available with a plug-door (8500 series) as introduced by the prototype builder in 1952. Of special note are the “rolling-pin” style Improved Dreadnaught ends with the top rib having a flat, non-tapered bottom. Accumate® couplers and appropriate trucks are included. The kits have an MSRP of $15.98 each.



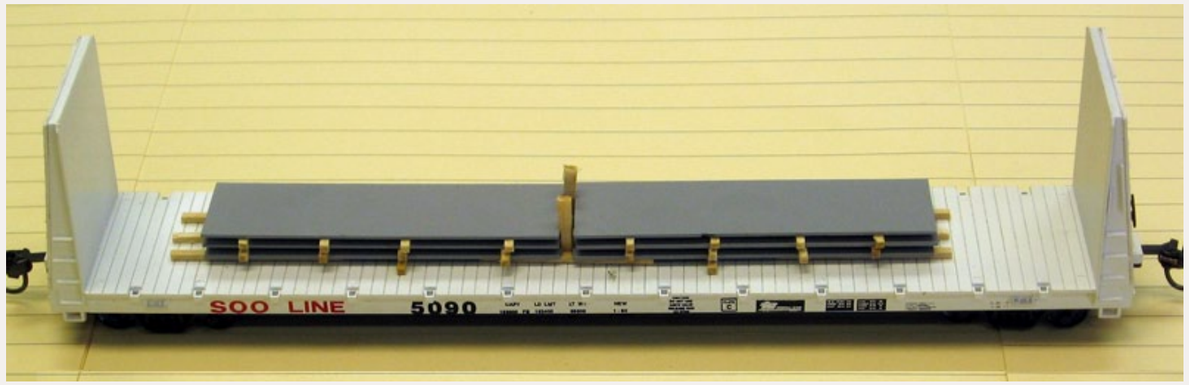
The initial release of the hinged-door car will be decorated for Northern Pacific, Great Northern, and NYC-MDT. Future releases will cover FGE, URTX-Milwaukee Rd, URTX-Rock Island, Burlington Route, PFE (SP/UP), Bangor & Aroostook, and Illinois Central.



In addition to the Burlington Route car shown above, plug door versions (series 8500) available now include SFRD and GN-WFE. Road names coming soon include PFE (SP/UP), GN (large herald), FGE, National Car, Burlington Northern, Milwaukee Road-URTX, and ART-Wabash/MoPac. Data-only on both yellow and orange car bodies with mineral red roofs and ends, and undecorated kits are also available now for both door types.

Accurail’s November limited-run special is for ATSF class SK-z 40’ wood double-deck stock cars. A 3-pack of the easy-to-assemble kits has an MSRP of $42.95. Next month’s limited-run will be a 3-pack of Western Pacific 55-ton USRA hopper cars at $41.98.

Adair Shops (adairshops.com) sells a variety of authentic looking steel plate loads for gondolas and flat cars that enhance the appearance of the car as well



as add weight for improved tracking. Each kit includes primed metal plates, wood dunnage, and instructions. Kits are available with either painted or finished steel plates as well as semi-finished steel plate loads for transfer to rolling mills. A special backload for center beam flat cars is also offered. Kit #9506 pictured above has a load of finished 5’ x 20’ steel plates and sells for $5.14.

Athearn (athearn.com) dealers are booking orders now for June delivery of Genesis series GP15-1 and GP15T locomotives. Introduced by EMD in 1976, the GP15-1 was a 1,500 hp, 4-axle unit using a non-turbocharged 12-cylinder engine. Spotting features include roof-mounted radiators, and side intakes. In 1982 Chessie System purchased the GP15T that used an alternator, a central air intake, dynamic brakes, and a turbocharged 8-cylinder engine. Apalachicola Northern bought three GP15T’s without dynamic brakes.

In addition to the Chessie unit shown above, Athearn will produce GP15T units decorated for CSX, and Apalachicola Northern. A GP15-1 decorated for UPY will also be offered. Each scheme will be available in three different road numbers. Notable features on the HO scale ready-to-run locomotive include wire grab irons, separate sand and air lines, and sliding cab windows. Lift rings, radiator intake grilles, top radiator screens, and windshield wipers are all made of etched metal. A standard DC locomotive without sound will have an MSRP of $189.98. A DCC version with Tsunami sound will be offered at $289.98.

More Changes for Athearn GP7/GP9

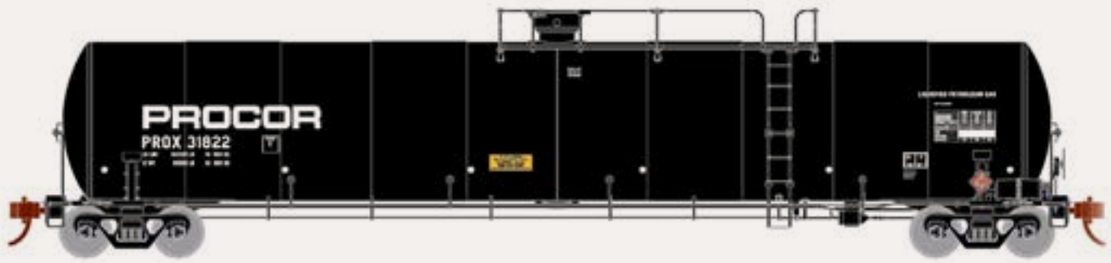
During the iHobby industry trade show held in late October in Rosemont, Illinois, Athearn issued a statement regarding specific changes in future production runs of their recently introduced HO scale EMD GP7/GP9 locomotive. Since April of last year, when Athearn first announced plans to produce the Genesis series model and subsequently released photographs of preproduction samples of the body shell, elements within the hobby have been relentless in their criticism of certain dimensions and shapes as scaled down from the prototype. In response, Athearn made some modifications in the tooling, but after the initial production run was released late this summer, the criticism continued. In anticipation of potential problems with future decorating schemes, Horizon Hobby approved funding for more changes. Raw samples of body shells incorporating the changes described below were available for inspection at iHobby.

Athearn released the following announcement on October 21st: Concerning Athearn Genesis GP7 and GP9 products: some dimensional discrepancies on these products have been pointed out and we regret any inconvenience to our customers. Some small measurement errors occurred in the development process and were not realized until after the first models were shipped. In order to address these issues we have measured actual full scale units in detail and are in the process of making the necessary tooling changes to ensure that, while our measurements show the current model is already the most accurate reproduction available, the revisions will make it even more so. These changes are limited to moving the side doors and grilles up .040”, and the cab side front and rear windows down .020”, but since these changes are important to our customers they are most important to Athearn. Already announced road names to be produced with the changes include the Santa Fe Zebra Stripe, New York Central, Boston & Maine and NKP, as well as any future announcements. We sincerely regret any inconvenience to our customers and continually endeavor to produce the most realistic, accurate, and affordable model railroad products in the industry.

.

Due in May is a ready-to-run 50’ combination-door boxcar decorated for Canadian National/BCOL, Delaware & Hudson, the Rock, and Union Pacific. Features on the HO scale model include separate side ladders and trucks with RP25 profile machined 33” metal wheel sets. Each road name will be available in three numbers at $24.98 each.

Athearn has scheduled a June delivery date for a ready-to-run SD45 diesel locomotive. Roads will include Burlington Northern, Conrail, SSW/Cotton Belt, and Springfield Terminal as shown above. Athearn reports that several upgrades have been applied to the HO scale model which features Celcon handrails, separately applied wire grab irons, window glazing, and operating headlights utilizing microbulbs. Road-specific details include headlight, bell and air horn location, grilles, battery access doors, fuel tanks, MU Hoses, high or low nose, front “L” window, and snow plows. The DC model will have an MSRP of $159.98. It comes with 8- and 9-pin plugs ready for an after-market DCC decoder.



Also coming from Athearn in June are both early and late versions of 33,900 gallon LPG tank cars with the later version (above) having an offset ladder and an extended loading platform. Features of the HO scale ready-to-run models include metal grab irons, upper/lower-shelf knuckle couplers, metal grab irons, wire formed underbody rigging, and etched-metal loading and end platforms. The white MBLX car (previous column) will be available with the older platform. A car decorated for CGTX Rail Canada will be offered with the new, larger platform. UTLX and Procor-PROX will be available in both types of platforms. Each version will be available in three different road numbers at $49.98 each.

Atlas Model Railroad (atlasrr.com) has scheduled a release of its 1932 ARA standard steel boxcar with new road numbers and paint schemes in the first quarter of 2012. The HO scale model represents the more than 14,000 long-lived prototypes built for 23 different railroads beginning in 1933. The ready-to-run boxcar will have an MSRP of $33.95. Three numbers each will be available for Clinchfield (Quick Service), Kansas City Southern, NdeM, Nickel Plate, and Missouri Pacific (I-GN).

Prototype modelers will be happy to learn that Atlas will offer four undecorated models at $26.95 each with variations in body tabs, ends, and roofs. The undecs are item #2000170 (long tab body, Murphy panel roof, 4/4 Dreadnaught ends), undec #20000171 (long tab body, 11 panel flat riveted roof, flat-riveted ends), undec #20000320 (short tab body, Hutchins radial roof, 4/4 Dreadnaught ends), and undec #2000091 (long tab body, 11 panel flat riveted roof, 4/4 Dreadnaught ends).

Also coming from Atlas in the first quarter of next year is a series of 45’ Pines trailers with new paint schemes. Features include detailed hinges and latches, rear bumper details, and two sets of landing gear-fully extended or retracted. Priced at $15.95 each, road names will include

Burlington Northern-BNZ Expediter, Iowa Interstate–IRMZ, Kankakee Beaverville & Southern-KBSZ, Nashville & Ashland City-NACZ, Providence & Worchester, TransAmerica-REAZ, and Western Pacific-BWPZ. An undecorated model will be available at $11.95 each.

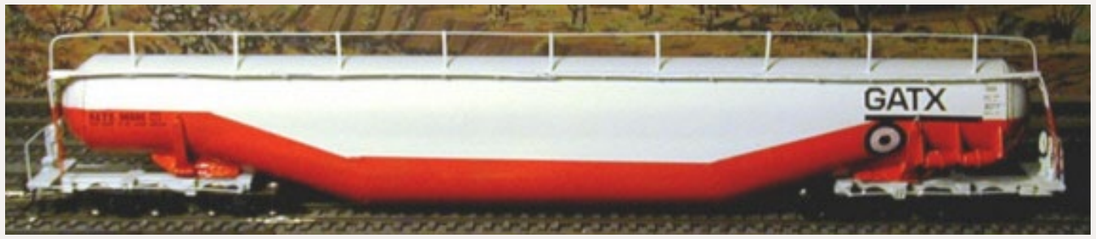
Atlas will release its HO scale Thrall 2743 cu ft gondola with new road numbers in the first quarter of next year. Produced until 2005, the prototype was introduced in 1995 with a 52’ 6” interior length and 5’6” width that took advantage of new regulations allowing load limits to 286,000 lbs. Thrall built over 6,700 of these cars from 1995 to 1999 when Trinityrail assumed production until 2005. Features include 14 side posts, detailed brake components with metal brake rods, etched platform and end reinforcement plate, separate air hoses, metal grabs, and optional coupler pocket for Kadee #78 or Accumate® coupler.

Broadway Limited (broadway-limited.com) has scheduled a third production run of its amazing HO scale Baldwin Centipede locomotive with delivery expected next April. The deadline for reservations is November 18, 2011. Additional paint and lettering combinations have recently been added to the run, so anyone interested, or previously disappointed in trying to obtain a specific Centipede, should check the revised website now.

Pennsylvania Railroad units in Brunswick green in both gold leaf and buff lettering will be offered in various numbered sets and as individual A units both with and without the distinctive trainphone antenna. Individual Centipede units will be available for SAL in four road numbers, and single units in three different road numbers in the distinctive dark green, red, and yellow livery of NdM. Although Union Pacific placed an order for a pair of Centipedes, it was cancelled before delivery and the set became the factory demonstration locomotives. BLI will deliver Baldwin’s 6000A/6000B demos in their original dark blue and crème paint scheme. Visit broadway-limited.com for full details on model numbers, road numbers and pricing.

Division 7, MCR, NMRA is selling a kit for a 50’ boxcar decorated for W. Allen McClelland’s Virginian & Ohio Railroad. The blue and white scheme includes the distinctive “The Ridge Runner” slogan to the right of the 8’ plug door. The HO scale model is based on an Accurail 5100 series steel riveted AAR boxcar with Camel door hardware, Accumate® couplers, and AAR Bettendorf-style trucks. The car kits are available at $17 each or in a four-pack with different numbers at $64. Shipping and handling is $5.50 for one car or $8.00 for two to four cars. Ohio Residents must include 6.5% state sales tax on the total price, including shipping charge. Order from Division 7, MCR, NMRA, PO Box 62501, Cincinnati OH 45241.

Concept Models (con-sys.com) has an HO scale resin body kit for a 60,000 gallon



LPG tank car. The prototype propane cars have been banned from interchange by the ICC. The 8-axle super tanker rides on four 4-wheel trucks mounted on pivoting bolsters. Handrails, piping, trucks, and couplers are not included in the basic resin kit. The instructions offer different walkway options to replicate variations in the prototype. The basic body kit retails for $49.00 and may be purchased at the above website.

ExactRail (exactrail.com) has released a hand-weathered version of its Missouri Pacific PC&F beer car. The HO scale models are from a late 2009 production run that was withheld from the market because the body color was deemed lighter than a pristine prototype. However, with the addition of subtle weathering, the lighter shade became a realistic representation of a faded car that had been exposed to the elements for some time. The ready-to-run models have all of the

regular Platinum series features including numerous hand-applied details such as air hoses, door bars, bell crank, door tracks, formed wire coupler cut-levers, and brake lever hangers. The cars come with knuckle couplers and equalized 100-ton ASF Ride Control® trucks with machined metal wheel sets. The weathered MP cars are available in three road numbers at $44.95 each. Hats off to ExactRail for turning a lemon into lemonade. Standard (non-weathered) versions of the beer car are also available for SP, MP, D&RGW, BNSF, UP and ATSF at $32.95 each.

On November 8, ExactRail will release its 40’ Milwaukee Road rib-side boxcar

decorated in the prototype’s 1963 repaint scheme The ready-to-run car comes with 50-Ton Barber S-2 solid bearing trucks and features the usual Platinum series details. The Milwaukee Road cars will be available in 12 different numbers at $34.95 each.

ExactRail has released the Phase III version of its 64’ ARMN-UP Trinity TRINCool

refrigerator car in 18 new numbers. Phase III cars can be identified by four individual rungs matched to the toe-pockets on the side of the car near the B end

(above left). Phase I cars have a four-rung ladder on both the side and the end. The A end of the car is shown at right. ExactRail’s HO scale Platinum series cars come with Kadee® long-shank 156 Whisker® couplers, several etched-metal details, wire-formed uncoupling levers, separately applied brake hoses, and equalized 100-ton trucks with 36” machined metal wheel sets. The ready-to-run cars are priced at $32.95 each.

Fos Scale Models (foslimited.com) is now selling a limited edition craftsman-style kit for Quinn Elbow Duct & Vent Co., a rambling HO scale structure with interesting shapes and levels. The building has a track-side loading dock and ramp. Components include laser-cut clapboard walls, numerous metal detail part, and Tichy plastic windows. Instructions, assembly templates, and weathering suggestions are included. The completed structure has a footprint of 3.5” x 9.” Additional signage is included for an alternate business. Figures, vehicles, and scenery shown in the picture are not included.

Imperial Hobby Products (ihphobby.tripod.com) has an HO scale kit for a two-car set of New York City Transit Authority IND R27/30 subway cars. The kit includes resin body shells, Bowser compatible cast floors, truck sideframes, and photo-etched end gates. The two-car set sells for $90.00.

In December, **Kadee Quality Products** (kadee.com) will release a 50’ PS-1 boxcar with a 9’ door decorated as Milwaukee Road no. 52007. The HO scale ready-to-run model will be priced at $35.95. Also due in December is a D&RGW PS-2 two-bay hopper car as built for the Colorado road in 1956. It will be priced at $43.95.

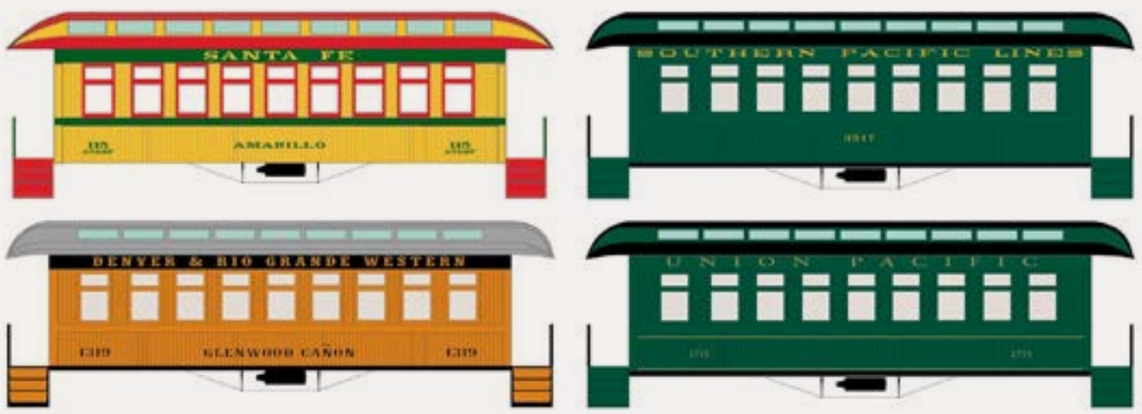
Kadee’s January release includes this Reading off-set side open-top hopper at $43.95, and a 50’ PS-1 boxcar with a 9’ door decorated for Atlantic Coast Line. The ACL car will be priced at $35.95 and will be available in two different road numbers. All of the cars mentioned will come equipped with Kadee’s two-piece self-centering trucks.

As a companion to its popular Pickle Works structure kit, **Laserkit division of American Model Builders** (laserkit.com) has added an HO scale pickle car conversion kit to its line. The special laser-cut pickle tanks and supporting structure are designed to fit with minimal modification on either an Athearn or Tichy 40’ flat car (not included). The Tichy model offers the option of leaving off the stake pockets which would not have been included on a purpose-built prototype. The stake pockets on the Athearn car would indicate that the tanks were installed on a standard flat car. Decals, produced by Rail Graphics, provide numbers for five different cars under the ownership of G. R. Dill & Sons (GRDX). The pickle car conversion kit no. 391 is priced at $37.95.

New products coming next month from **N.J.International** (njinternational.com) include an HO scale color position light signals for Amtrak Northeast Corridor (former PRR). Item No. 1149 is $49.99. Also coming are standard PRR Signal Heads wired with LEDs (No. 1048) and a clipped head version (No. 1049). Both are priced at $19.99 ea.

Plano Model Products (planomodelproducts.com) currently has factory stock on Proto2000 GP7/9 intake screen sets, as well as intake grilles for Proto2000 E8/9 locomotives. The finely detailed etched-metal parts are available direct from the above website or through hobby suppliers.

Roundhouse (roundhousetrains.com) has scheduled an April release date for a series of HO scale ready-to-run steel passenger cars with removable Harriman-style arched roofs held in place with magnets. Based on tooling originally developed by Model Die Casting, the cars have been significantly upgraded with such features as new stirrup steps, improved window glazing, separate grab irons, vestibule partitions, knuckle spring couplers, and upgraded trucks with 33” RP25 machined metal wheel sets. Road names include Canadian National (RPO above), Illinois Central (diner above), Pennsylvania, and Rock Island. In addition to the diner and RPO car, the series includes a baggage car, combination baggage-coach, coach, and open-end observation car. The RPO has mail hook details on both sides of the car. The combine and coach come with four-wheel trucks, the others have six-wheel trucks. The cars have an MSRP of $44.98 each.



In June, Roundhouse will issue a rerun of HO scale Overton open-platform cars decorated for Santa Fe, Southern Pacific, D&RGW, and Union Pacific. Each road will be available for a baggage car, combination coach-baggage, business car, and coach (above). Upgrades to the original Model Die Casting models include 33" machined metal wheels, metal truss rods, knuckle couplers, and new window glazing including in the clerestory section. The quality of the painting and printing of current Roundhouse equipment shows a significant improvement over the original MDC products. Individual cars will have an MSRP of $29.98 with the 4-pack listed at $199.98.

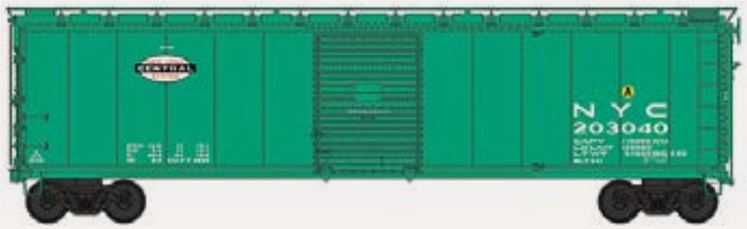
Railflyer Model Prototype Inc. (railflyermodel.com) has released a kit to upgrade kit Atlas GP40-2W and InterMountain SD40-2W HO scale locomotives. The kit includes a GMDD wide cab, steps, CN early wide cab pilot, SD walkway duct, electrical box, ditch lights, snow shields, coupler plates, and waste retention tank. The upgrade kits sell for $99.00. To order or learn more about the upgrade kits visit http://www.railflyermodel.com/collections/model-kit-combinations/products/atlas-gp40-2w-upgrade-kit.

Tangent Scale Models (tangentscalemodels.com) has introduced a newly-tooled HO scale model of a Bethlehem Steel Company 52' 6" 70-ton drop-end riveted gondola car. This is the fifth new body-type introduced by Tangent. Initially purchased by B&O, the Bethlehem-designed prototype was produced intermittently from early 1937 until 1957. Although most were gone from revenue service by the mid-1980s, many continued for decades in MOW service. Special features of Tangents HO scale ready-to-run cast styrene model include accurate stencils and lettering placement, detailed interior, separate air hoses, formed wire grab irons and coupler lift bars, Kadee® couplers, and Tangent 70-ton ASF A-3 Ride-Control® trucks with metal wheels. Road-specific details include location of tack boards; steel or wood deck; Duryea or conventional end sill detail; Dreadnaught or straight corrugated ends; various brake platforms; and Universal, Ajax, or Equipco handbrakes.

In addition to the Western Maryland (1953 scheme) shown above, road names available on Tangent's initial release also include Baltimore & Ohio (class O-59 in the original 1937 paint scheme with white stencils on a black car body), and Lehigh Valley (in 1973 Cornell red). All are available in multiple numbers. An undecorated version (assembled and painted primer gray) is also available now. The ready-to-run models are priced at $32.95 each, with discounts available on factory-direct orders of six or more. An unpainted kit will be available after December 1.

An April delivery date has been scheduled for **Walthers** (walthers.com) Proto™ 16K gallon 40' Funnel-Flow tank car. As the trade-name implies, the funnel-shaped tank is slightly lower in the middle, allowing liquids and slurries to be unloaded by gravity. Walthers HO scale ready-to-run version features etched-metal walkways and platforms, factory installed grab irons, accurate train line and brake underbody rigging, and road-specific placement of manways and safety valves. The trucks will be equipped with 36" turned metal wheelsets. Two numbers each will be available for AFPX (wide yellow band on black body), OMYA (white body), Procor-PROX (white body), and Cargill-CRGX (above). The Funnel-Flow tankers will have an MSRP of $37.98.

A new group of Walthers Mainline series 49’ 100-ton eastern-style 3-bay open hopper cars are due to be released in late April. Two new numbers will be available on five new road names including Chessie/B&O, Norfolk & Western, Conrail, Pennsylvania, and Milwaukee Road. The HO scale ready-to-run model will have an MSRP of $19.98. Appropriate 100-ton trucks will be fitted with 36” metal wheels.



Walthers is quoting a late May delivery date for a new production run of 50’ AAR single-door steel boxcars. Features of the Proto™ series limited-edition models include individual factory-installed grab irons, full train-line and brake underbody rigging, 5/5 Dreadnaught ends, and Youngstown corrugated doors. Two road numbers each will be available for Burlington Northern (green body), Chicago Burlington & Quincy (red body, Burlington Route herald, Everywhere West slogan), Southern Pacific (san-serif lettering), and New York Central (above). The ready-to-run HO scale models will have an MSRP of $31.98 each.

Walthers is booking dealer orders for a 50’ insulated smooth-side boxcar with delivery scheduled for late next May. The HO scale ready-to-run car will come decorated for Chicago & North Western (yellow body), Southern Pacific-NADX (LD herald), Gulf Mobile & Ohio-NIRX (above), and Western Pacific (Cushion Protection herald, billboard-style WP). The Mainline series cars will have an MSRP of $19.98.

N SCALE PRODUCT NEWS

Athearn division of Horizon Hobbies (athearn.com) has continued to improve its N scale F50PHI diesel locomotive since the model was introduced in 2003. The next production run, scheduled for release in May, will include ready-to-run models decorated for Pacific Surfliner 10th Anniversary, West Coast Express, and a fantasy Tri Rail scheme. According to an Athearn spokesperson, *“Tri Rail does not run F59PHI locomotives, but if they did, they’d look like this.”* The ready-to-run N scale models will be available DCC-ready at $129.98, and with DCC with Tsunami Sound at $259.98.

Next June, Athearn will begin delivery of N scale Bombardier commuter cars decorated for Trinity Railway Express, Tri Rail, and West Coast Express. The paint schemes will be available on a coach and a cab/coach as used in push-pull commuter service. They are priced at $49.98 each. Also available will be a pack of three coaches with different numbers at $149.98. The cars in the 3-pack will have different numbers than the single units.

Atlas Model Railroad Company (atlasrr.com) will deliver a new N scale coil-steel car during the first quarter of next year. The N scale model replicates a 42’ design with a distinctive fishbelly below the side sill. Features of the ready-to-run car include see-through walkways, a removable hood, and wire formed coupler levers. Road names on this initial release will be CSXT (gray body), CSX-CSXT (blue

body with yellow end bands), Kansas City Southern (gray body with black, red, and yellow sill), Northwestern Oklahoma-NOKL (red body, gray sill), Norfolk Southern (silver body with black and blue graphics), and SeverCorr-CAGY (above). The model has an MSRP of $29.95. An undecorated version will be available at $24.95. Atlas's HO version is shown in the above photo.

Atlas will release its 1932 ARA standard steel boxcar with new road numbers and paint schemes in the first quarter of 2012. The N scale model represents the more than 14,000 long-lived prototypes built for 23 different railroads beginning in 1933. The ready-to-run boxcar will have an MSRP of $23.95. Three numbers each will be available for Clinchfield (Quick Service), Kansas City Southern, NdeM, Missouri Pacific (I-GN), and Nickel Plate (above).

Atlas will offer four undecorated models at $17.95 each with variations in body tabs, ends, and roofs. The undecs are item #50000114 (long tab body, Murphy panel roof, 4/4 Dreadnaught ends), undec #50000115 (long tab body, 11 panel flat riveted roof, flat-riveted ends), undec #50000150 (short tab body, Hutchins radial roof, 4/4 Dreadnaught ends), and undec #50000514 (long tab body, 11 panel flat riveted roof, 4/4 Dreadnaught ends).

Here is an early look at a pre-production sample of an all-new N scale PRR class X58 boxcar under development by **Eastern Seaboard Models** (esmc.com). Note the etched-brass running board indicating this is an original version of the PRR car. ESMC will also offer a transitional edition and a modern version of the X58. The multiple-part design of the floor/underframe assembly will allow variations of the Keystone and Hydro-Cushion underframe to be represented. ESMC expects to have the new boxcars ready for introduction by February, 2012.

Kato USA (katousa.com) is preparing a second release of N scale locomotives and cars for the Santa Fe El Capitan with delivery planned for February 2012. A basic set of 10 El Capitan cars will include a baggage car, a baggage/dorm, four coaches, two step-down coaches, a diner and a lounge car. The set will be priced in the $280 to $290 range. Two 2-car sets consisting of a coach and a mail storage car will be available at $55. Santa Fe's F3A diesels in Warbonnet livery will be available in two road numbers (19 and 19C) at $85 to $90 each. A companion F3B will be offered at the same price. All prices mentioned are subject to change.

Micro-Trains (micro-trains.com) has released two new versions of its N scale 83' open-platform Pullman 3-2 observation car. The classic all-steel prototype was built in the mid-1920s to plan 3959D by Pullman Company. The N scale ready-to-run heavyweight car rides on appropriate 6-wheel solid-bearing passenger trucks. Schemes currently available include a Great Northern car painted Pullman green, and "Shasta," a Southern Pacific car (above) painted olive green. The lettering on both cars is rendered in metallic gold. They have an MSRP of $22.70 each.

Micro-Trains has also released a 50' standard boxcar with combination plug and sliding doors decorated in the distinctive scheme of Florida East Coast Railway.

The N scale ready-to-run model represents a prototype built in 1962 and repainted by FEC in 1981. The model has an MSRP of $25.35.

Also new from Micro-Trains is this D&RGW high-side PS-2CD 4427 cu ft three-bay covered hopper. Pullman-Standard built the 100-ton prototype in 1968. The center-discharge system of the Rio Grande car indicates it was intended for grain service. Micro-Trains ready-to-run N scale version has an MSRP of $24.55.

Trainworx (train-worx.com) is taking orders through November 30 for new 40' exterior post trailers to go with their previously announced 85' Trailer Train flat car. The new trailers will have etched brass panels added for the heralds. As appropriate to the prototype, they will have either a single curb door on the right side, mail doors on both sides of the trailer, or a combination of the two. They will be available at $19.95 each decorated for Pennsylvania Railroad – PRRZ (red body with brass panels and curb door), Pennsylvania Railroad Flexi-Van – PRRU (silver trailer with brass panels and mail doors), and Missouri Pacific Flexi-Van (silver trailer with brass nose panel). Also new is a 40' corrugated reefer van, with a curb door, decorated for Great Northern at $17.95 each.

Walthers (walthers.com) has four versions of this N scale EMD GP20 diesel locomotive including Santa Fe (blue with bold yellow lettering), NYC (black body, white sill, yellow handrails), Union Pacific (gray over Armour yellow, red lettering), and Conrail (above). Special features include constant intensity and directional headlights, die-cast split-frame chassis, Accumate® couplers, and a DCC-ready mechanism with a Clip-Fit circuit board. The N scale ready-to-run model has an MSRP of $99.98.

Walthers has ready-to-run ProtoN™ Alco RS-2 diesel locomotives decorated in paint schemes prevalent in the 1950s. Road names include New Haven (McGinnis orange, black), New York Central (black body, white sill, yellow handrails), Pennsylvania (Brunswick green, gold lettering), and Green Bay & Western (above). The N scale version of the 1500 horse power prototype features a DCC-friendly mechanism with a Clip-Fit circuit board. The model has an MSRP of $99.98.

NEW DECALS, SIGNS AND FINISHING PRODUCTS

Jerry Glow (home.comcast.net/~jerryglow/decals) has new HO scale decals for Minneapolis & St. Louis flat cars, and Chicago North Western PS-1 boxcars as repainted with a CNW logo.

Daniel Kohlberg has introduced HO and N scale white decals for ICG-55 GM&O General American 50' RBL boxcar sill 2/3. Development of the decals was inspired by the highly-regarded HO scale RBL car recently introduced by Moloco (See MRH page 106 September 2011). There may be a delay in posting the new decals on Kohlberg's web page (paducah.home.mindspring.com) but they can be ordered direct from Daniel Kohlberg, 7507 North State Route 159, Moro, IL 62067. The decals are $7 per set plus $1 for shipping and handling for a total order. Customers outside USA please include $2.00 with total order.

Model Memories (modelmemories.com) has decals for New York Central P-2b heavy electric locomotives. The HO scale decals include lightning stripes, NYC herald, full prototype number sequence, a guide-photo of a completed model, and a unique masking template to aid in painting the engine. The lettering set is available at the above website at $8.95 each. Decals for other New York Central electrics are under development.

New HO scale decals available from ***Microscale Industries*** (microscale.com) include 6,000 and 8,000 gallon tank cars for Kansas City Mexico & Orient, Missouri Kansas Texas, UTLX, Magnolia Petroleum, Great Western Oil, Terrell Cotton Oil, and Texas Company. Also new are decals for Penn Central circa 1968 to 1976, and SOO Line 40' and 50' boxcars. All of the sets mentioned are priced at $7.00 each. Currently under development are decals for SCL wood-chip hoppers and gondolas, SPFE/UPFE orange boxcars, and Milwaukee Road boxcars.

Send us your product announcements

If you are a hobby manufacturer with a product announcement, just click here and submit your announcement to us.

Our website and free magazine reach continues to grow, so get on board with this new media train that's hard to stop!

About our news and 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.

He enjoys building models, particularly structures, some of which appeared in the June 2006 issue of ***Model Railroader*** magazine.

Reader Feedback
(click here)

Selected Events

November 2011

CALIFORNIA, LOS ANGELES, November 5-6 and 12-13, Pasadena Model Railroad Club Sierra Pacific Lines Fall Show. One of the world's largest layouts with over 1,700 feet of mainline track, 42 inch minimum radius, controlled by 10 mainline cabs. 5458 Alhambra Avenue. Info at **pmrrc.org**.

CALIFORNIA, PASADENA, November 5-6 and 12-13, The Slim Gauge Guild Model Railroad Club semi-annual open house, 2000 sq ft filled with S/Sn3 and HO/HOn3 layouts. China Factory Mall (basement), 300 S. Raymond Ave, near MTA Gold Line Station. Info at **info@slimgaugeguild.com**.

CALIFORNIA, ROSEVILLE, November 13-14, 34th Annual International Railfair, model railroad show and sale, operating layouts, railroad memorabilia, workshops and clinics, live steam. Placer County Fairgrounds, 800 All American City Blvd. Info at **internationalrailfair.com**.

INDIANA, DANVILLE, November 19, Train Show and Swap Meet presented by NMRA Central Indiana Division with operating layouts, clinics, dealer tables, door prizes and special kids events. 10 am to 4 pm at Hendricks County 4H Fair Grounds. Info at **cid.railfan.net**.

MICHIGAN, LIVONIA, November 27, Model Railroad Show & Workshop, Civic Park Senior Center, Farmington and Five Mile Roads. Info from Mark Ellis at 734-421-2673 or **emark@sbcglobal.net**.

NEW YORK, HICKSVILLE, November 25-27, December 2-3, and 9-11, **westislandmodelrailroadclub.com/home.html**, 485 So. Broadway, Unit 22A.

NEW YORK, POUGHKEEPSIE, November 13, 40th Annual Railroad Exposition, hosted by Hudson Valley Railroad Society (all proceeds to Hyde Park Railroad Station National Historic Site), dealer tables, railroadiana, model exhibits, operating layouts, modular displays, clinics, and modeling demos. Mid-Hudson Civic Center. Into at **hydeparkstation.com/hvrsshow.html**.

PENNSYLVANIA, MONACA, November 20, Beaver County Fall Model Train Show, Center Stage, 1495 Old Broadhead Road. Info at **bcmrr.railfan.net**.

UTAH, SALT LAKE CITY, November 11-13, Wasatch Rails 2011, hosted by NMRA Wasatch Division, at Grand Building and Promontory Hall, Utah State Fair Park, 1000 West and North Temple. Info at **nmrawasatch.org**.

WISCONSIN, WEST ALLIS, November 12-13, Trainfest 2011, billed as America's largest operating model railroad show, featuring the latest in model railroad products and technology from more than 100 manufacturers and dealers, plus more than 60 operating railroads. Wisconsin Expo Center, State Fair Park, 8200 West Greenfield Ave. Info at **trainfest.com**.

December 2011

CALIFORNIA, DEL MAR, December 3-4, The Great Train Expo, Del Mar Fairgrounds. Info at **greattrainexpo.com**.

INDIANA, INDIANAPOLIS, December 17-18, The Great Train Expo, Indiana State Fairgrounds. Info at **greattrainexpo.com**.

NEW YORK, ALBANY, December 4, NMRA Berkshire Division and Train Associates present Great Train Extravaganza. Free seminars, operating layouts in most scales, 200 sales tables. Empire State Convention Center. Info at **gtealbany.com**.

Future 2012

CALIFORNIA, SANTA CLARA, February 9-11, 22nd Annual O Scale West 2012 (includes 6th Annual S West meet), model displays, vendor displays, movies, swap meet, and layout visits. Hyatt Regency. Info at **oscalewest.com**.

CANADA, ONTARIO, OTTAWA, May 5-6, Ottawa Train Expo, featuring layouts, models, displays, clinics, demonstrations, and tours. Billed as the largest train show in Eastern Canada. Carleton University Fieldhouse, off Bronson Ave. Info at **ottawatrainexpo.wordpress.com**.

FLORIDA, COCOA BEACH, January 5-7, Prototype Rails 2012, premier RPM meet hosted by Mike Brock. Hilton Hotel, 1550 N. Atlantic Ave. Call 800-526-2609 or 321-799-0003 for reservations. Info at **prototyperails.com**.

MASSACHUSETTS, WEST SPRINGFIELD, January 28-29, Amherst Railway Society Railroad Hobby Show, attracting up to 25,000 railfans and hobbyists with hundreds of exhibits and product displays by manufacturers and dealers. Eastern States Exposition Fairgrounds. Info at **railroadhobbyshow.com**.

MICHIGAN, GRAND RAPIDS, July 29-August 4, NMRA National Convention and National Train Show. Info at **gr2012.org**.

NEW MEXICO, ALBUQUERQUE, February 16-18, 27th Annual Sn3 Symposium. Info at **Sn3-2012.com**.

NORTH CAROLINA, BREVARD, October 12, 13, Narrow Trak 12.

Selected Events *Continued ...*

OHIO, HILLIARD, May 18-20, 4th Ohio N-scale Weekend, Franklin County Fairgrounds, hosted by Central Ohio N-trak. Info at centralohiontrak.org/.

OHIO, MARION, April 12-14, Central Ohio RPM, Marion Union Station. Info at hansmanns.org/meet/.

PENNSYLVANIA, MALVERN, March 23-25, RPM-Valley Forge Meet. Info at phillynmra.org/RPMMeet.html.

WASHINGTON, BELLEVUE, September 12-15, National Narrow Gauge Convention. Info at seattle2012.com.

Future 2013

CALIFORNIA, PASADENA, August 28-31, 2013, National Narrow Gauge Convention.

MINNESOTA, BLOOMINGTON, April 25-28, 2013, 28th Annual Sn3 Sumposium. Info at Sn3-2013.com.

NEW MEXICO, ALBUQUERQUE, June 6-9, 2013, Rails Along the Rio Grande 2013, NMRA. Rio Grande Division 6, Rocky Mountain Region Convention with clinics, layout tours, train show, OpSig sessions, UPRR and BNSF modelers showcase night, and banquet. Marriott Pyramid North. Info from Al Hobey at alhovey@comcast.net. ■

To submit an event notice to us, please use the online form at this link.

Reader Feedback *(click here)*

Briefly noted at press time...

In a follow up to our Athearn report on page 98, Vic Audo, Horizon Hobby's interim director model railroad division and the senior corporate manager at Athearn, has confirmed that Athearn's new GP7/GP9 uses at least portions of the original Front Range tooling.

According to *Model Retailer magazine*, Audo said despite comments to the contrary, every bit of the former Front Range tooling for the units was retooled before production, save for the base.

Audo said Athearn employees measured a prototype unit at the Port of Long Beach for the new revisions to the tooling. He noted that the changes will be especially apparent with new units that have stripes and lettering that interact with the body.

"Most people were happy with the original model, but it had problems and we are happy to correct it," Audo concluded.

Bowser is selling most of the equipment it once used to make kits for steam locomotives, something the Montoursville, Pennsylvania, firm has not done since late 2008 when it began focusing exclusively on injection molded plastic models (see MRH page 15 April 2009).

For sale are all of the tools, molds, dies, and fixtures used for manufacturing steam locomotive kits with such familiar brand names as Bowser, Bowser of Riverside, Penn Line, Cary, Arbour, and Varney, including the famous 0-4-0T Dockside switcher.

Also for sale are tools and fixtures for producing Selley Finishing Touches, Menzies car kits, and several Pittman motors.

A complete list is available on request from sales@bowser-trains.com. ■

Remember to tell them: "MRH sent me!"

REVERSE RUNNING: Is Steam-to-Diesel interest coming or going?

Stepping outside the box with a contrary view

Reader Feedback (click here)

— by Joe Fugate

Hand-wringing about the longevity of steam-to-diesel modeling in the hobby crosses my workstation every so often. Many see the modeling of this era fading as those who remember it pass on in ever greater numbers.

Many worry that the very core of the hobby today will fade over the next couple decades and the hobby will shrink dramatically as a result.

Enjoy it while it lasts is generally the conclusion.

I'm sorry, but I don't buy into that line of thinking.

Let's look at our sister hobby, model airplanes. One of the most popular types of model airplanes to model are military planes – especially World War II and World War I prop planes.

How many of those modelers *actually* saw a WWII or WWI prop plane in service during its heyday? Darn few, that's how many. Most WWII vets still with us are in their 80s or 90s now – and most of them probably aren't model airplane enthusiasts at that advanced age.

Radio-controlled aircraft as a hobby today is growing worldwide as new technology opens up more modeling possibilities. And the internet is helping that along by making it easier for model airplane enthusiasts to share ideas and collaborate on modeling projects.

I think the key isn't that a specific era gets seen every day, it's whether or not the particular *mode of transportation* is seen regularly, both in real life and in media. Today, encountering commercial aircraft is common – yet more aircraft modelers prefer to model military aircraft than commercial aircraft because military aircraft are more interesting.

"Many see modeling the steam-to-diesel era fading in the years ahead and worry that the very core of the hobby today will likewise fade and the hobby will shrink dramatically as a result."

Same story with model railroading.

As long as people see trains in real life, can ride excursion railroads as a family event, and see trains regularly in the media (what Western doesn't have a train in it?) then I think the model airplane hobby demonstrates that we'll be fine.

People naturally gravitate to modeling whatever era is the most interesting, regardless of what they actually see in real life. And thanks to today's internet, getting information on any prototype and era is often just a couple Google searches away.

Notice that new technology is helping the model airplane hobby grow these days. I think Lenz releasing their DCC technology to the model railroading hobby through the NMRA was a brilliant stroke for giving the model train hobby new life.

I see a number of emails and posts from guys getting back into the hobby these days because of DCC. If you're still using DC and haven't made the shift, no problem – but make sure you express your appreciation for the new life DCC is injecting into the hobby, even if you aren't partaking.

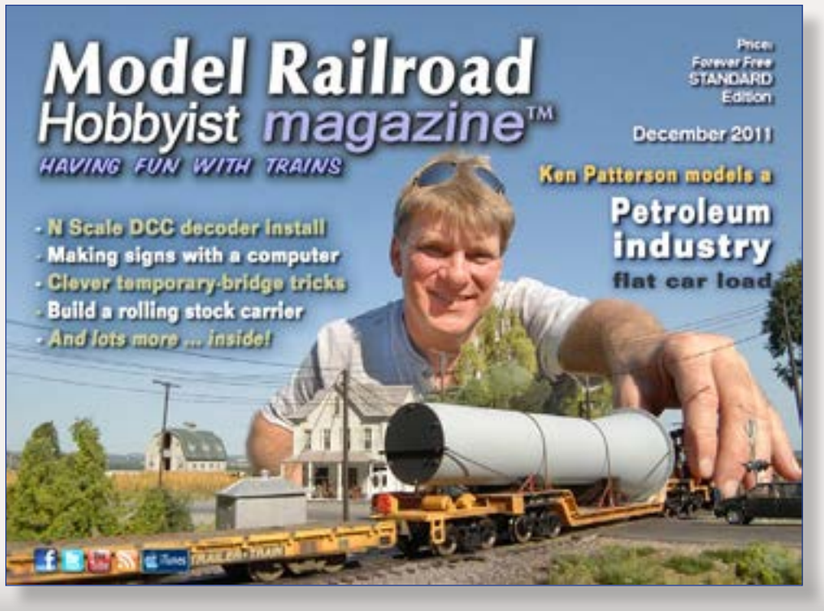
In summary, the hobby is changing, to be sure. But if model airplanes are any indication, modelers pick the era to model based on how interesting it is, not necessarily if they've seen it in real life.

And thanks to today's modern internet and video media, seeing a steam-to-diesel era train in action on a 50 inch big screen with surround sound and subwoofers is just a few clicks away. That will continue to impress many new generations of model railroaders for a long time to come! ☑

Coming in the December 2011 issue

- Ken Patterson models an oversized flat car load
- N scale DCC decoder install
- Making signs with a computer
- Clever temporary bridge tricks
- Building a rolling stock carrier
- New one evening projects

... and lots more!



Derailments, humor, and Dashboard on next page ▶

Derailments

humor (allegedly)

A fast freight rear-ended a local peddler freight late one night, and the investigation probed if the crew of the first train had flagged the second train sufficiently.

"Now, then," asked the superintendent to the peddler's rear brakeman, "were you flagging your train that night?"

"Yes, sir," he said.

"And were you at least a half-mile from your train?" asked the super.

"Yes, sir," said the brakie.

"And did you attempt to flag the express down?" asked the super.

"Yes, sir, and they went right on past me," the brakie said.

"And did you use a red lantern?" the super asked.

"Yes, sir, of course."

The railroad couldn't decide who was at fault, so they closed the investigation.

"You did just what I asked." replied the conductor of the local freight to the rear brakeman after the hearing. "You told the truth. Were you nervous at all?"

"You bet!" said the brakeman. "I was hopin' he wouldn't ask if the lantern was lit!"

If you're the first to **submit a good bit of humor** and we use it, it's worth $10!

DASHBOARD

Toggle Full Screen

⇩ Printer-Friendly Version

⇩ Download PDF Version

Exit Document

Reader Feedback *(click here)*