Model Railroad Hobbyist magazine™

HAVING FUN WITH TRAINS

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April 2011

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ISSN 2152-7423

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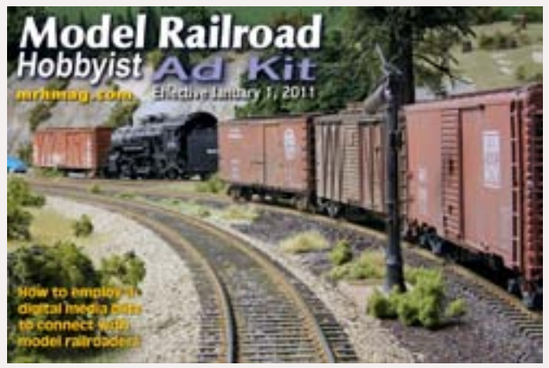

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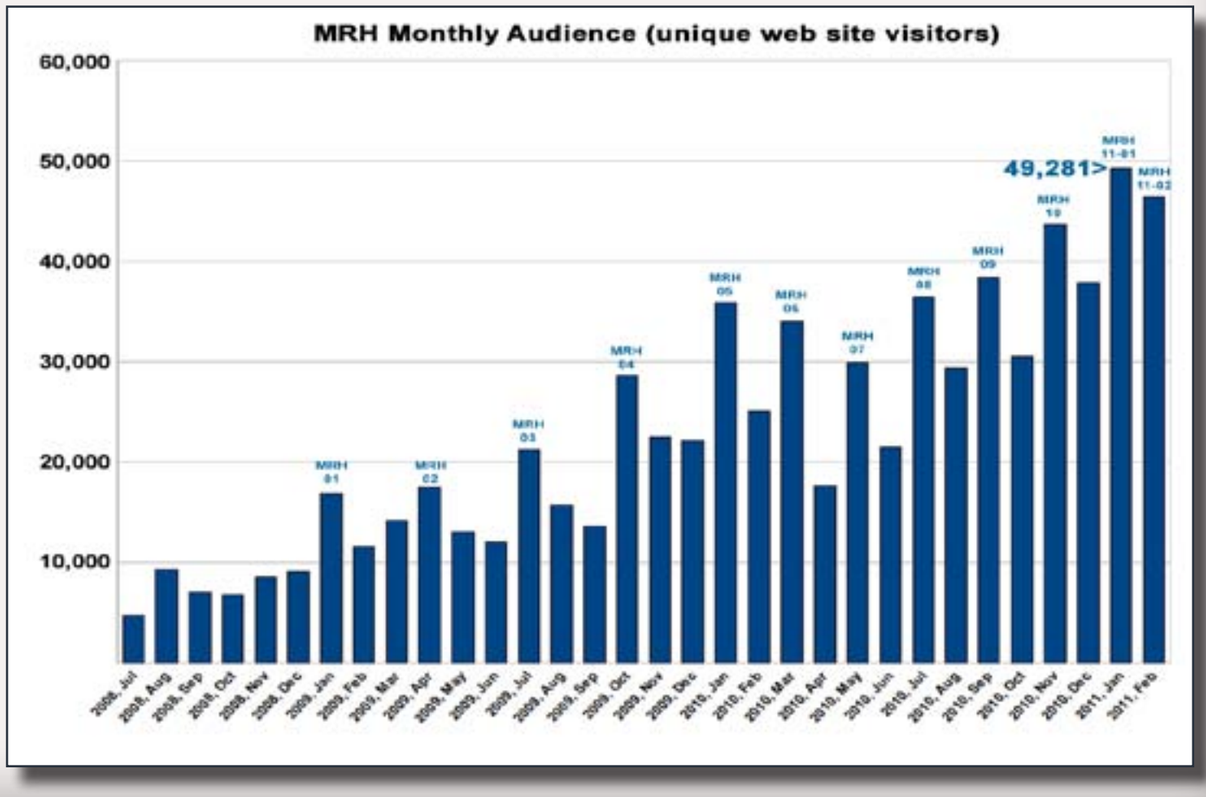

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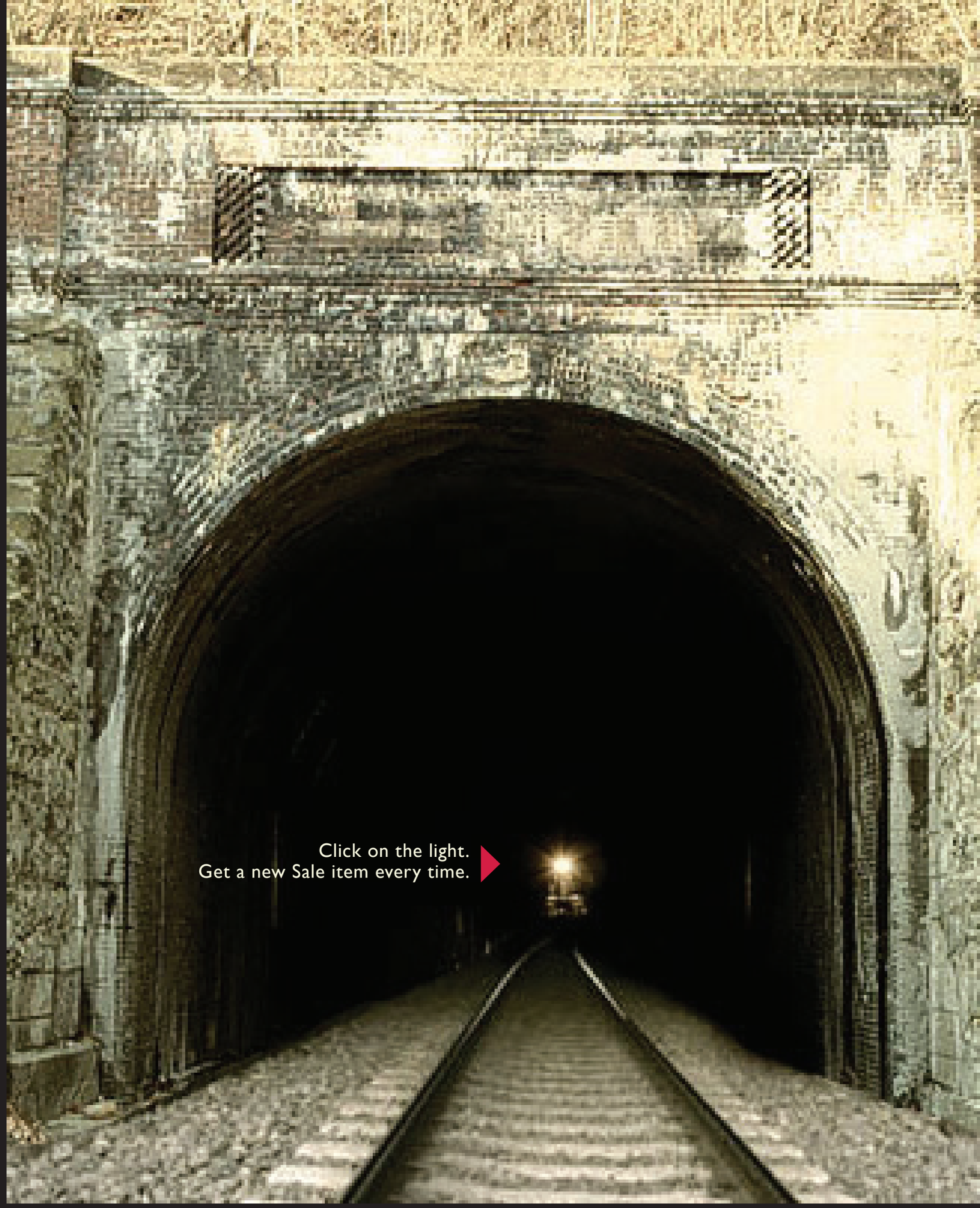

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About the Editor

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: Obsession!

It's a way of life ...

Reader Feedback *(click here)*

I looked up the word "obsession" in a dictionary to check out its official definition.

"The domination of one's thoughts or feelings by a persistent idea, image, desire, etc."

Sounds like a word that's familiar to many model railroaders. I believe I'm on a first-name basis with it myself. What effect does this have on us and our pursuit of life, liberty, and happiness?

I'm not sure about the life and liberty parts but happiness comes very close to MRH's new mantra – having fun with trains. An obsession can be fun in the beginning, but will it still be fun in the long-term?

Let's think about our model train obsessions. I'm sure you've heard the saying, "Whoever dies with the most toys wins". I wonder how many of us believe, "he who dies with the biggest, fully scenicked , super-detailed, and flawlessly operating layout wins!"

It ain't healthy to obsess about perfection. I should know. My obsession with photography drives Joe (the MRH publisher) nuts. And it sure didn't take long for me to turn my kids off to model railroading. "Hey, that's nice but we could make it better here and leave this part out, and..." Next thing I knew it was, "Yes dad, that's nice. Can I go play video games now?"

Obsession in the train room can be mistaken by spouses as "you love that ^#$@! 12-car set of brass 20th Century Limited passenger cars more than you love me!"

Some of us obsess about size. Size does matter when it comes to main-line length, train length, and number of turnouts on our layouts, or so we believe. Bigger is better! Do you feel your modeling is inadequate because you don't have a purpose-built 6000 square-foot barn filled with trains?

If you had that much space you'd never be able to fill it with a completed layout, at least not by yourself. Either you'll live out there in a model railroad submarine, coming to the surface only to receive food, air, and more flex track, or you become a general contractor riding herd on a motley crew of 'helpers'.

Detail is another hole we gleefully jump into. Is a structure complete in your eyes until the interior has period-correct wallpaper, scale bedclothes on the bed, proper lighting fixtures, scanned art on the wall, a hand woven rag carpet, toilet paper rolls that actually rotate plus a crowd of appropriate dressed people all around; walking, talking, unloading trucks, and driving cars? And don't forget the pigeons (or are those seagulls) on the roofs!

Operation can turn into another black pit. "I can't believe you used a form 19 for that train order that clearly needed a form 31, and by the way I see you're not underlining each word as the operator reads it back to you." How thick is the rule book your uncle Fred liberated from the railroad where he worked, and you're requiring everybody to memorize before they can touch a train? And spot rules test are good! They help the crews stay proficient.

Well, brothers (and sisters) in trains, we modelers are prone to being obsessaholics. But, if we do it because we enjoy it, while at the same time not abandoning spouses or alienating kids and friends, or blowing the rent money on more locomotives, rolling stock, and structures which join the pile of boxes we haven't had time to open yet, then aren't we just having fun with trains?

Vive la obsession! But do it carefully...

Notes from the MRH Staff

Oops, copy cats, leading articles in March, the NMRA online archive, and more ...

Oops! We're sorry ...

Well, what can we say? With great hoopla we launched the MRH website's new look last month. We thought it was thoroughly tested, even including using a bunch of adventurous MRH readers as beta-testers. The result?

Oops...

It was popular enough that our servers couldn't keep up with the load, leading to performance problems. Exacerbating that were name-server problems by our service provider plus some hidden problems in the software underpinning the site. Suddenly it seemed the MRH website was down way too often.

We're sorry for the inconvenience. Really sorry.

We restored the old site and added some measures to keep it stable. We've also been working with a new service provider, one that specializes in the software used to build our site, to get our performance and reliability issues solved. We're also getting some really fire-breathing new servers to power it and making a few minor revisions to the new site to make it more web-server friendly.

We plan to go live with the new site on April 9th. There will be a 6-hour period during which the MRH website will be in read-only mode while we copy all the files to our new service provider. After that we'll be up and running again, Lord willing. Note that while the transfer is happening you will still to be able to download your favorite online train magazine, read blogs on the forum, and watch MRH Theater videos. You just won't be able to post.

The web site problems were the bad news, the good news is our circulation and website visits are on an upswing which helped cause these problems!

Copy Cats

Do you have a friend or two (or two hundred) with slow internet connections or who don't like navigating the web, but want to read MRH? Make them copies of MRH on CD, DVD, or a USB thumb drive! We're much more interested in increased circulation than we are in making a profit on each issue sold. Besides, given our cover price,

how much profit can there be? Do us a favor and become a MRH copy cat!

Last issue's ratings

Drum roll please! The five top-rated articles in the March 2011 issue are:

- **4.7** Track is a model too!
- **4.6** Modular Adventure: Roundhouse building
- **4.5** Lite & Narrow: Weathered wood fence
- **4.5** Comme-N-tary: RuNNing on empty
- **4.4** Aging wood with acrylic washes
- Issue overall: **4.7**

Please continue to provide ratings for articles – the more people who take a few moments to rate articles, the better we are able to judge what our readers would like to see. This is your shot at letting us know what kinds of articles float your boat (or train)!

NMRA online archive

The NMRA has been at work digitizing the photo collection of the Kalmbach Memorial Library. They are pleased to announce that the online archive is available for use. Check it out at archive.nmra.org.

This service is available to members and non-members alike. Copies of the photos may be ordered (NMRA members get a price break – another reason for signing up!).

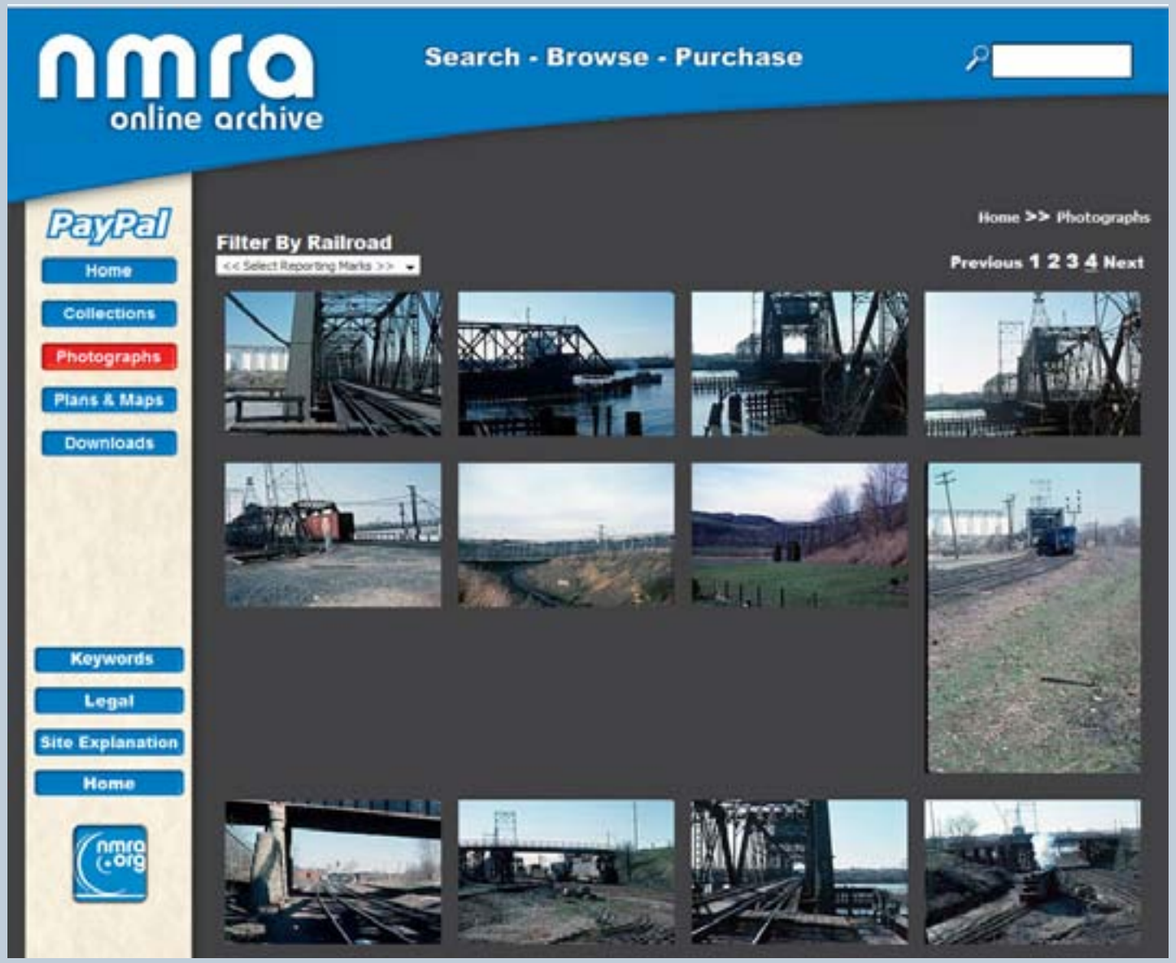

Figure 1: The new NMRA online archive website.

Figure 1 shows the online archive in action with part of the bridge photos collection.

The digitization is not yet complete. If you're interested in contributing to this worthwhile project look into the NMRA Diamond Club at www.nmra.org/diamondclub

Why don't you ...

We often hear, "Hey, why don't you guys do an article on xxx?"

We'd love to. But there are only so many hours in a day making it difficult for us to write everything anyone desires. If you're waiting for an article on your favorite subject, have you considered writing it yourself?

We're looking for articles on the following topics (and others too):

- Loco detailing
- Rolling stock detailing
- Structure building
- Bridge building
- Model railroads operation
- DCC decoder installation
- Airbrushing
- Bloopers - what was your biggest mistake and how did you cope with it?
- Doing the hobby in modern times using online resources
- Modular modeling with Free-Mo or One-Trak

If something in this list tweaks your imagination, the first step you take should be to read the *MRH Submission Guidelines* under the Authors/Submission Guidelines menu on the MRH website – or surf to model-railroad-hobbyist.com/submission_guildelines.

You don't need to write a War and Peace length article. We don't have the room to publish many of those so your chances of acceptance will be better with something shorter.

Including a short video with your article submission also helps your chances as do high-quality photos – we can fix text but not poor quality photos.

We use the following types of articles:

TIP

A TIP is very short, less than a half page and includes one to three photos.

One Evening Project

These articles describe a small project that can be accomplished in an evening or an afternoon. The Scenery Scene, Tool Shop, and Engine House

series are all One Evening Projects. These have a couple hundred words and from 6 to 10 photos.

From the Workbench

Up to 500 words and 10 to 20 photos. This type of article is about building something at the workbench and usually is about 5 pages in length.

Layout Tour

We like to format our layout tours as interviews with the layout owner and accompany them with a dozen or so good-quality, eye-candy photos, plus other photos documenting construction or aisle configuration. Panoramic shots, showing the layout from a particular place as one spins 360 degrees are a plus! A layout tour should be accompanied by a video clip showing the layout in action and with highlights of the owner interview. These articles run around 11 pages in length.

Step-by-step

These articles describe in detail how you built or modified a model. They often include several dozen photos and 4000 words of text. The photos should clearly illustrate each step described in the text. These articles can run up to 20 pages (or more if the article becomes a multi-part split across multiple issues of MRH).

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(*well it is April and we had to do something silly!* - Ed)

Actually, we do work very hard to make each issue of MRH great!

First Monday of the Month

We have people asking when each monthly issue comes out, and the answer is: the first Monday of every month. If you're wondering when you'll see the next issue, just look at the calendar, find the first Monday of the month, and that's it!

That said, we do try to upload each issue to the mrhmag.com web site a few days early. This lets MRH forum regulars grab an "early" download. We figure these early-bird readers will let us know if we really messed up something like a download script or ad link, letting us get 'em fixed before sending out the subscriber e-mail to come-and-get-it.

Hang out on the MRH site the weekend before the first Monday of the month – the new issue may already be available.

Shows we're attending

We're going to the following shows, in force in 2011. Come stop by the booth!

- ***NMRA National Train Show***
  (Sacramento, CA) - Jul 7-10, 2011
- ***National Narrow Gauge Convention***
  (Hickory, NC) - Sep 6-11, 2011
- ***Fine Scale MR Expo***
  (Peabody, MA) - Oct 12-16, 2011
- ***RPM Conference (formerly Naperville)***
  (Lisle, IL) - Oct 20-22, Lisle, Illinois
- ***Craftsman Structure Convention***
  (Mansfield, MA) - Nov 2-6, 2011
- ***Trainfest***
  (Milwaukee, WI) - Nov 11-14, 2011

Come on by and say hello!

Reader Feedback
(click here)

Remember When?

Using Sound to Enhance Your Layout

Want your layout to do more than just look good – but to sound good too? Then you don't want to miss the techniques we cover here ...

Reader Feedback

— by M.R. Snell
Photos by author

Figure 1: Two types of switches can be used to activate each module. The first is a 'normally open' (N/O) momentary switch such as a push button which is used for a 'play once' application. The second is a toggle which allows continuous play while the toggle is in the on position.

One of the common goals of model railroaders is to make our layouts as realistic as possible; our trains running through carefully executed scenery often enhanced with visual animation. While visual animation can really add to the look of the railroad environ have you ever considered also employing audio animation to further bring your layout to life?

Several years ago during an operating session on my layout I noticed something seriously amiss. It was the middle of the night in "railroad time" and the only activity on the railroad was in a large classification yard where the next day's local trains were being assembled.

As the yard crew stopped to read their waybills it was quiet – eerily quiet to the point I had wondered if the operators had vaporized, leaving only the sound of the transformer fans filling the room. It was then that I began to notice what a noisy world we really live in – just close your eyes and listen. As I model north-central New Jersey where the air is constantly filled with highway, city, industrial, and other noises, I wasn't happy at all with this situation. This began my quest to enhance my layout by making it sound more realistic.

When we think of sound, there are two types of basic sounds we hear every day. Ambient sound is the low "rumbling" we hear everyday, most of which we have learned to tune out over the years. This can be noise from highways, water splashing along a river bank, or the ever present undertones that permeate both city and rural environments. The

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MRH
Questions, Answers and Tips

Reader Feedback *(click here)*

QUESTIONS AND ANSWERS

Q: What's the best way to remove paint from styrene?

A: It depends on the paint, and to some extent the type of plastic as well. If you search online you'll find answers ranging from brake fluid to decal setting solution.

I haven't used brake fluid myself, but I have noticed that it those touting it usually add stern warnings that it may turn the plastic brittle or disintegrate a locomotive shell. I suggest saving brake fluid as a last resort and I'd look for an undecorated shell first.

For spot paint removal, such as logos and road numbers, I've found Micro-Sol works pretty well – use a cotton swab to apply it heavily and let it work for a few minutes. Then apply more Micro-Sol on a cotton swab and you'll start to work the paint off. I've used this to transform locomotives originally lettered for one Genessee & Wyoming family railroad to another.

For bulk paint removal, I've had success using 91% rubbing alcohol (available in really large containers at Walgreens) to soak entire Atlas locomotives or styrene painted with acrylics. As far as I can determine, the plastic was undamaged. Be prepared to soak the pieces for awhile – perhaps overnight. Then go to work on them with an old toothbrush.

For some coatings, a lye based stripper, such as Purple Power is needed – www.clean-rite.com alternatively, Easy-Off oven cleaner or Castrol Super Clean (available by the gallon at Wal-Mart) can also be used.

If you need to remove Scalecoat II paint, Scalecoat makes "Wash Away" to remove their paint.

Heating the stripping solution (to 140 degrees Fahrenheit or so using an incandescent bulb) is recommended by some to improve the efficiency of some paint strippers. Using strippers in an ultrasonic cleaner also helps. MRH suggests caution with these methods.

One thing that seems to work well, but is only rarely suggested, is a sand blaster or air abrasive gun. With the right type of powder, it can remove a single layer of paint, all the paint, or give parts some 'tooth' prior to painting. It also works very fast. One hobby model (as opposed to those used in auto body shops) is the Badger 260 (www.badgerairbrush.com/Badger_260.asp) available through hobby shops and Walthers.

One discussion I saw on the Atlas forum had a modeler attempting unsuccessfully to strip a model using all of the following:

Alcohol, denatured alcohol, Pine-Sol, brake fluid, Simple Green, Purple Stuff, sandblasting (which did more damage to the plastic than the paint), and then an ultrasonic cleaner with an additional heater to take the model and water up to around 200 degrees.

He ended up with a slightly warped shell, but the paint untouched!

BLI, who manufactured that model, has come up with an effectively unstrippable paint. In such a case you may need to paint over the original paint. If numbers or lettering are present, try to sand those off to keep their outlines from appearing in the new paint.

A couple of suggestions:

- Try whatever method you choose on an inconspicuous a corner of the model for between 10 to 15 minutes to ensure it's not going to do more damage to the model than the paint.
- Always wear gloves and (if indicated on the packaging) breathing protection when handling this stuff - if it's made to chew up paint, it will likely do a quick job on your skin (and lungs) as well.

— Jeff Shultz

Q: I'm building a trestle. Should I be including refuges, and how far apart should they be placed?

A: Railroads built refuges on wood trestles both as a place for employees who were on the bridge to get out of the path of oncoming trains and as a platform to store barrels of water for firefighting purposes – an important consideration in the days of steam locomotives. Refuges were primarily used on single track trestles.

The spacing of refuges varied from railroad to railroad. From "A Treatise

A Micro Engineering trestle refuge.

on Wooden Trestle Bridges" by Wolcott Cronk Foster, copyright 1900,

"On all trestles of any length, say 200 feet or over, refuge-bays or small railed platforms to receive workmen or track-walkers who may be caught on the bridge by a train, should be placed every two or three hundred feet apart."

— Charlie Comstock

Q: I'm building an HO scale 1950's dining car. Does anyone make HO scale people who are sitting and eating? I also need scale restaurant equipment. Can I buy any of this, or am I going to have to scratchbuild it all?

Dining car kitchens were all built-ins made of stainless steel and black iron and can be replicated by pieces of wood and styrene painted silver and black. Use a diagram of your prototype's dining car kitchen to lay out your model as there were many configurations. Mixers and other counter top accessories were kept secured in a cabinet because of train movement and don't have to be shown. Unless you're building a contest model adding details inside the kitchen isn't necessary as the small windows make what's inside difficult to see.

Any brand of HO people dressed for the '50s will work as patrons. You'll need waiters and porters dressed in white. Unless you have an large budget, getting unpainted figures and painting them yourself will save a lot of money - especially true of the patrons as there can be lots of them. Use Google to search for HO people to check on what's available.

Since the dining area windows limit viewing angles, you don't need figures that are actually sitting. Instead amputate their legs and glue the torsos to the seats so they appear to be sitting. Reposition their arms (cut them off and glue back) to look like diners. Waiters and porters were almost always African Americans dressed in white coats, white shirts, black ties, shoes and pants and worked without hats. Paint any figure wearing a suit accordingly.

If you need tables and chairs, use folded card or plastic sheet stock bent in chair shape and tables with legs.

Table cloths can be made from square pieces of single-thickness facial tissue painted white with diluted tempera paint. Drape the tablecloth over the table and allow to dry. This also works for napkins. Place mats can be painted directly on the table cloth. Use thin stripes of silver paint or marker to make the silverware on the table.

Tables likely feature a flower pot. Make these from a bead with a small tuft of paint brush hair in it. The tops of the bristles can be dipped in white glue and then in fine ballast and painted a bright flower color. Menus can be made from small pieces of bond paper cut out with a manicure shears and folded in half. Glue a menu or two into the hands of a customer. Plates can be fashioned from small sequins painted white or your railroad's china color.

Lavatories had opaque glass so you can't see inside them. Toilet and sink castings can be purchased from Walthers or just cut them out from pieces of scrap plastic sprues. If you study the shapes in a sprue it is amazing what you can make from them.

Don't forget to add details to the roof to match the interior details. You will need vents for the lavatories, kitchen, and hallways. The hallway in a standard heavyweight dining car was not air conditioned, nor was the kitchen or lavatories. Don't forget the roof hatch over the kitchen for filling the ice bunker. Whatever you do, check to see how the prototype did it.

Unless you are creating a contest model, the interior details of a diner can be quick and inexpensive approximations. Dining cars usually had large windows, so make sure the interior of the car is lighted so people can notice all the detail and work you have done..

— Lew Matt

Q: I'm using cork roadbed for the first time. When it comes to bending the cork around the curves, am I supposed to soak it in water so I can curve it properly?

A: I've been using Midwest cork roadbed (HO and N scale) for years and I've never resorted to soaking it in water. Their HO roadbed comes in strips 36" long by $^{1}/_{4}$" thick. N scale roadbed

Midwest HO scale cork roadbed

comes 36” long by 1/8” thick. Both are split longitudinally on a bevel.

I install cork roadbed by drawing the track center-line. Then I split the cork into two pieces along the pre-cut bevel in the center. I lay the cork using yellow glue to hold it in place on my plywood sub-roadbed. You might consider a latex (not solvent!) construction adhesive if installing cork roadbed on rigid extruded-foam sub-roadbed. I use a map tack every couple of inches to hold the cork in place while the glue dries. I keep laying more pieces of cork until I run out of map tacks, wait for the glue to dry, then add more cork.

— Charlie Comstock

Q: I am having problems planning my 4’x8’ layout. First, how much room do I really need for this layout? I want to do a modern railroad with at least two bridges and a river, a yard, and several industries. I want to run Union Pacific and BNSF trains. Can you help me?

A: It sounds like your 4’x8’ will be an island layout. You’ll need to allow aisle space on all sides of it for access. If you go with bare minimum 24” aisles that will mean you’ll need a 8’x12’ room to hold your layout.

It sounds like your list of desired features is a bit ambitions for an HO scale 4x8 layout and modern (large) equipment so perhaps N scale is what you need.

There are many offerings in N scale for both UP and BNSF, so acquiring locomotives and rolling stock won’t be a problem.

However, a 4’x8’ island layout implies a maximum track length of 4 + 8 + 4 + 8 or 24 feet (assuming no curves in the corners!). If you were to invert the plan – that is build 2’ wide benchwork around the walls of the room, that would allow a maximum track length of 8 + 12 + 8 +12 or 40’ in the same room – almost double the mainline length.

This extra length might be enough to let you model in HO if you’d like larger equipment. Bear in mind that 89’ tri-level auto racks, double stacks, and 85’ hi-cube cars are not going to like anything much tighter than a 30” radius in HO – in other words you’ll still be a bit cramped. If you can live without those long cars you’ll probably be able to drop your minimum radius down to around 24”, at which point such a layout becomes even more doable.

If you stay in N scale but with an around-the-walls configuration, you should have no trouble at all fitting in everything on your list.

The bad things about an around-the-walls layout are you need walls and a way to get into the middle of the layout – either a swing or liftout section or a duckunder.

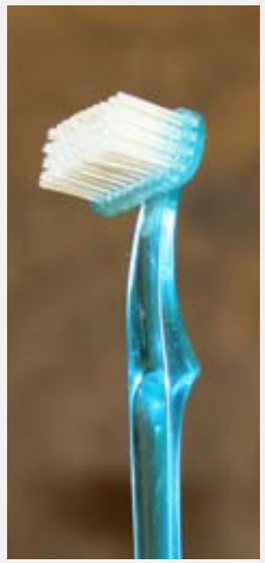
Good luck with your layout planning!

— Charlie Comstock

TIPS

Build your own Ballast Rake for practically no $$

Here's a simple, easily made tool that helps spread and level ballast before adding glue.



It started life as the cheapest toothbrush I could find at The Dollar Store. The brush needs to be a rectangle that is wider than your track gauge.

I cut off the handle close to the brush, trying to match the shape of the other end of the brush. I filed the back of the head and the end of the handle to get a flat gluing surface. I thought I'd need to use epoxy but found that MEK worked to glue the handle to the back of the brush. You may have to experiment to determine the best adhesive to use with your brush.

I tried the 'rake' and was pleasantly surprised at how quickly it spread and leveled ballast, while leaving very little of it on the ties. I found that putting the bottom row of bristles in the web of the rail removed virtually all ballast piled against the rail – stuff that, until now, I found onerous to remove using other techniques. This is now the first tool I use when ballasting.

— Terry Roberts

Ballast rake at work.

Reader Feedback *(click here)*

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A Custom Animated Sign

Your name in lights ...

– by Rick Wade

Reader Feedback *(click here)*

I wanted to jazz up my newest building using Miller Engineering's #65812-R "Arrow Series" animated sign. Since my buildings have 'personal' names none of the included peel-n-stick graphic overlays fit the bill. A custom overlay would be cost-prohibitive but the folks at Miller said I could make my own using an inkjet printer and transparency film.

I used my scanner to scan the sign overlays supplied with the kit. This gave me a template for the exact shape and size of the overlay.

Next I used my graphics editor "mask" tool to draw an outline around a sign and delete everything within the mask. This left me with an hole the correct size and shape for my graphics and text (figure 2).

I spent about 15 minutes coming up with the design in figure 3. Hint, use dark colors for the background and white or a very light color for text. I made extra copies of my design before printing to have extras in case of accidents during cutting (they came in handy!)

Test prints on plain paper are a good idea – I needed to adjust the size a bit. Instead of transparency film I used Avery's #4383 "Clear Sticker Project Paper" for the final output. After printing, I cut out the overlay using sharp scissors – I get a cleaner edge with them than with a hobby knife.

Figure 1

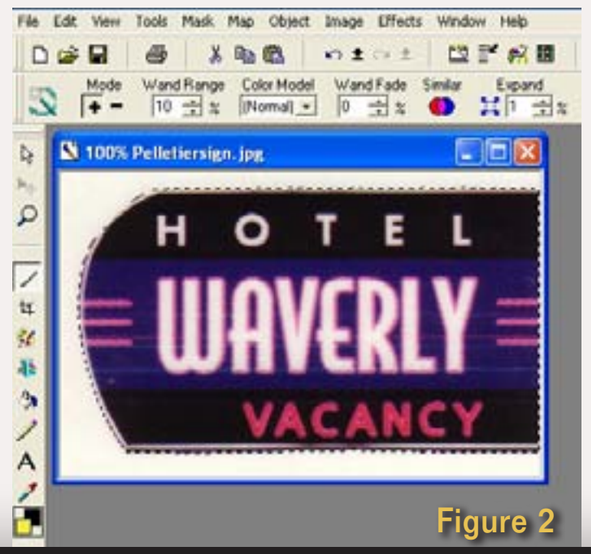

Figure 2

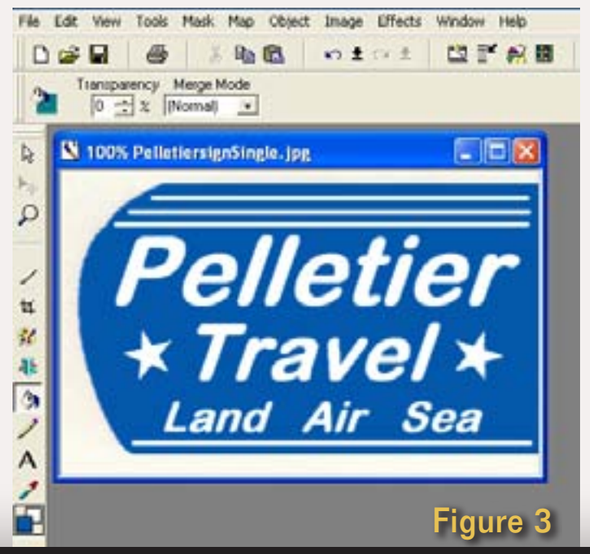

Figure 3

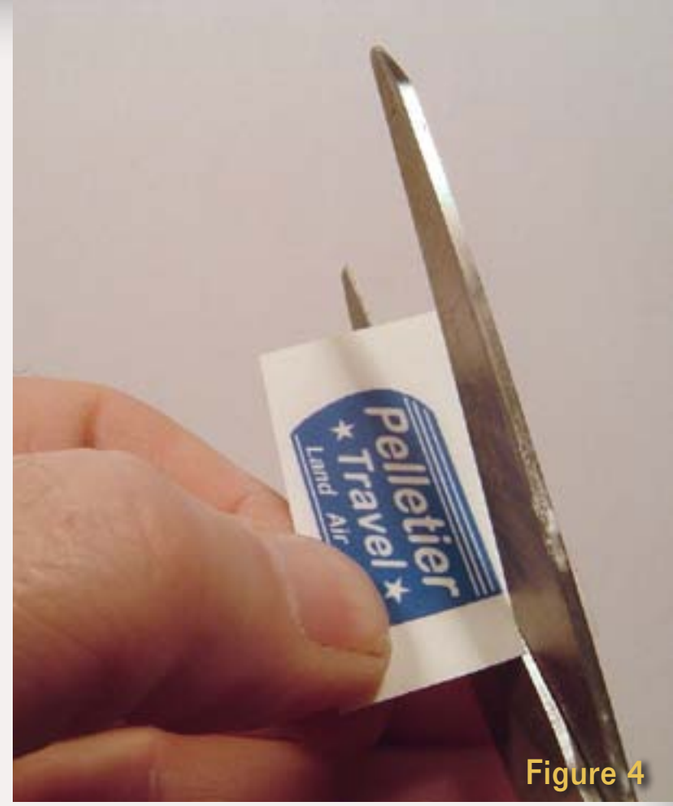

Figure 4

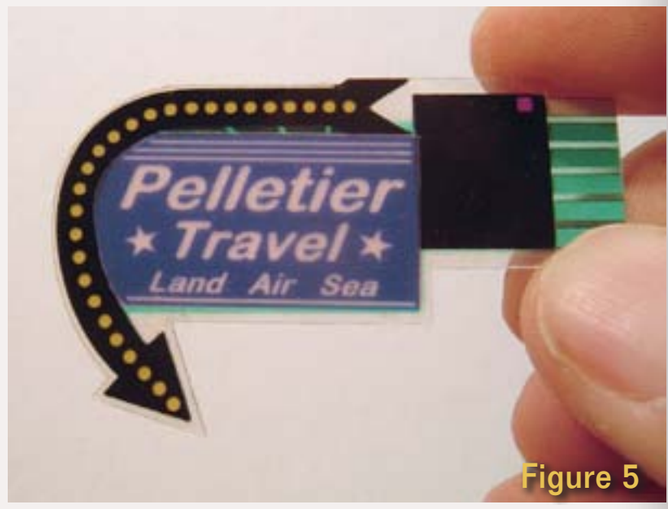

Figure 5

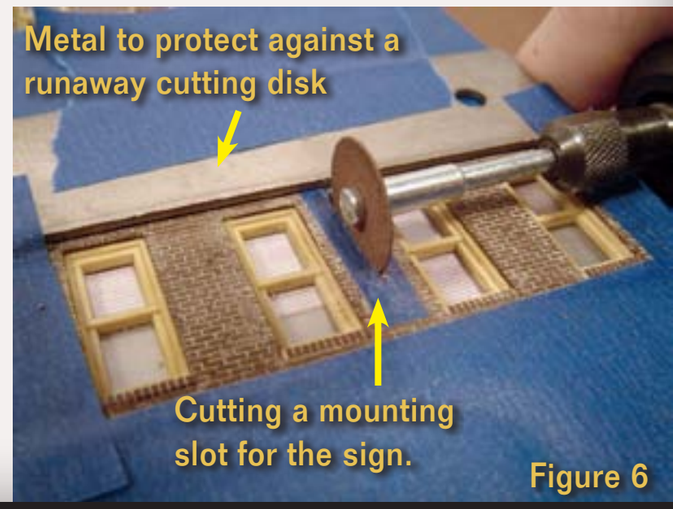

Figure 6

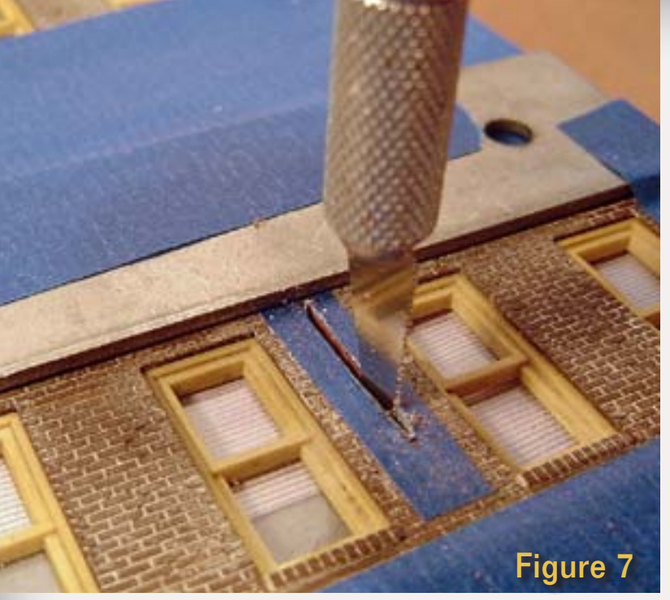

Figure 7

I carefully stuck the overlay to the sign. The label is movable until firmly pressed in place – helpful during alignment. Figure 5 shows the Miller sign with my custom graphic overlay.

I made a slot in the building with a cut-off disk in a motor tool to mount the sign (figure 6). I marked a piece of masking tape where the slot would go as a guide and added more masking tape and a piece of metal to protect the wall in case the cutting wheel 'jumped'.

I cleaned up the cut with a small hobby saw and added an 'angle iron' frame around the sign made of .060" styrene.

Figure 8 shows the sign after painting and weathering, installed in its angle iron frame.

A custom animated sign really helps personalize your layout adding a little extra class. I spent a few hours and cost was reasonable. Give a sign a try on your layout! ☑

Figure 8

Click the video thumbnail to see my sign in operation!

Video won't play? Click here to play it on YouTube

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Dave Adams'
Durlin Branch

The Durlin Branch has been under construction for two decades. This On3 masterpiece lives in a special-built room behind Dave's house where it migrated from its previous home in his garage. Dave's meticulous craftsmanship is evident throughout.

EXTRA 2011 WEST
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Advanced section

Dave Adams' On3 Durlin Branch layout is one of many fine Bay Area layouts available for attendees to tour prior to the X2011 West National Convention in Sacramento, California, July 3 to 9, 2011. Surf over to www.x2011west.org for more information.

EXTRA 2011 WEST
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Article and photos by Charlie Comstock

Reader Feedback
(click here)

There's something special about small locomotives assaulting steep grades through rugged mountains, exhausts barking loudly with echoes bouncing to and fro from cliff faces. By narrowing the track gauge railroads economized on the cost of building right-of-way and more importantly, could use tighter radii where there wasn't the real estate to keep curves broad. Welcome to the world of Colorado narrow gauge. Dave Adams was captivated by the feel of narrow gauge three decades ago and never looked back. His current layout is housed in an 18'x27' room he added behind his home (with the help of several friends).

Dave Adams invited me to visit his On3 layout, based on the Denver and Rio Grande. Dave calls it the Durlin Branch although there was never a branch with that name on the D&RGW. Everything is well done, it all fits together – scenery, structures, and rolling stock. It's obvious from the card-card boxes and paperwork that Dave likes to operate.

Charlie: Dave, when did the On3 bug hit you and how long have you been model railroading anyway?

Dave: Well, I'll start with the last question first. My parents claim I was model railroading ever since I was born. My dad had built a model railroad when he was growing up. When he went into the army for World War II he sold all his equipment – mom said that was a mistake. Turns out it was, but we recovered. The On3 bug really started to bite in 1973 after I moved to the Bay Area and ran into some narrow gaugers, including the Grandts, at the old East Bay Society of Model Engineers. There was another group that was working on an On3 and On2 layout on School Street in Oakland. Essentially they taught me narrow gauging and

Figure 2: Ken Kukuk's C-21 No. 361 crosses the road entering Carrumba at the top of the 3.8% climb from Chama. The railroad structures in Carrumba are modeled from those at Cumbres on the D&RGW.

Figure 2

Figure 3

scratchbuilding from the ground up, so I've been at it ever since.

Charlie: So you've been doing On3 for over 30 years?

Dave: That makes it sound like I'm getting old!

Charlie: It makes it sound like you should have it right by now!

Dave: Either that or I need a few more years to practice.

Charlie: Well, I will say all your equipment runs beautifully smoothly. This isn't something you normally associate with brass engines.

Dave: Well, some of the locomotives are mine but some belong to a gentleman named Ken Kukuk who doesn't have room to build an On3 layout where he lives in Los Angeles so he rotates motive power in and out of the Durlin Branch to keep it in operation. Anyway, most of the locomotives have been remotored and regeared. Now we like Tsunami sound decoders. Before that we were using Lenz and Zimo decoders for motor control and a Soundtraxx DSX for sound. I converted to DCC in 2000.

Figure 3: Chama is the main yard on Dave's layout. After some kidding by his ops crew, he fully detailed the inside of the operator's bay.

Charlie: You're moving to an all Tsunami fleet because it sounds better?

Dave: Yes, there's no doubt about that. Tsunamis will replace decoders that fail, and maybe others as I find the money.

Figure 4: C-18 No. 320 is working Extra 320 east up the 1% grade between Carrumba and Fritz Park. The stock cars suggest there will be work at the stock chutes in Fritz Park or perhaps down the line in Durlin.

Charlie: Was this room originally part of the house?

Dave: No, the room is an 18'x27' addition put up with a lot of sweat equity. My father in law and Jim Holmes (retired from the Southern Pacific) along with Dick Lucas, Rod Jenson and John Parker invested a lot of time in it.

A number of the modelers who ran on my old layout came over and helped put this layout up. I've got a good friend, Jack Fishbourne, who came down from Calgary, Canada a lot and helped on this and Ken (my locomotive connection) came all the way to San Jose from Los Angeles. A pretty loyal group of folks!

It's been a lot of fun and over the years I've tried to convert them all into operators and with a pretty good success rate so far.

Charlie: Tell me about your trackwork. How much of it is there?

Dave: I really don't know. I really enjoy hand laying track, so how much had to be put down wasn't important to me. It was a matter of could I fit enough track in the room to support the kind of operations I wanted. So far the railroad's worked out pretty well. I wish I

Figure 4

would have known then, what I know now about operations but I'm not looking back. I'm still having fun and going forward.

As far as the trackwork goes, it's all hand-laid. I laid all of the turnouts in place, but I had some help with the track between turnouts. I figured if things were going to go wrong it would be at a switch and I didn't want to be mad at my friends. This way I get the blame for any problems at a turnout.

Charlie: I notice that you have some stub turnouts in Durlin.

Dave: Yes I do. There's a scratchbuilt 3-way stub turnout over there that's one of three I built. The others existed on a previous layout with close to 90% stub switches. When I decided we were going to run some heavier engines and use larger rail on this layout, I did the same thing the prototype did – I went to points turnouts rather than stubs.

Charlie: Can you give me some idea of what number frog you're using?

Dave: The frogs are primarily #6.

Charlie: Is the trackwork reliable?

Dave: It is. The railroad has a reputation for being derailment free in operating sessions. If something happens during an op session, we write up bug reports, then work on them between sessions.

Text continues on page 37

Figure 5: The town of Durlin is the end of the line on the railroad's namesake branch. The depot is a compressed model of the one at Silverton, Colorado.

Figure 5

Dave Adams'

Durlin Branch

Layout Statistics

Era: 1939

Locale: Colorado

Style: Proto-freelance D&RGW

Configuration: Double deck

Scale: On3

Trackplan: Mainline loop below with the Durlin branchline leading to the upper deck.

Size: 18′ x 27′

Minimum radius: 40″ mainline, 36″ spurs

Track: Hand-laid

Turnouts: #6

Control: CVP Easy DCC with radio throttles

Elevations: 40″ to 63″

Roadbed: 3 wood splines with spacers in between topped with Homasote®.

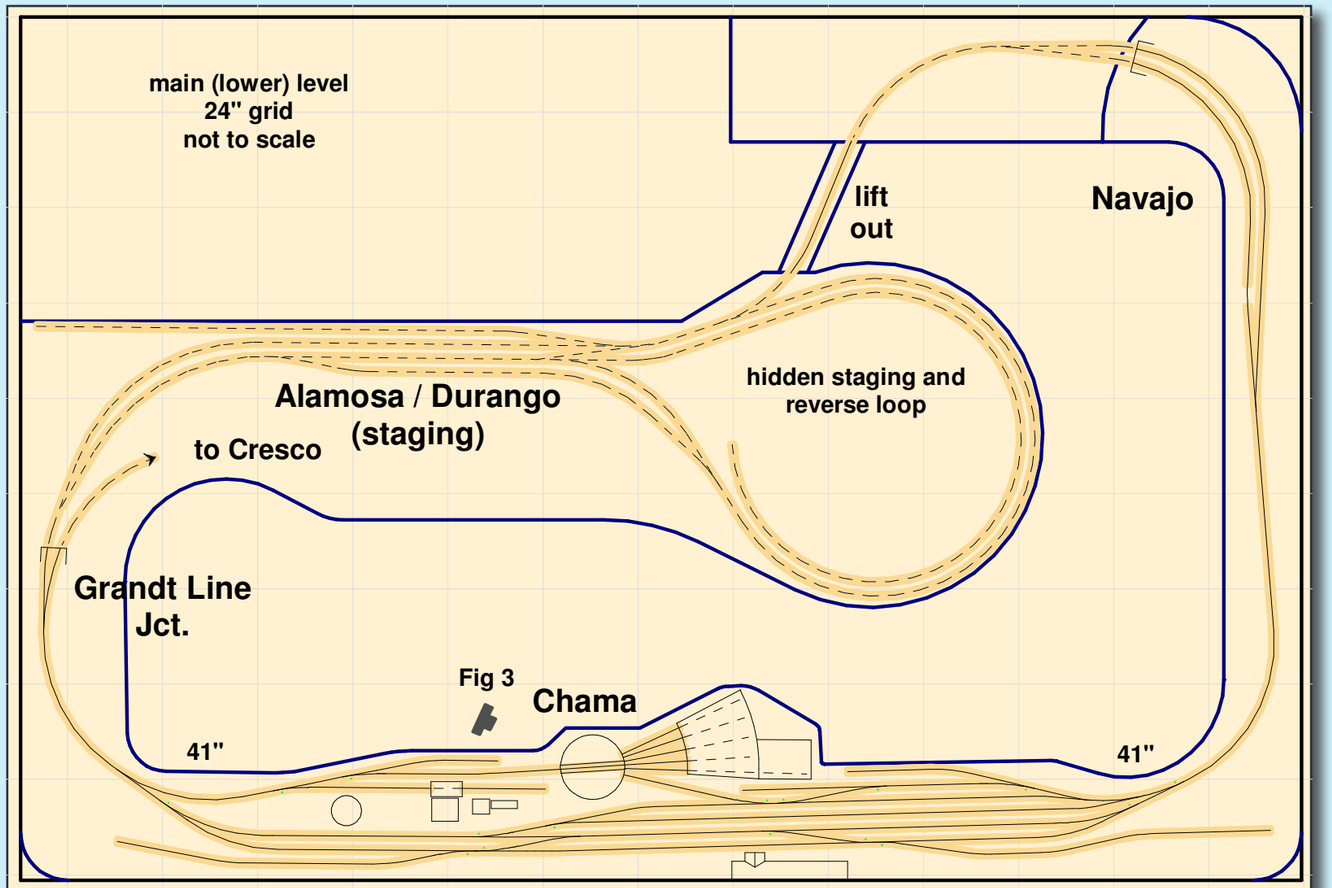
Staging: Three through tracks and two stub ended tracks.

Dave Adams got started in the hobby with an America Flyer S gauge oval while in grade school but he switched to HO scale around age 10. A junior membership in the Corvallis Society of Model Engineers soon followed. He helped build different railroads in his family's home, the last of which lasted until about three years ago.

He graduated from Oregon State University and moved to the San Francisco Bay area in 1973, where he built a small switching layout in an apartment. A small On3 layout soon followed along with a bad case of narrow gauge fever.

Dave currently resides in the San Francisco Bay area with his wife, Carla.

Dave next to Durlin



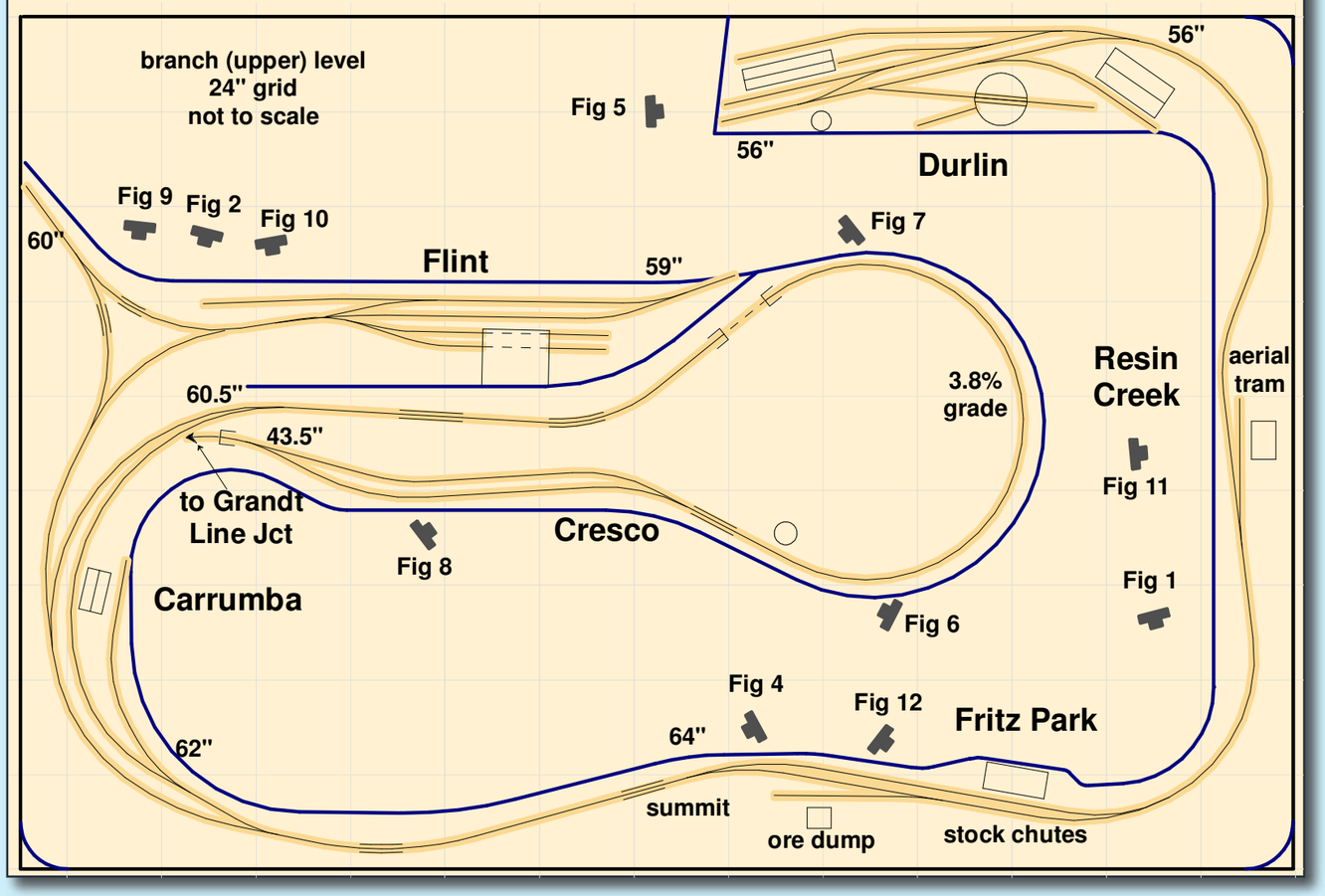


Figure 6: Engine 320 pauses at Cresco to take on water before resuming the grueling climb up the 3.8% grade to Durlin. Dave animated the operation of the water spout.

Continued from page 35

We kept fixing things until we got to the point where things aren't happening any more. Operating a lot has a lot to do with getting a good operating railroad. You don't want to be embarrassed the next time everybody is over so you get problems fixed between sessions.

Charlie: There's a grade between the two decks. Was that a design element or did it just kind of happen?

Dave: One of my original designs had a helix to get trains between the two decks. But I discovered that I'd be running a granger railroad on two decks. What I really wanted was to model mountain railroading with small engines and a helper district. This convinced me to 'waste' the entire peninsula gaining 18" from Grandt Line junction up to Carrumba and that resulted in the 3.8% grade.

Charlie: That's steep!

Dave: When we're doing double heading, there's a reason for it. These small engines can't handle much tonnage uphill individually and aren't pulling the trains on their own. There's even a short section of 4% coming up out of Durlin.

Charlie: Your railroad is covered with trees. How did you get them?

Figure 6

Figure 7

Figure 7: A caboose rolls through the tunnel on the stiff 3.8% grade up to Carrumba from Grandt Line Junction. Note the blasted rock inside the tunnel.

Dave: The pine trees are High Pines Limited, run by a gentleman named Lynn Ebel. I ran into him a long time ago and was able to order large boxes of these from him at a reasonable discount. That seemed to be an easy way to get an instant forest. The aspens are all made from materials procured at places like Michaels (craft store). It usually goes under the name of Mini-Gyp. I pruned the trunks, then pinched the trunks together, wrapped them up with white floral tape and used a black marker to create the eyes in there. I used Design Master floral sprays to get the coloring in the leaves. I've obviously chosen to model the fall – I think because I like that season in Colorado. Carla, my wife, and I have made a lot of trips back there.

Charlie: It is very colorful. Are your rocks carved or cast plaster?

Dave: The rocks are all plaster. They're traditional rubber mold castings of plaster or Hydrocal®. I made some of the rubber molds from rocks I picked up. Some I made in the field. Others are commercial rubber molds from a variety of different suppliers. There is also large box of rubber molds that makes the rounds of the narrow gaugers here in the area. If you're working on rocks, all of sudden this big box of molds may just show up. So there's quite a bit of variety to choose from.

Charlie: Variety is good with rocks!

Dave: The coloring on them is straight out of Paul Scoles' article in the Gazette a number of years ago – using universal tints with water in spray bottles.

Charlie: Spray bottles?

Dave: Yeah. It goes real fast and it creates an effect that's dye-like. Most of the people who have seen the railroad have appreciated it.

Charlie: Do you do anything with your rocks to make them accept the tints?

Dave: The hard part is the seams between rocks. I ended up overlapping rocks an awful lot. After I peeled off a rock mold that was overlaid, I'd take a look it and use a chisel or something sharp to pop away the top casting until I got to the point where there was a really tight seam between layers of rocks. The 'popping' leaves the surface of the plaster porous so it will take stain just like the surface made from the rubber mold. If you try to cut or tool the rock, you get a smooth, sealed surface that just isn't going to take stain – the colors won't soak into a smooth surface the way they will a shattered surface.

If you look carefully you can see I do a lot of spraying from the top and not from the bottom, that's because of the orientation of spray bottles. So if you look up you're going to see places where you should be seeing shadows, but that's

Figure 8

Figure 10: Late-afternoon sun slants in low on Consolidation 320 struggling up grade toward Carrumba with a short string of livestock cars.

something somebody else can figure out how to avoid. I'm not going to rework the layout to solve that problem.

Charlie: Did you have to scratchbuild all the structures?

Dave: If a kit was available that was close to what I needed, I'd try to make use of that just to save construction time. The majority of the buildings had to be scratchbuilt just because people weren't making kits in quarter-inch scale (O-scale) of the Rio Grande buildings I needed.

Most of the buildings in the town of Flint are kits or kitbashed with the exception of the Kukuk and Holmes Blacksmith (figure 10) which was built by Jim Vail for me. The other buildings include some laser-cut peel and stick buildings and resin castings (Design Tech) or plaster castings (Downtown Deco). There's also a Thomas Yorke kit building in there.

Some of the buildings got built twice. Originally they were built as flats, then I changed the design of the town and we basically had to take the flats and add the rest of the building behind them. I had to scratchbuild the coal breaker and powerhouse at Flint. If you don't scratchbuild, you're really missing something.

Charlie: The town of Durlin is the namesake of the layout. It's the terminus of the branchline. Would you tell me about it?

Dave: I actually transported Durlin lock, stock, and barrel from a much smaller previous railroad I built in the garage. It essentially represents the kinds of industries that were in Silverton, Colorado. The depot is a compressed version of the Silverton depot.

Durlin basically is a bad pun. It arose from when Cliff Grandt started shooting Delrin®, a new engineering plastic. Cliff said people would call up and say, "Send us some of those good 'durlin' parts you have." So we picked the name from there saying it sounded pretty Colorado and railroady. So that's where the name came from, there's not an actual Durlin anywhere.

Charlie: I see you've got a armstrong turntable there?

Dave: That's right. It's operated by a hand crank on the fascia connected to a worm and gear underneath it. The gears came from Diamond Scale models – at one time they would sell gears for their turntables independently. The gear box is made from plywood with bronze bushings. I connected the hand crank to the gears using metal rod and some universal joints from the hardware store. This turntable has probably

What is On3?

On3 is O-scale, $^1/_{48}{}^{th}$ real size or $^1/_4$" = 1 foot, but with 3 scale feet, or $^3/_4$" between the rails instead of standard gauge's 4' 8$^1/_2$" between the rails.

On30 is similar but has 30" gauge.

On3 is sometimes called 'fine scale' because the wheels (treads and flanges) and track (flangeways) are modeled more accurately than 'standard' O scale models.

been in operation for about 25 years so there's something to that kind of basic construction that's part of the reliability of the railroad.

Charlie: You're modeling something that looks like it's from Disneyland. What was it used for?

Dave: It's not quite Disneyland, but it is a model of a balanced bucket aerial tramway from the Rio Grande Southern (figure 11). I based my ore bin on measurements I took in 1976 of two different ore bins that were on the RGS. I didn't have room to model to top of the tramway so the cables just go up to the room's ceiling. In reality, there would be a mine head up there and the tramway would be used to bring the ore down.

Charlie: Too steep for trains?

Dave: Yes it is and it also was a way to cross ravines or other natural obstacles. There are an awful lot of aerial tramways in the mining areas in Colorado.

Charlie: How does it work?

Dave: A balanced bucket tramway has two buckets. While one was bringing loads of ore down, the other, usually

Figure 9

Video won't play? Click here to play it on YouTube

empty bucket, was going back up. Because the down bucket was heavier, they let gravity run it using brakes to control speed.

They did need to lift supplies up to the mine head and they'd often put them in a bucket or they might lash things like mine timbers or machinery to a bucket, especially if there weren't any half-decent roads to the mine head. If the uphill load was too heavy, a hoist engine might be required to lift them.

Figure 9: Water made with EnviroTex® shows depth, and pours without a nasty smell. Dave cautions to be certain there are NO holes, even pin holes, in the river bed or it will leak out all over everything.

Anyway, this was one of the things I wanted to include on the railroad even though I didn't know of any prototype trams on the Silverton branch. Then I found out afterward there actually was a similar operation on the Silverton branch between Durango and Silverton! I've got some photos of that structure, but it was near collapse, nowhere near as well preserved at that time as the ones on the RGS were.

Charlie: Tell me about the depot in Chama?

Dave: When I replaced the 15-year-old foamcore stand-in depot, a good friend of mine, Jim Holmes said "Your operators can see inside that operator's bay. What are you going to do about an interior?"

Text continues on page 42


MINERS HOTEL
VAIL'S
est. 1923
GENERAL STORE
HARDWARE APPLIANCES FEED
VAIL'S
MINERS HOTEL
ROOMS
HOT BATH
POKER
GIRLS
BAR
KUKUK & HOLM
BLACKSMITHS
LOBAUGH
STEAM DOBLE MOTORS
361
361
RAIL
CROSSING
ROAD
LOOK OUT FOR THE CARS

Figure 10

Figure 10 (previous page): Engine 361 gets set to depart Flint on the upper level.

Continued from page 40

I generally try not to do interiors, but Jim started needling me about my wanting to operate so I needed an operator and stuff in the operator's bay. One thing led to another and it ended up with me researching what a typical station had (figure 3).

I was only able to find one, really old photo of the Chama depot. It was dark but it gave me some idea of what was there. I also obtained some pictures taken in the '50s that showed the operator's desk, the board they put up to hold relays and for the telegraph system.

I'm modeling a typical small-town depot operator bay. There's a telegraph key and sounders, relays, a box with train order forms, paper and waybills and a map, and a desk for the station agent (the railroad's face to the community) to handle their work. Also there is the conductor's lobby to the left. This was a register station so there would be crews going in and out there, picking up orders and registering in and out. Modeling the depot turned into almost a hobby by itself!

Charlie: Well Dave, thank you very much for having me here.

Dave: You're welcome any time!

Figure 11

Figure 11: Train 23 working up grade through Resin Creek on schedule to connect with trains 115 and 166 in Chama.

Figure 12: Getting set to load livestock at Fritz Park.

Figure 12

Detailing the Backs of Buildings - part 1

– *by Tom Wilson*
Photos by the author

Reader Feedback
(click here)

In his "Up on the Roof" article in the Mar/Apr 2010 issue of MRH. Tom wrote about adding rooftop detail to a selection of structures. He continues his structure detailing theme here with various items often found behind buildings – a particularly appropriate view of a building given that their backsides are frequently the side visible from the tracks.

Figure 2: The rear wall of DPM 11600 Carr's Parts building as a basic starting point with no details added.

In this article, I'll show you how I added additional details to some of the buildings I used in my "Up on the Roof" article. I'll also give you some suggestions for adding detail to other types of buildings. Let's get started.

Becky's Rook Station Café

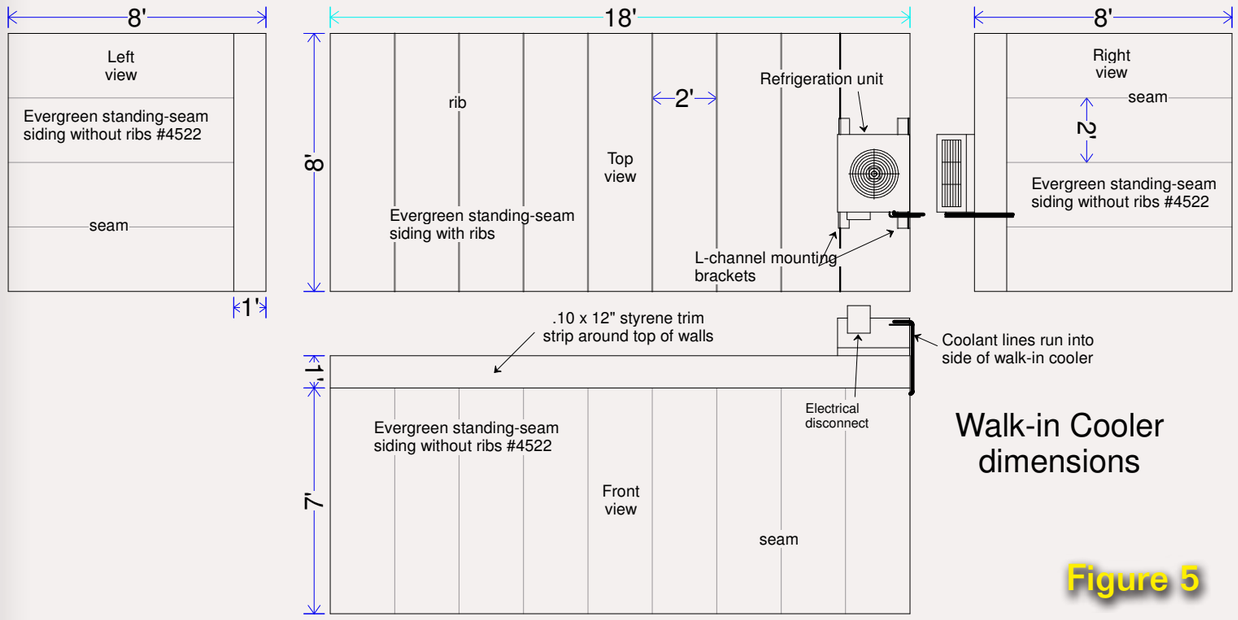
The first building that I'll tackle is Becky's Rook Station Café restaurant (figure 3). Since this building's front faces away from viewers I didn't bother to add any details there. The building is a Design Preservation Model 11600 Carr's Parts Building. See my "Up on the Roof" article for the methods I used to install window glazing and paint this structure. In figure 2 the building is painted and ready for the details.

Walk-in Cooler

The first item that we will add to the building is the walk-in cooler. See figures 4a and 4b, prototype pictures of walk-in coolers for additional ideas. To model the cooler you will need Evergreen Scale Models standing-seam metal roofing #4522. The prototype sectional panels are 24" to 48" wide and 8' high. The sections are joined together to create an insulated box. My model's wall sections are 24" wide. I left the ribs off of the Evergreen styrene sheets that make up the wall sections, but I did install

Figure 3: The finished Becky's Rook Station Café scene showing the details added behind the structure.

Figures 4a and 4b: A typical modern walk-in cooler added to the rear of a building.



Walk-in Cooler dimensions

Figure 5

Figure 6a

Figure 6b

Figure 5: Cooler dimensions.

Figures 6a, 6b: The refrigeration unit started with a N-scale loco.

Figures 7a, 7b: The finished refrigeration unit.

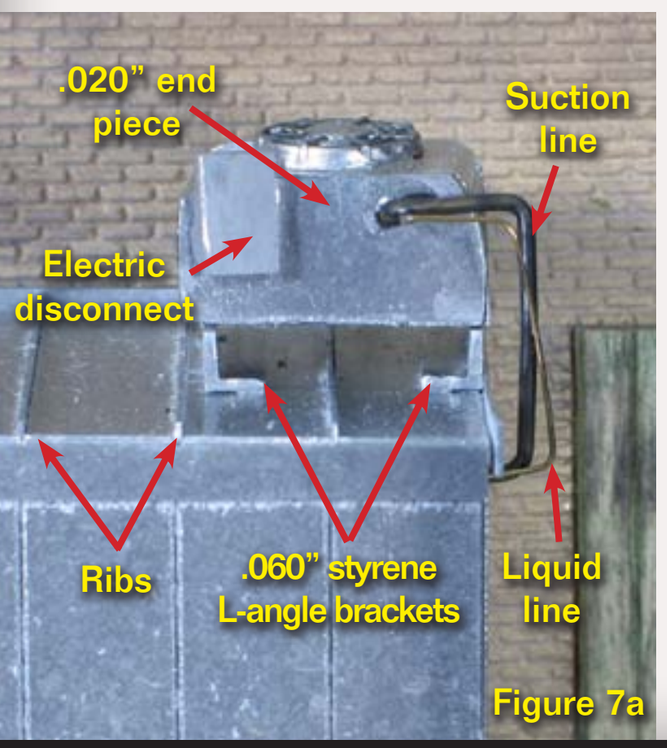


Figure 7a

Figure 7b

the ribs on the roof panel. I cut the cooler's walls and roof from standing-seam styrene per the dimensions in figure 5, then assembled them using styrene cement.

I added the roof ribs and the trim board around the top of the walk-in cooler before painting the box with flat aluminum spray paint from Lowe's.

I made my refrigerator condenser unit from a discarded N scale engine. A locomotive shell from the scrap box can be used. I cut the louvered grille section from the engine (figures 6a and 6b), then filed the ends square and glued two small pieces of .020" styrene to the outside edges. The two small pieces of styrene should just be a little larger than the cut shell. I painted this assembly with the same flat aluminum spray paint as the main walk-in cooler.

See figures 7a, 7b and the lead photo. The completed refrigeration unit assembly is glued to two small pieces of .060" Evergreen styrene angle that I will glue to the cooler's roof. I added refrigerant lines using 26-gauge solid wire. I stripped the insulation off the piece used for the liquid line but left the insulation on for the suction line. I painted the suction line grimy black. I simulated the electrical disconnect with a small piece of styrene, then I glued the refrigerator unit to the top of the cooler. When that glue was dry, I drilled two small holes in the condenser unit and walk-in cooler to accept the refrigerant lines. I used needle-nose pliers to bend 90-degree angles and glued them in place with ACC.

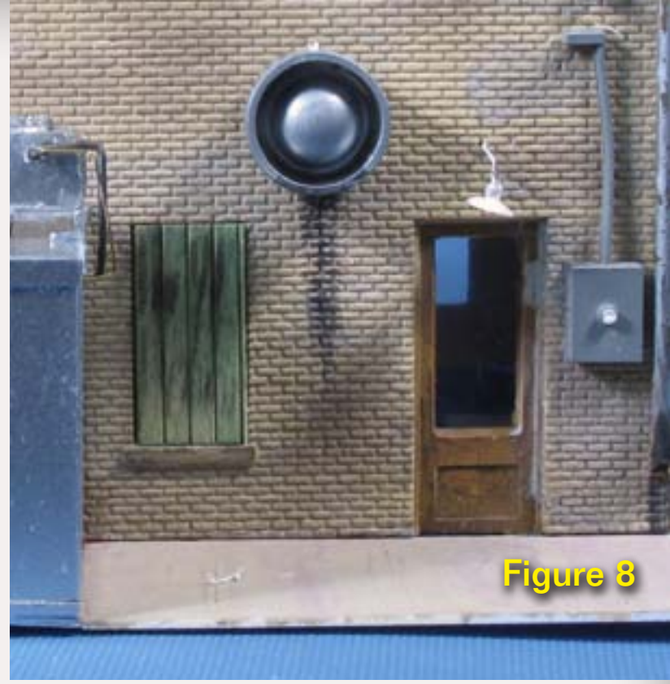


Figure 8

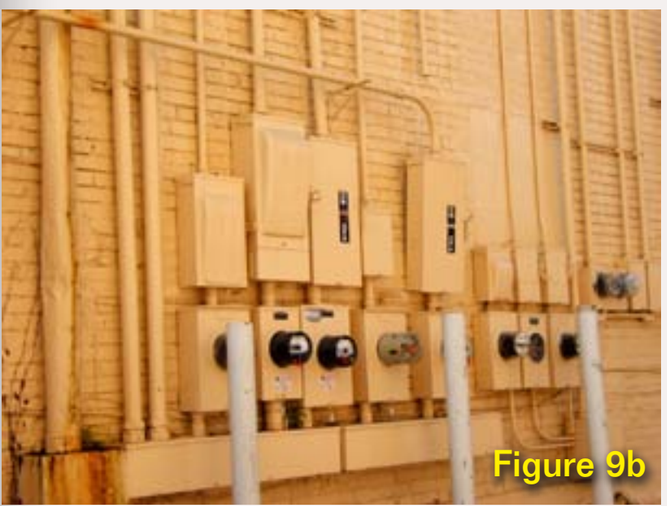
Figure 8: Boarded-up window, dishwasher exhaust vent and concrete pad.

Exhaust Fan

I filled the window between the cooler and the back door with painted scribed wood from my scrap box to simulate a boarded-up window. The exhaust fan for the dishwasher is a "motorized vent" from Walthers Modulars roof detail kit 933-3733 and a small piece of Evergreen round tubing painted a flat aluminum color. This is then attached to the wall. I streaked black under the vent with Bragdon's weathering powders.

Concrete Pad

I simulated a concrete pad behind the café with a piece of .040 styrene. I scribed the styrene to represent the expansion joints present in concrete pads before painting it with PollyScale Old Concrete (figure 8).



Figures 9a and 9b: Typical prototype electric meters.

Figures 10: The electric meter behind Becky's.

Electric Meter and Mast

I painted a Micro Engineering electric meter and mast, #80-184, Old Silver and glued them to the rear wall next to the door (figure 10).

I drilled two holes above the mast head using a #80 drill bit (figure 10), then I put the lift ring ends through the holes of the smallest beads I could find at my local Michael's craft store, and glued them into the holes. The eyes of the lift rings are used to tie off the overhead electric lines from the power pole. Feeder wires are routed from the lift rings down to the mast head. See figures 9a and 9b for typical prototype meter installations

Garbage Cans

I added a garbage can and two 55-gallon drums to hold used grease behind the restaurant (figure 11).

The Grocery Store

The basic building is complete, with roof details added. I added the

Figures 11: 55-gallon grease barrels (to the left of the back door) and a garbage can with a cat trying to sneak in.

Figure 12: Back of the grocery store showing dimensions and selected details.

Figures 13: The bottom of the stairwell.

following items to make the rear wall more interesting (see figure 12).

Exterior Stairwell

I wanted an exterior stairwell leading to the 2nd floor – see figure 12.

I built the outer wall of the stairwell using a sheet of wood clapboard siding with a board spacing of $^1/_{16}$". I cut out the main wall following the basic dimensions in figure 12. I used more $^1/_{16}$" clapboard siding for the 4'x11' front (or should that be rear) wall, cutting a hole in it to fit the Grandt Line door, #5088, I chose from my spare parts collection.

I also cut the back (top end) wall from the $^1/_{16}$" clapboard sheet, making it a scale 4'x8'.

Before cutting the milled sheet siding, I put masking tape on its backside to avoid splitting the wood. When cutting door or window openings I recommend cutting a little under-size and gradually enlarging the hole. This takes more time but avoids (usually) making the hole too large and having to make a new wall.

I braced the inside corners with $^1/_8$"x $^1/_8$" basswood, gluing the braces in place with carpenters yellow glue. I had some clapboard siding left over from making the walls and I used that, clapboards down, to make the roof pieces. I glued some $^1/_8$"x$^1/_8$" basswood cleats to the tops of the walls inside the stairwell and glued the roof to the cleats.

Before I started cutting, I pre-painted the clapboard siding with Floquil Antique White and the trim pieces and the Grandt door with PollyScale Coach Green. Pre-painting avoids getting blobs of the wrong color in unfortunate locations on a nearly finished model.

I attached the stairwell assembly to the main building using Canopy Glue. My hobby shop carries this adhesive in the model airplane section. It can be used to glue just about anything when building a model. You can even make window glass with it! Canopy Glue is made by Pacer Technology.

Finally I added some pieces of scale 1"x8" for trim along the tops of the walls and some 1"x6" for trim on the corners at the top and bottom ends of the stairwell.

Masking tape stuck to the roof simulates tar paper roofing. I painted it a nice dirty PollyScale Grimy Black (figure 12). Then I painted the Grandt Line #5062, lamp shade coach green. I used a small piece of wire bent at a 90-degree angle to model a conduit holding up the lamp shade, sticking it in a small hole I drilled in the siding above the door (figure 13).

Canopy Roof

The guys who were loading and unloading at the rear service doors wanted a canopy to keep off the rain. I used Walthers Modular's wall section #933-3722 roof supports (see figure 14). I painted the roof supports PollyScale Coach Green.

I used Campbell's corrugated metal for the roof. I painted it with gray

Figure 14: Walthers roof supports - #933-3722

automotive primer, then cut it into scale 2' wide strips and attached it to the roof supports with canopy glue. I used Bragdon weathering powders for the weathering rust (figure 15).

Other details

I finished off the back of the grocery store with a Micro Engineering electrical meter, #80-184, (the same meter as the one I used on Becky's Cafe), but

Figure 15: The loading doors are sheltered by the canopy roof.


Figure 16

this time I used some wire to make a custom mast that runs the full height of the building (figure 16). I painted the meter and the mast with flat aluminum spray paint from Lowe's and attached it to the building with Canopy Glue.

The roof drain outlet came from a small soda straw (figure 17). I cut the straw at a 45 degree angle, leaving a short straight section to attach it to the building. I painted the inside of the straw (and the wall behind it) flat black after attaching it to the wall with canopy cement. Figure 18 shows a prototype roof drain.

Detailing Other Buildings

Here are some prototype and model pictures for ideas on how to make your buildings different from other stock models.

1) Not all buildings are perfectly square, so I curved the side walls to add character (see figure 19). The roof canopy was built using Evergreen styrene and covered with Campbell corrugated metal. It curves to match the building shape (see figure 20).

2) Details on the back of the building like the hanging pots and the bench next to the 55-gallon grease container make it unique and realistic. Walking behind any restaurant will prove this point (see figure 21).

3) This prototype building in figures 22a and 22b gave me the idea to add a wood clapboard addition to my brick grocery building.


Figure 17

Figure 16: The Micro Engineering electric meter with custom mast.

Figure 17: A roof drain outlet I modeled with a drinking straw.

Figure 18: A prototype roof drain outlet.


Figure 18

Figure 19: Buildings on my former P&WV. The industry was Old Overholt Rye Whiskey, Notice the sliding doors made from old box car doors, the ventilated louvers with fans, and the pallets of grain on the loading docks.

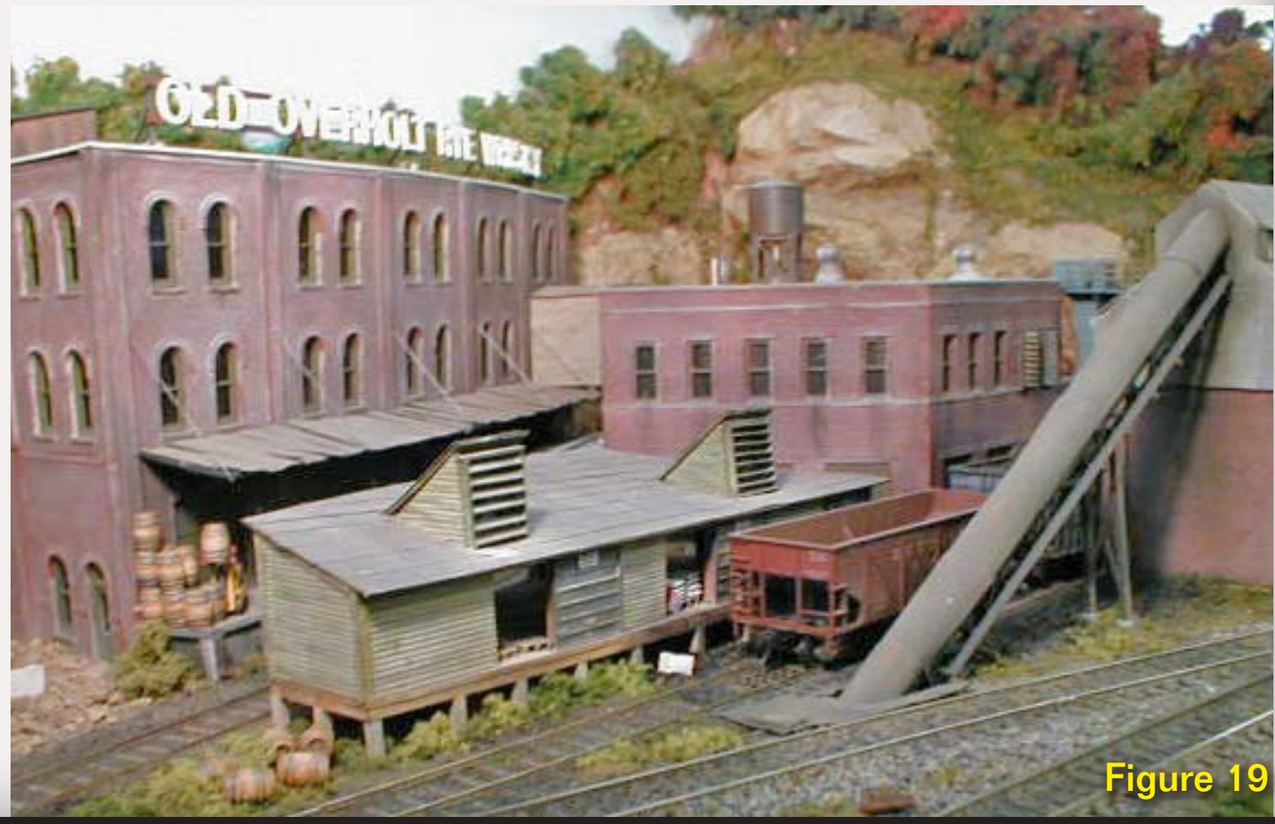


Figure 19

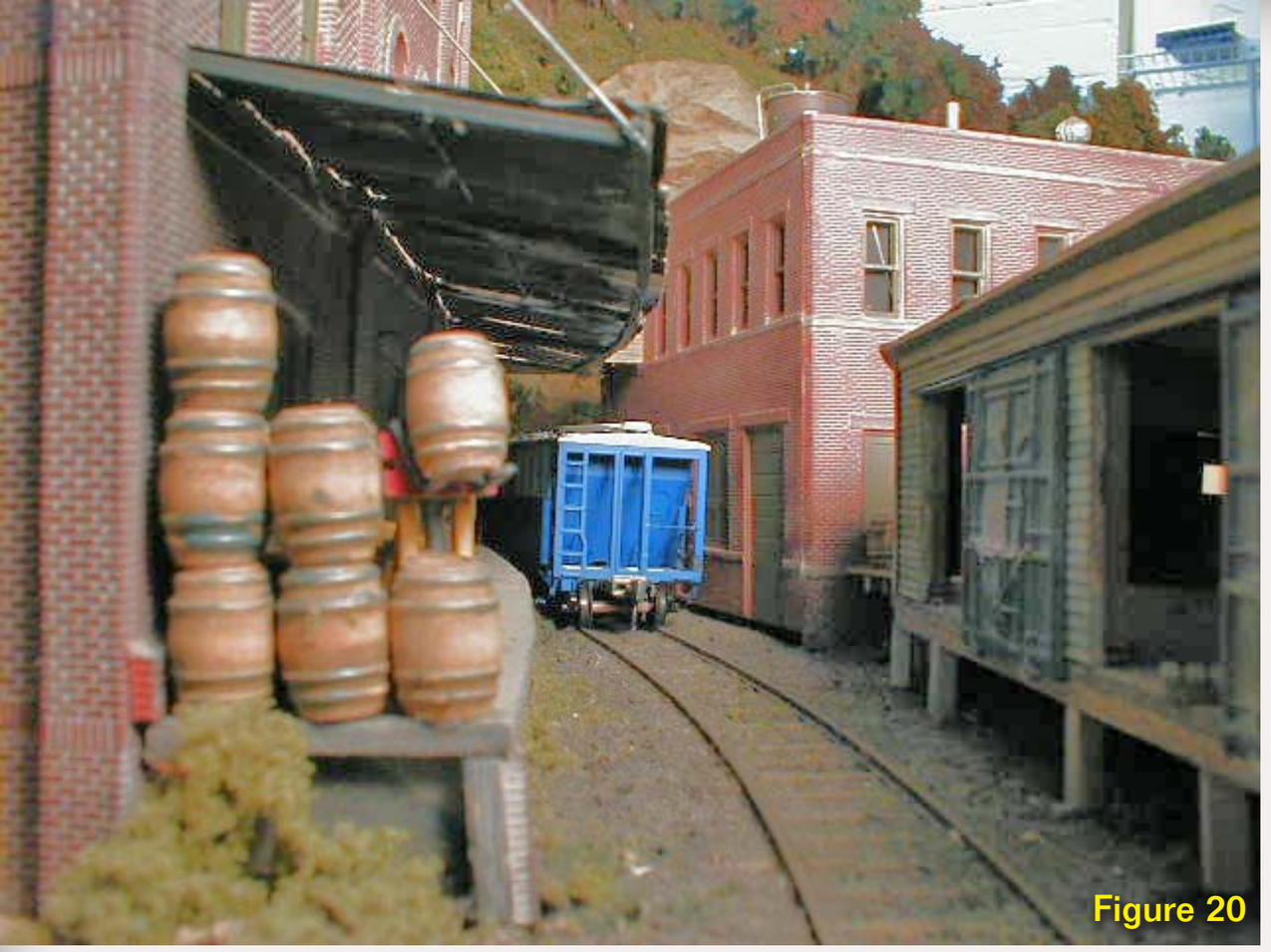


Figure 20

Figure 20: The loading dock of the main building of Old Overholt. The building was built on a curve. The metal covering the loading dock curves with the building. A different type of old boxcar door was used on this side of the grain unloading building.

Figure 21

Figure 21: Even the back of the building can have some class. The employees' bench is sitting next to the used grease drum barrels. The lids must be kept on tight or else they SMELL! But we do have some nice potted plants to spice up the area.


Figure 22a

4) Researching additions at the rear of buildings. Figure 23 shows buildings that have been added to many times. I'll start at the ground and go up.

The propane cylinder behind the building is new. There is a boarded-up window. The stucco finish on the rear of the addition is nice but the side wall stucco is a mess. The original building is made of brick and the original mortar has turned almost black. A window air conditioner has been added. A big gap above the AC unit has been filled with some material. The roof covering is roll roofing. The caps on the walls are all different; clay tile, metal and roll roofing. Notice the tar that has run down the sides of the wall from the roof. An air conditioner has been added to the roof along with some ductwork. In front of the air conditioner is an up-blast fan.


Figure 22b

Figure 22a: A wood addition at the rear of a brick building.

Figure 22b: From the rear the addition shows different stages of weathering and faded paint.

The backs of grocery stores are an especially interesting area to study and a particular favorite of mine.

Figure 23

Figure 23: There is a lot in this area. Propane tanks, different wall materials, block, stucco, brick, and wood siding. Tar roofs are common here, and excess tar seems to be dribbling down several of the walls. There are enough window and roof-top air conditioners to suggest a warm climate – at least in the summer. Don't forget the different types of flashing on the roof side walls. Electric and phone lines along with poles, meters, and other infrastructure are everywhere.

In figure 24, look for signs giving scheduled unloading times, pallets, the metal canopy, and the plastic covering over the door which keeps the cold air in the building.

Figure 25 shows a nice little addition to a loading dock on the back of a building. The trailer goes right up against the bumper. The loading dock ramp is recessed so forklifts can directly unload the trailers.

Coming Next Issue

The first two buildings are now complete in the Backs of Buildings series. In Part Two I'll cover an office building and the apartments.

Tom Wilson has been a Model Railroader for 38 years, and now has a 4-level operating layout. He lives in Florida with his wife of 36 years, and works as a building inspector.

In addition, Tom has worked in steel mills, and done mechanical contracting. As a building inspector, he has worked for Disney and now for the City of Winter Park, Florida.

Tom's website is www.pwvrr.webs.com

Figure 24

Figure 24: Signs at the loading dock tell what times the different departments will receive trucks.

Figure 25

Figure 25: Door cushions and a bumper at the loading dock for tractor-trailer unloading.

Video won't play? Click here to play it on YouTube

Prototypical Kitbashing:
Modeling A Norfolk Southern High-Side C&D Gondola

— by Matt Snell
photos by the author

Kitbash a Walthers Airslide covered hopper into an open gondola, to haul construction and demolition debris ...

Reader Feedback *(click here)*

What is a railroad to do when it is hit with a surge in traffic, especially for a commodity that has not been a previous standard within the rail industry? That is exactly what railroads have faced recently as the refuse industry has looked to rail to move waste to distant landfills. One commodity known as C&D (construction and demolition) has resulted in new traffic growth requiring some creative use of existing railcars to meet the demands of the new traffic.

One such car is the 'new' C&D gondola of the Norfolk Southern Ry. While these cars may look fresh from a fabrication floor they are actually surplus Airslide covered hoppers which have been recycled, and converted into high side gondolas by the Union Pacific DeSoto Car Shop in Missouri. While modeling one of these converted hoppers may sound complicated, kitbashing one using a Walthers Airslide is fairly simple by following the same steps used to convert the prototype cars.

Figure 1: This NS C&D hopper looks like a “new” car, however close examination reveals the outline of the dual hopper bays, giving away its heritage as a former Airslide covered hopper (see all 3 pictures).

STEP 1: Disassembling the Airslide

The current release of the Walthers Airslide covered hopper is produced in Ready-To-Run form (Figure 2). To enable kitbashing it must be broken down into the 3 main components comprising the model: body, floor, and center sill. Disassembly of the model is fairly simple starting with removing the trucks and couplers, then snapping the center brace away from the outer walls, breaking the glue bond by gently prying upward with a small screw-driver (Figure 3).

Figure 2

Figure 3

The floor assembly, complete with center sill, can now be removed from the body by inserting a #17 X-acto blade into the joint between the floor and body and prying the floor upwards away from the body (Figure 4). Once the floor has been removed, simply lift out the center sill and now you have the three main components of the model (Figure 5).

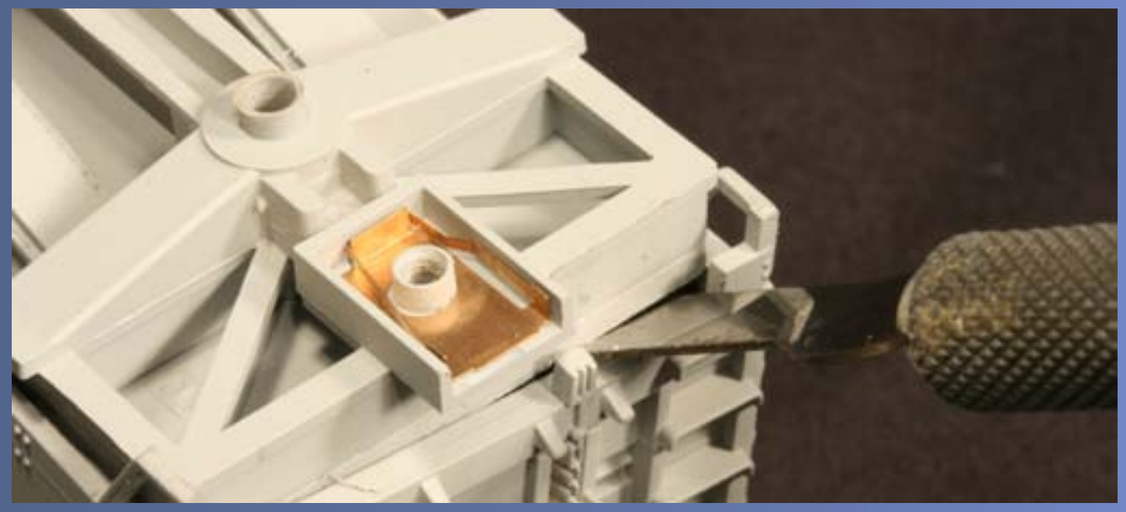


Figure 4

Figure 5

STEP 2: Removing the Roof

The most visible change in the hopper rebuild is the removal of the roof and this is the first step in converting the covered hopper into a gondola. The Walthers model features a roof which is molded to the side walls and removal can be started using a Dremel tool with a cut-off wheel and file. Remove the roofwalk, then cut into the roof ¼ " from each side wall, removing the center section. File the leftover portions of both roof and roof ribbing flush with the interior walls and top chord.

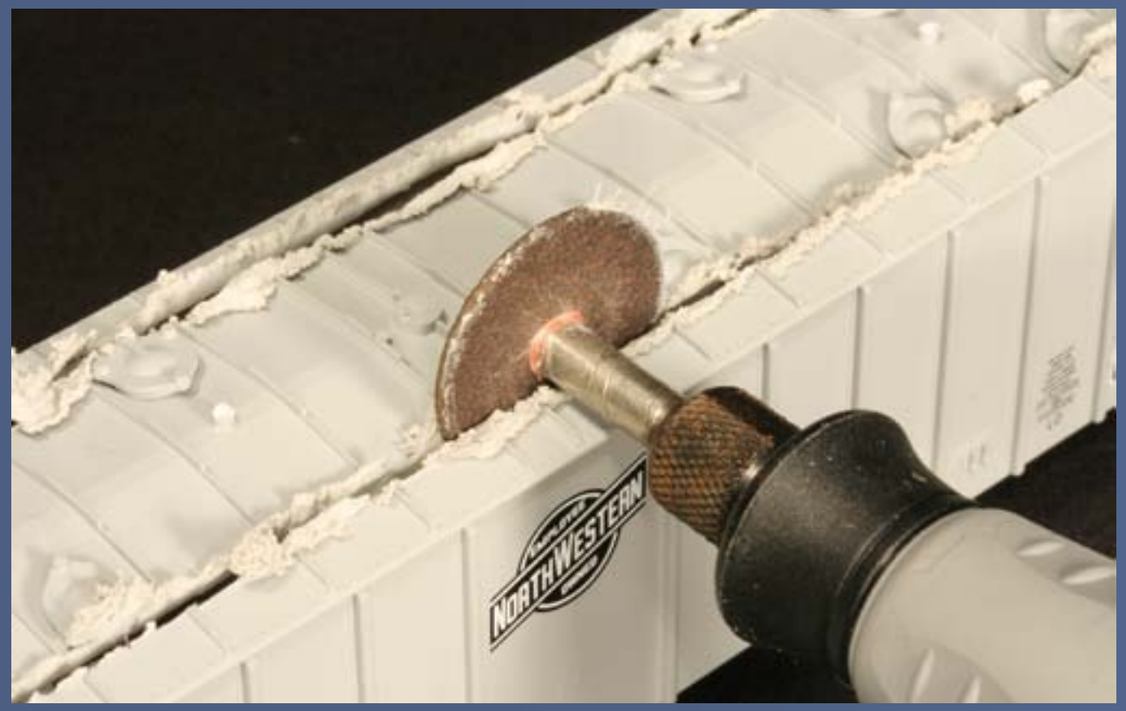


Figure 6

Figure 7

Figure 8

STEP 3: Removing Other Small Parts

One immediate eye-catching feature of this car is the extension along the top of the car, bringing the walls to a tall 154½" height. Raising the height of an existing 1:1 scale railcar, no small feat, required squaring off the peaked ends of the car and adding bracing to the sides and ends of the car to accommodate the height extension. Square off the peaked ends of the model using a razor saw, placing the car on end, and gently sawing through the peaked portion. Use the top of the sides as a guide. The top of the car should be even all the way around (Figure 9, 10).

The final visible modification to the exterior of the Airslide body is removing the two angled plates on each side of the car extending from the bottom sill of the car. Place the car on its side, then cut through them with a #18 X-acto chisel blade and sand down any rough edges with a file or 400 grit sandpaper. Now, what once was a covered hopper can be rebuilt into a gondola. Begin by stripping the paint and adding a new floor (Figure 11).

Figure 9

Figure 10

Figure 11

STEP 4: Replacing the Floor

One major modification to the prototype cars was removing the angled hopper bays and installing a flat floor. To add the new floor, cut a rectangle of .040" styrene sheet sized to fit the interior of the car. Remove the two screw 'nubs' from the Walthers floor, then cement these into the bolster holes on the center sill. When this has dried, cement the entire center sill to the new floor using Plastruct Plastic Weld.

As our models rely on hidden weight to keep them from derailing, add a double floor with the car's weight sandwiched between the two. Remove the weight from the Walthers floor by prying it upward. Place the weight in the gap between the center sill and floor. Cement a length of .100" thick styrene strip at each end of the weight and next to each bolster which will provide support for the second floor while also holding the weight in place. The second floor extending between the bolsters can now be added to hide the weight and close the unrealistic gap between the centersill and inner floor.

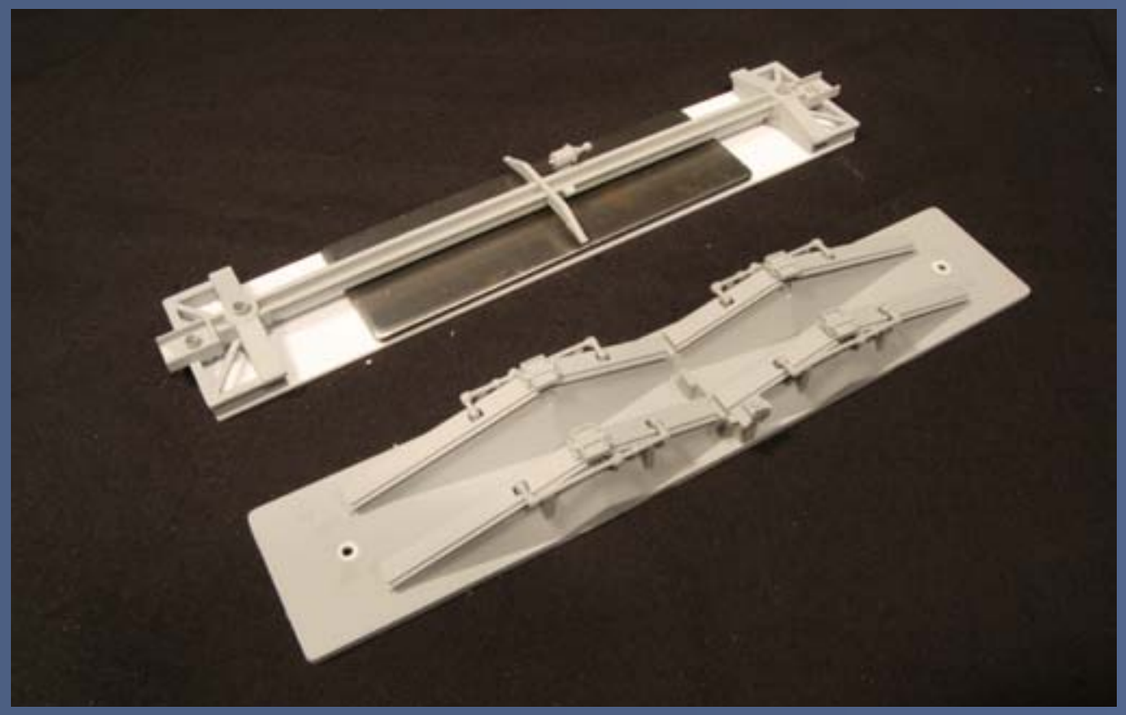


Figure 12

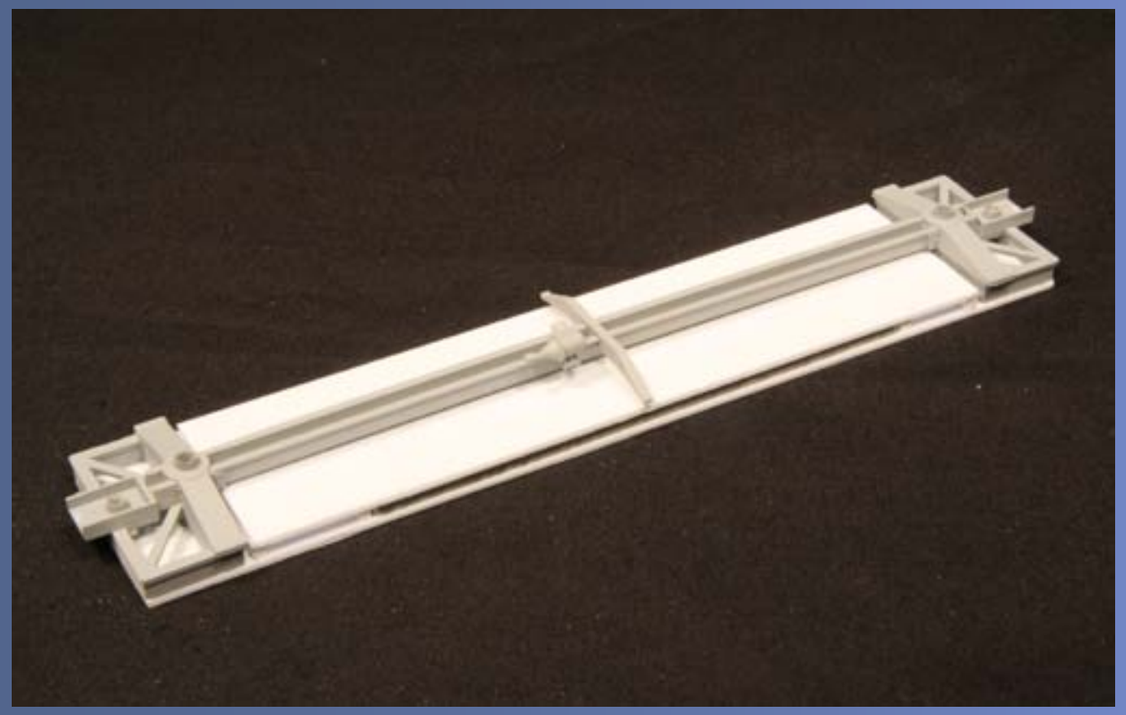


Figure 13

STEP 5: Extend the Height of the Car

With the floor complete we can start to modify the body of the car, beginning with extending the height of the car by adding a rectangular 'cap' that will sit atop the original Airslide walls. Use two .040" styrene sheet lengths cut 34" high, to fit the sides of the car and another two to fit the ends of the car, mounted within the side extensions. Once the cap has been assembled, the new top chord can be added to the cap using .040" x .060" styrene strip. Cut the strip to allow a 4" overhang at each end of the sides.

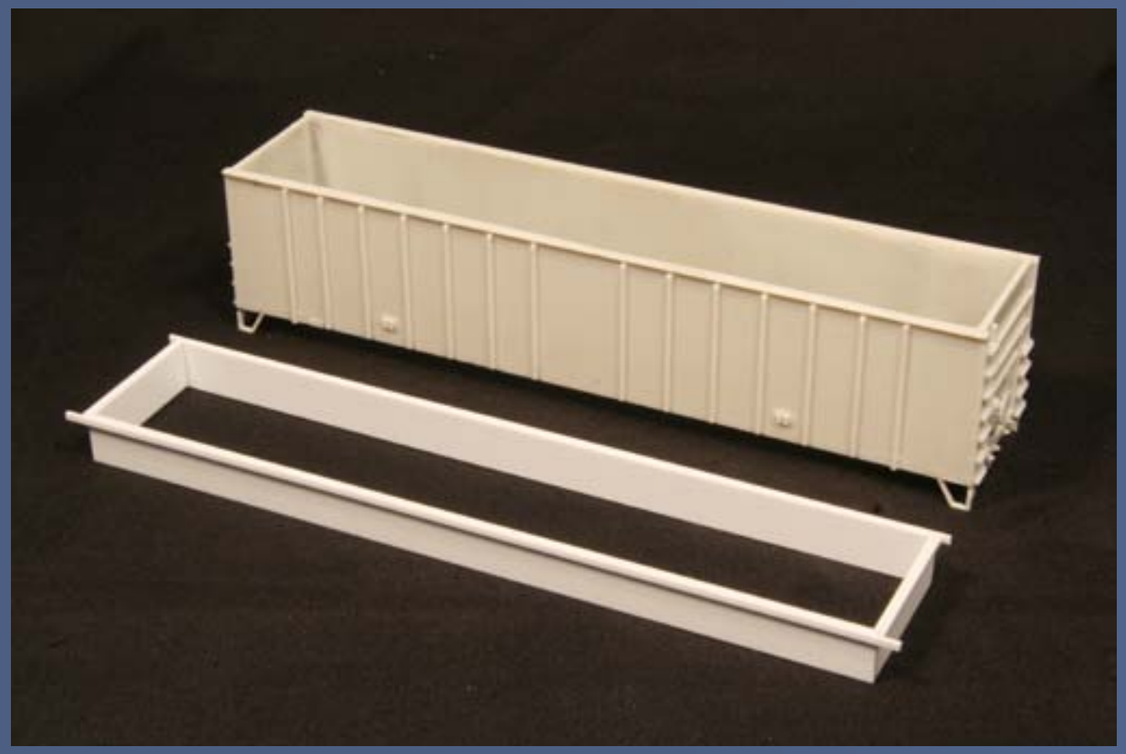


Figure 14

Figure 15

STEP 5: Extend the Height of the Car *Continued ...*

To add strength to the cap, 14 vertical support ribs were added. Each lines up with the existing ribs of the body and joined using splice plates. Getting the ribs lined up accurately may seem difficult, but can be accomplished fairly easily using a modeler's trick. Cut 14 2-inch lengths of 040" x .040" styrene strip. Tape the cap assembly to the car with masking tape, allowing it to extend about ¼" beyond the side of the car (Figure 17). Place cement along the back of the first strip, then place it onto the cap using the excess length of the rib as a handle to hold the styrene strip. Once this has been completed for all 14 strips the cap can be removed from the car and the excess of each strip can be trimmed off using a #18 X-Acto blade along the lower edge of the cap (Figure 18).

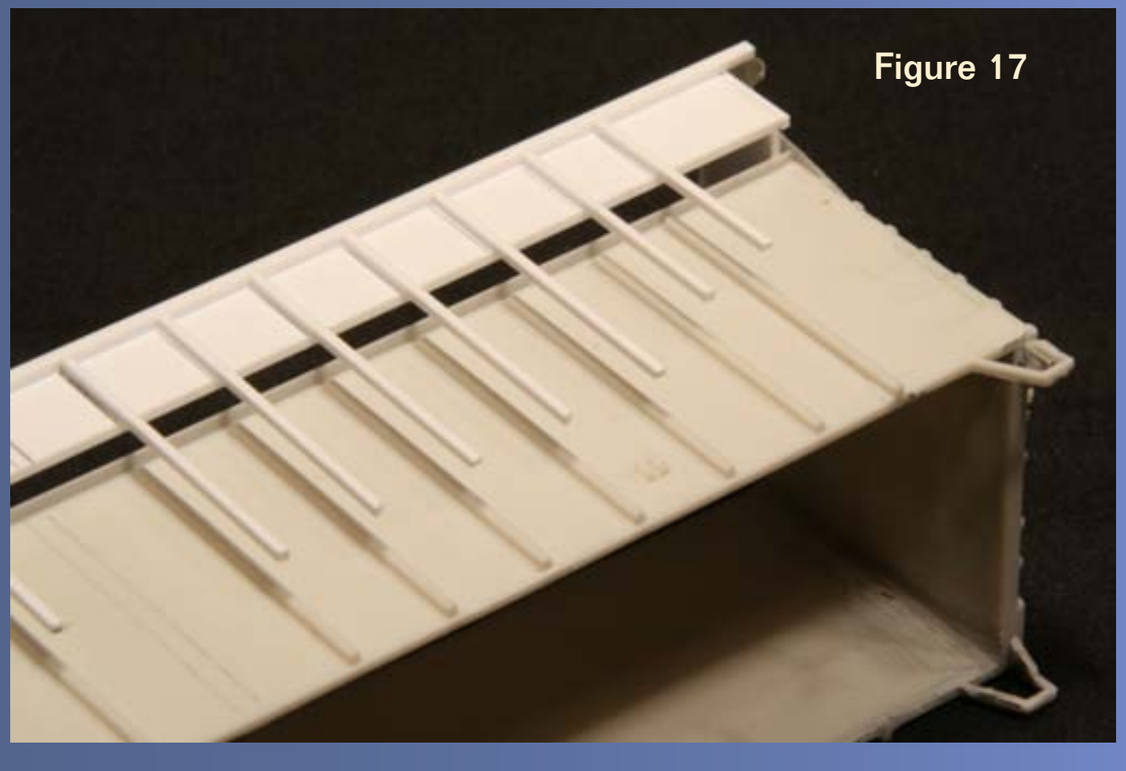


Figure 17

Figure 16

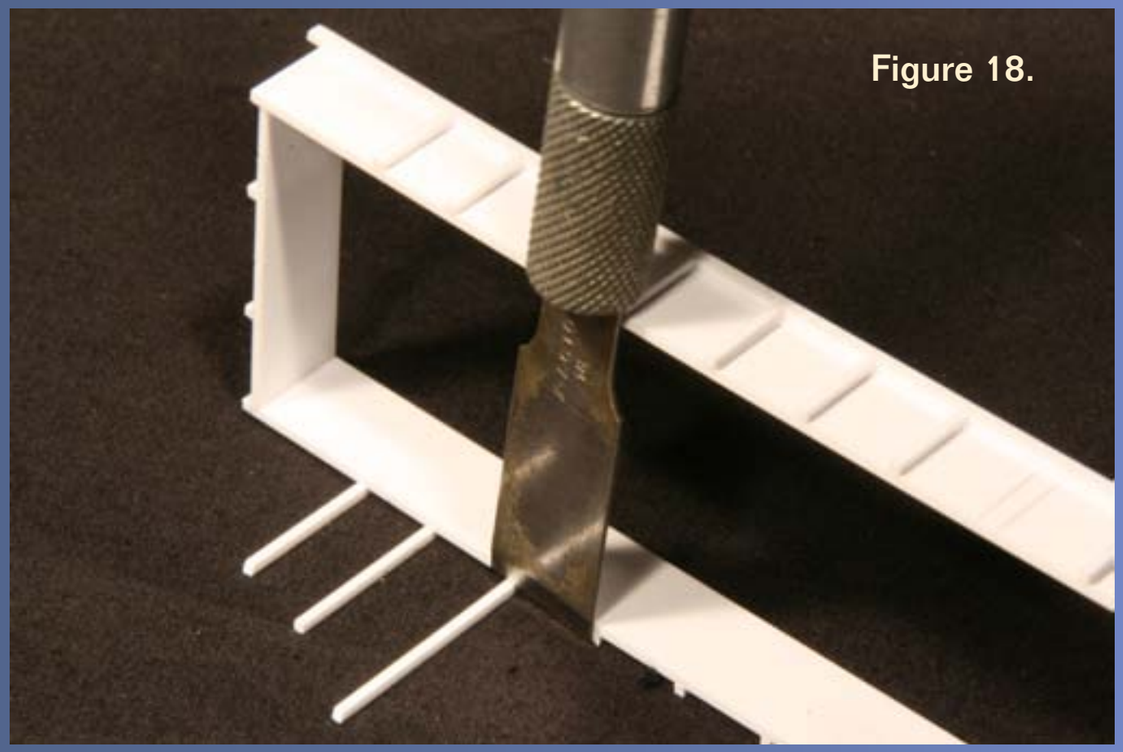


Figure 18.

STEP 5: Extend the Height of the Car *Continued ...*

After the ribs have been added to both sides of the cap, add the vertical support ribs to each end of the cap. Cement one .040” x .040” strip at each end of the cap, then cement an additional strip 36” from each end, dividing the cap end into three equal panels.

The Walthers car is an older model featuring molded grabs. The car side grabs are easy enough to remove with a #18 chisel blade, but the grabs on the end have a thick molded upright support bar rather than the thin metal bar found on the prototype. The Walthers support bar can be extended by placing .040” x .040” styrene strip between the top chord and the bottom of the cap.

Cement the cap to the car with a CA type cement with a gap filler. Tack the four corners of the cap in place, then apply cement from the rear of the joint between cap and body allowing capillary action to flow the cement into the joint and fill any gaps. Once the cap is in place, then the horizontal rib can be added to each end of the car to cover the seam between cap and existing car end. Simply trim away the Walthers ladder support, then cement a length of .040” x .040” styrene strip between the outer upright posts.

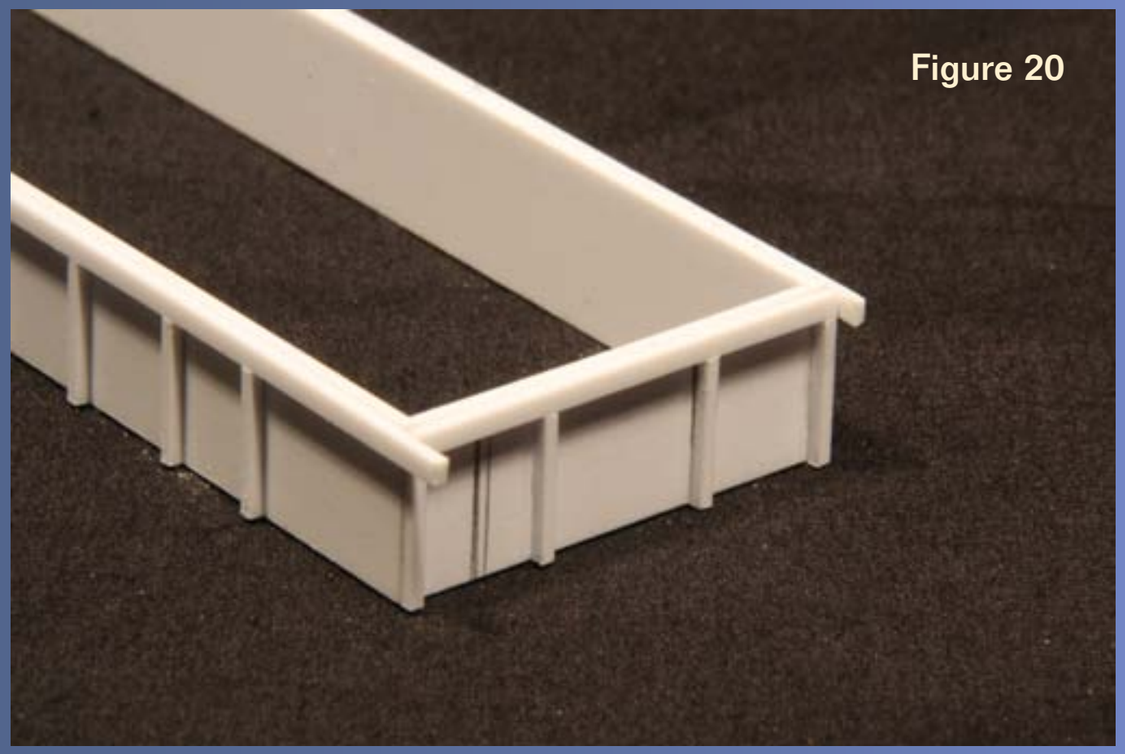


Figure 20

Figure 19.

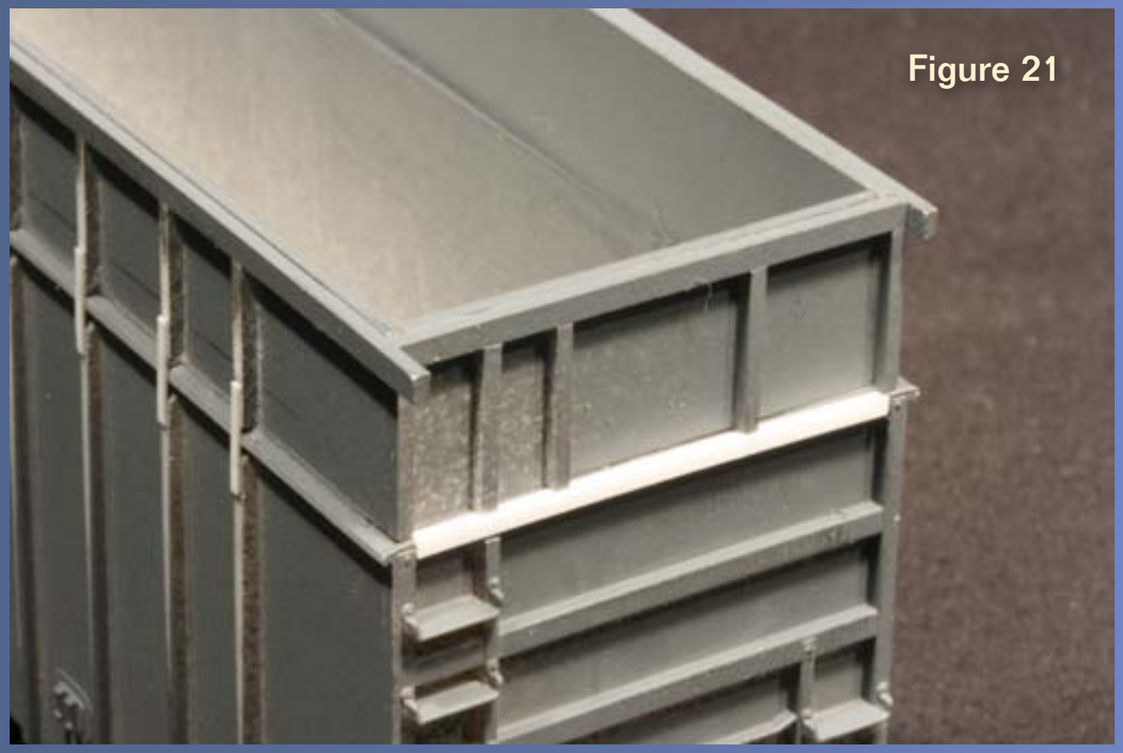


Figure 21

STEP 5: Extend the Height of the Car *Continued ...*

Bracing was added to the side of the car in the form of a 15th rib located in the center of the car, extending from the top chord down to a plate below the side sill. Adding the new rib requires cutting a small notch into the old top chord, then cementing a 13’ 6” high .040” x .040” strip to the car side, extending from the new top chord to below the bottom edge of the car. The small brace panel at the bottom will be added later.

Figure 22


Figure 23


Figure 24

STEP 5: Extend the Height of the Car *Continued ...*

To complete the cap bracing, each of the new upper ribs is joined to the existing lower ribs using a 21” splice plate extending across the original top chord of the hopper. To add the splice plates, gently file along the Airslide top chord to insure that it will not extend outward further than the ribs on the cap. Then draw a line the length of the hopper side 10” above the old top chord. Add splice plates of .010” x .030” styrene strips across the joints, each placed at a uniform height, using the guide line for alignment.

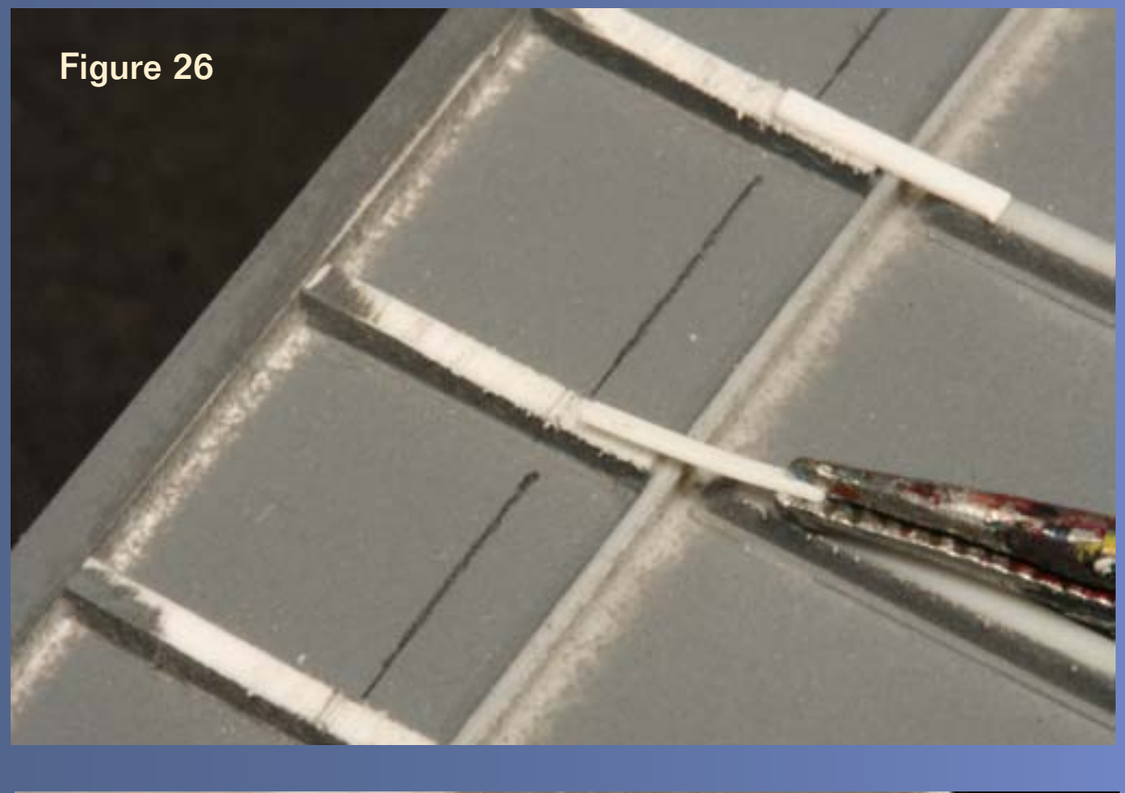


Figure 26


Figure 25


Figure 27

STEP 6: Lower Portion and Underframe

With the upper bodywork complete, the modifications to the lower portion of the car and underframe can be made. To support the floor, 10 ribs were added to the underside, each extending out from the center sill and terminating at 6”x 9” metal plates welded to the car side. The plates are reinforced with a small triangular plate welded to the existing upright ribs on the car side.

Figure 28

Figure 29

STEP 6: Lower Portion and Underframe *Continued ...*

Cut .015” x .060” styrene strips to a 9” scale height, then cement these to the underside of the car at the 5 ribs each side of the long center rib. Cement lengths of .080” I beam in place between the plates and center sill. Then the triangular braces at each plate using .015” x .040” strip styrene cut into small triangles. To complete the lower portion of the car, add the large plate at the center rib by cutting a sheet of .015” styrene to 15” x 30”. Then trim the lower corners at an angle 6” high x 6” wide.

Figure 31


Figure 30

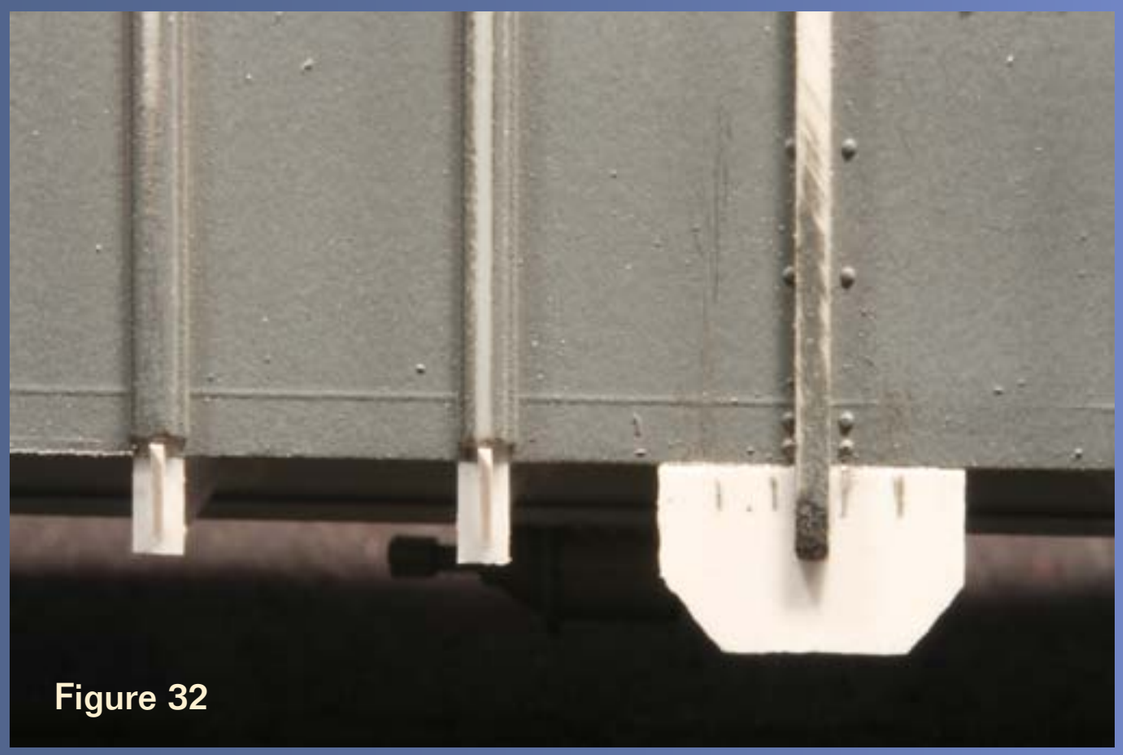


Figure 32

STEP 7: Side Detail

Completing the car is simply a matter of detailing and painting it. The ladder style grabs on the right end of the sides and the left side of each end were extended on the prototype car to allow access to the top of the heightened car. Trim away a portion of the old top chord, then add Detail Associates #6427 freight car drop grabs. The car grabs on the ends are extremely difficult to remove without damaging the body, I chose to replace the side grabs entirely, while only adding two top grabs to the ends, mounting them close to the body so the difference would not be as visible (Figure 34).

Figure 33

Figure 34

STEP 8: Paint and Decals

Add the grabs and other detail items such as cut bars, brake hoses, and AEI data tags. Paint the car a light grey. The decals are either a combination of commercially available decal sets or a custom set made using a home computer.

Whether modeling the Norfolk Southern or your own freelance road, a project such as recycling this Airslide will allow a perspective into freight car construction while adding another type of traffic with unique equipment to your layout!


Figure 35

Figure 36

Parts List

Walthers Airslide Hopper #932-3721 through 3726, 40551 through 40556

Evergreen #101 .010 X .030 styrene strip
Evergreen #112 .015 x .040 styrene strip
Evergreen #113 .015 x .060 styrene strip
Evergreen #142 .040 x .040 styrene strip
Evergreen #143 .040 x .060 styrene strip
Evergreen #175 .100 x .100 styrene strip
Evergreen #272 .080 I-beams
Evergreen #9015 .015 plain styrene sheet
Evergreen #9040 .040 plain styrene sheet
Detail Associates #6206 brake hose
Detail Associates #6246 AEI data tag
Detail Associates #6215 coupler cut bar
Detail Associates #6427 freight car grabs

Floquil SP Lettering Grey

Suitable Decal Sets That Can Be Combined

Microscale #87591	**NS Freight Cars**
Microscale #91112	**Black Stripes 1” and 2” Wide**
Highball Graphics #AD-14	**Yellow Reflective Sill Stripes**
Highball Graphics #AD-11	**Excess Height Car Data**

For Information on the Custom Decal Created for This Car

Contact: CONRAILSTUFF@yahoo.com

So You Want a Set of Custom Decals?

It's happened to almost all of us. We're all set to model a specific car or locomotive and then we find out there's no decals available to finish our project. First we contemplate using combinations of multiple decals, then we start thinking – why not get a set made for this piece we're trying to build?

Creating decals is misunderstood within the hobby, with many hobbyists under the misconception that if they contact a manufacturer with an idea, the manufacturer will immediately get on board. Large manufacturers such as Microscale are interested in creating and manufacturing sets that will have mass appeal, such as widely used roadnames suited to model equipment that is readily available such as a common locomotive or boxcar.

Our projects often have a much narrower focus with less common roadnames, or a much narrower style of equipment. While I could have combined sets from multiple manufacturers to get MOST of the decals I needed for the NS C&D gondola, I would still be missing some of the graphics of the prototype car. Since I'd done this much already, why not complete the car correctly?

Enter the custom decal set. Custom sets are available from several smaller 'cottage industry' manufacturers. Having successfully commissioned twenty custom sets, I'll share my 10 rules for having a custom set made.

1. Begin with the realization that while you may be familiar with a specifc railroad or their equipment, the person creating the artwork may have no idea what you are talking about. While it's human nature to say "you know – the big logo on the Grand Trunk car" the person creating the artwork may never have seen the car or the logo. Even if they are familiar with the equipment, variations exist in the graphics applied by railroads, leading to rule number 2.

2. Take or obtain good well-lit, straight-on pictures of the car. This is very important and can save time and money later. Angled photos are difficult to work from, especially if a specific graphic must be redrawn. Figures 37-40 on this page and the next page are examples.

Figure 37

Figure 38

Reader Feedback (click here)

Figure 39

Figure 40

Take overall pictures of all four sides of the equipment, then move in for close-up pictures of each graphic. Simple lettering is fairly easy to recreate, but special graphics may have to be drawn. Close-up pictures such as this one will help the artist to accurately recreate them.

Figure 41

3. Take measurements. While it is not necessary to measure each individual graphic, try to measure several. If that is not possible, take at least one measurement of a part of the car (Figure 42). Measuring a part such as a rib will give you a known size that allows you to scale the unknown sizes using that measurement.

M.R. (Matt) Snell has been a model railroader and rail-fan for 30 years. He lives in Ohio. He 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 Model Railroad Hobbyist and railroad.net.

Figure 42

5. Make a folder with all the closeup photos, giving each photo a file name matching the numbering used on the document.

6. Contact a custom decal manufacturer about your project and ask about pricing and time for completion. Pricing varies between manufacturers. There is usually a one-time artwork fee for creating the decal and a separate cost for printing the decal. Six questions to ask are:

- What the run size is (a run is the minimum number of decals that must be printed)
- The cost for reprinting if you want more later
- What shipping and other hidden costs may be
- Fees for correcting mistakes, either yours or theirs
- Who will own the artwork when the decals are finished. (This prevents the manufacturer from selling a set independently when you may have paid to create it.)
- Are there any licensing issues (such as the UP or CSX licenses) and how are these handled.

Remembering rule #1, be prepared to send them the photo and listing via e-mail or regular mail, insure that they understand your expectations, and then lock in a firm price.

7. Require a proof to be sent prior to printing. This can be done using a PDF file. Review the proof for accuracy including size of each graphic, correct letter or number combinations and correct colors.

A good idea is to print the PDF without any scaling, then cut out each graphic and apply it to the model. There may be slight variations needed between a model and prototype to manufacture or construct a specific piece of equipment.

8. Correct any errors, then request additional proofs until you are happy with the set – remember that while the manufacturer may resist, you are paying them to do this correctly, to your satisfaction.

Figure 43

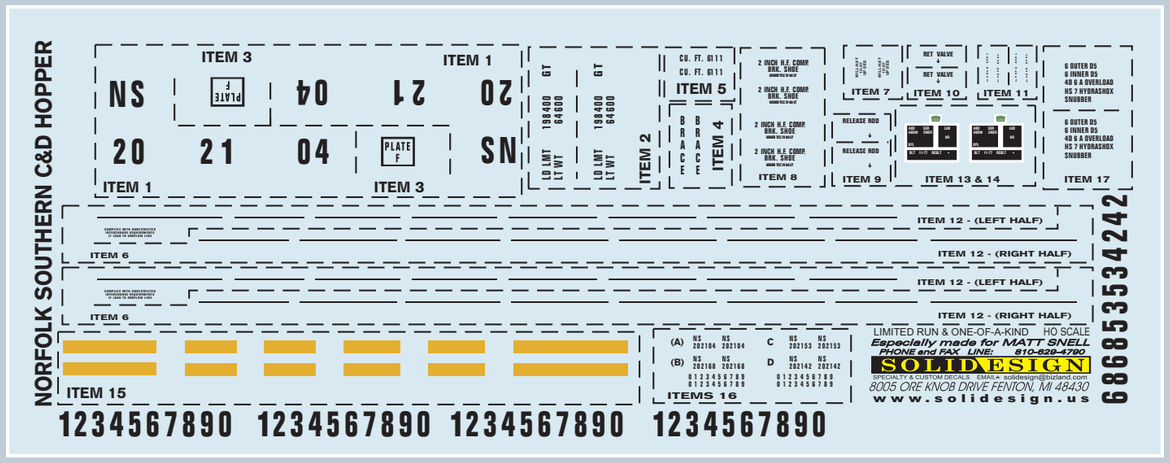


Figure 44

9. Once you are satisfied with the final proof, authorize the printing.

10. Enjoy your new custom decals.

Click the image of the gondola to rotate it a full 360 degrees

10 Things to Know About Airbrushing

— by Joe Brugger
photos by the author

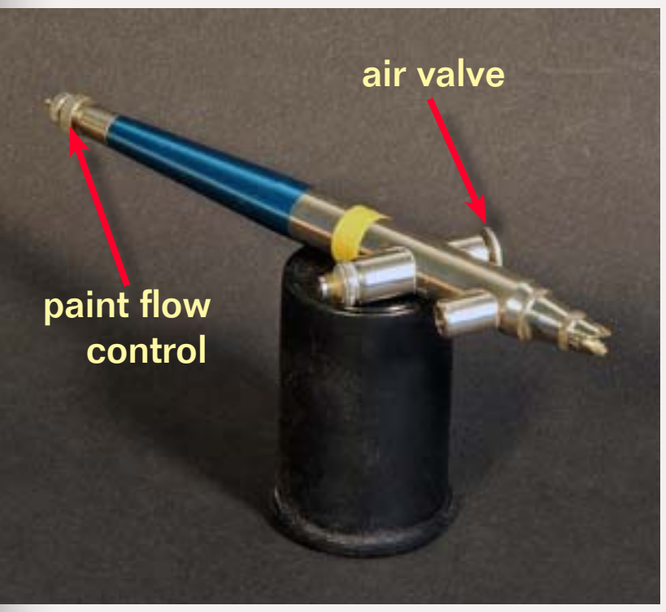


Figure 1: There are many kinds of airbrushes available for different jobs: single and double action, internal and external mixing. This Badger 200 is set up with a fine tip and needle for spraying solvent-based paints and the owner has marked it with a thin band of tape next to the trigger button.

Reader Feedback (click here)

You found an airbrush at a local garage sale and your uncle Fred gave you his old air compressor. Now what?

Here are a few hints ...

1. The Air We Breathe

Before you start spraying, think about where the extra paint will end up. If the answer is 'in your lungs' or 'all over the inside of the train room', move your painting to the garage with the door open (and a slight breeze) or get a paint booth and vent the fumes outdoors. Even with acrylic paints, ventilation and filtering are critical and overspray should not be inhaled. The solvents in paints like Floquil and Scalecoat will rot your brain if not properly vented. Letting solvent vapors build up in a room is an explosion hazard.

Google 'paint booth' for a few options. Micro Mark sells some small paint booths for hobby use.

2. Small Steps

Learn one thing well and stick to it for a couple of projects. Use one airbrush and one brand of paint. Experiment on cheap models, scrap cardboard or styrene to see how different pressures, needle settings and spraying distances work, but only introduce one new thing at a time.

3. Wash Up

Paint lays down better on clean surfaces. Gentle scrubbing in a bath of plastic prep or lukewarm soapy water will strip oils, fingerprints and mold release from plastic and metal parts. You will be surprised by the different appearance of parts before and after cleaning. Let everything dry before painting. Use the airbrush to blow moisture out of nooks and crannies. Good prep is particularly important on slippery items like plastic truck side frames and handrails.

4. Be Mellow About Yellow

Not all colors lay down the same. You can be a hero spraying engine black and oxide red, but lighter colors will leave you ready to pitch a project through the window. The answer is patience. My Spokane International

Figure 2: A color cup is a good way to handle small quantities of paint and is particularly useful with thinned-down weathering colors. On this single-action brush, the top button controls the airflow and the screw at the back adjusts to control paint flow.

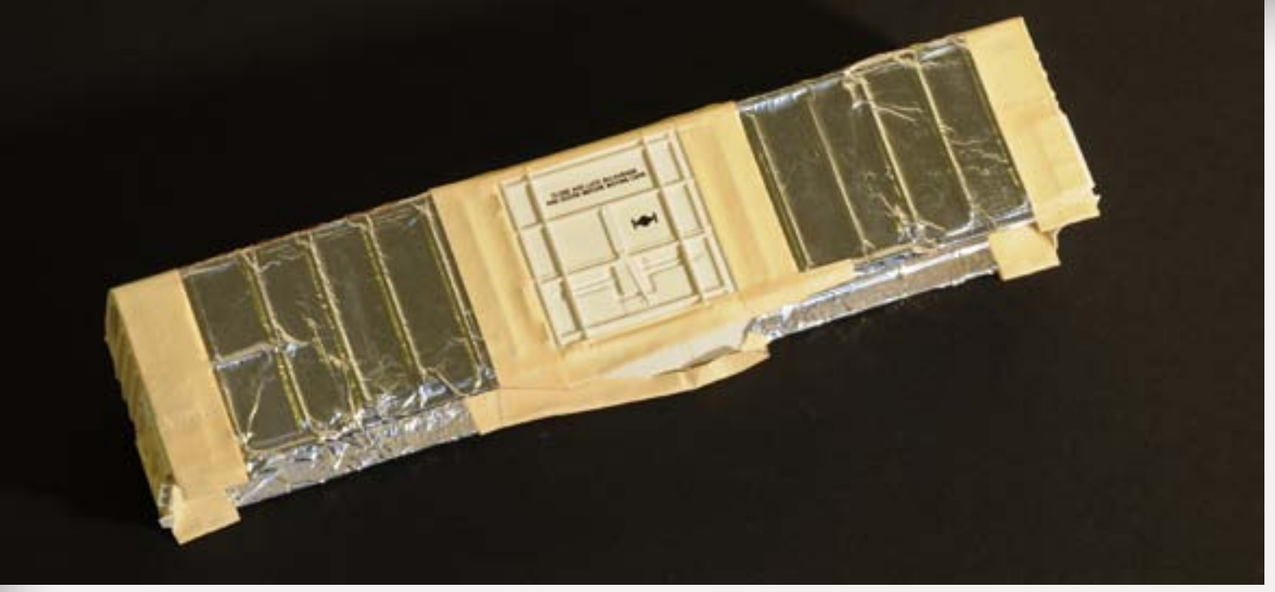


Figure 3: Aluminum foil is impervious to paint, cheap, and can hold itself in place. The drafting tape used to seal the edges lifted slightly overnight, requiring some touch-up work with a Microbrush.

Figure 4: Here's a close-up of a 15-year-old PollyScale paint job on a Spokane International RS1. Atlas brought out its own SI model within months. Yellow is difficult, but with practice, this finish could be improved.

Alco RS1 in UP Armour Yellow took about nine coats. When spraying light colors, fog on a light even coat. Let it set up for a couple of hours, and repeat. Trying to cover a model in one pass with yellow (or white, gray, orange, many reds etc.) will leave a drippy mess that pools in the footwells and along the walkways, obscuring detail. Lay down paint on the tricky areas like inside corners first, then go back to fill in the easy parts.

5. Break It Down

Analyze your painting project and see if it will work in sub-assemblies. Can you get a cleaner finish on window trim by painting pieces before a building is assembled? Are the walkways on a locomotive a different color than the hood? Are grab irons going to get in the way of striping? Painting parts instead of a fully assembled project can save masking time and give cleaner lines.

Figure 5: At a more normal viewing distance, the tiny bumps and imperfections are invisible.

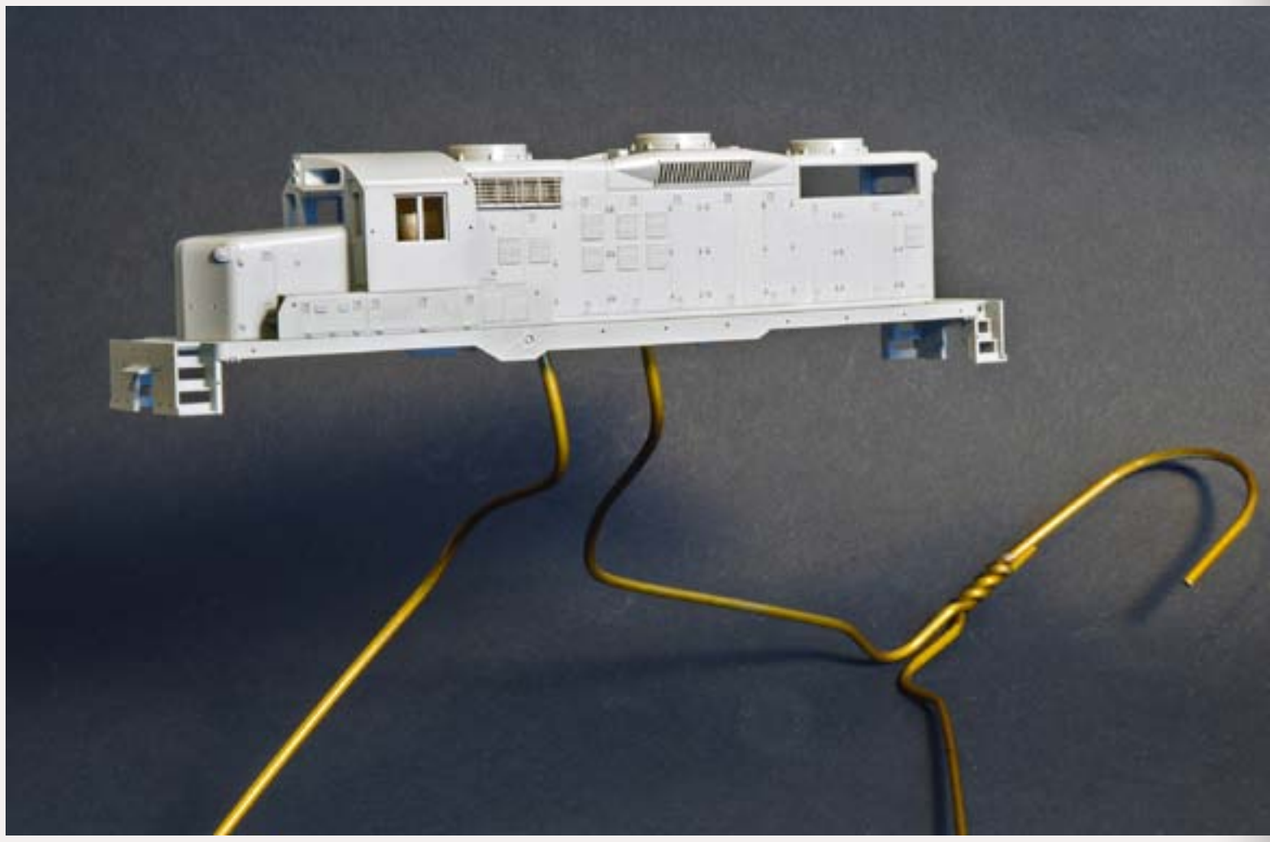


Figure 6: A wire coat hanger stand takes a couple of minutes to improvise. A loop of drafting tape on the inside of the shell helps to hold the body steady. A cheap Rubbermaid lazy susan also reduces the need to touch models while painting them.

Figure 7 (left): Military model shops sell Tamiya Masking Tape. It's thin (.0025 inches) and molds easily to uneven surfaces. Drafting tape (.005 inches thick) needs to be carefully burnished down to seal.

Joe Brugger is an accomplished photographer whose work has graced the pages of MRH before. He enjoys painting rolling stock and locomotives (including many of the Bear Creek & South Jackson diesels) when he's not busy hanging around at local op sessions or providing copy editing services for MRH. Joe currently resides in Portland, Oregon with his faithful airbrush Squirt and compressor Rusty.

6. This Isn't the Indy 500

You can whip out a multicolor project in a day with acrylic paint and a hair dryer. What's the hurry? Letting each color cure completely means fewer fingerprints, fewer chances of masking lifting the paint, or decal-setting fluid soaking into the finish. The model will be around for years so why the rush to get it painted?

7. The Man Behind the Mask

As with good prep, good masking creates professional-looking multicolor paint schemes. The painters tape that worked in the dining room is not effective on scale models unless you go to the trouble of cutting a new edge on the tape. Thin and flexible model-specific masking media like Tamiya Masking Tape give a clean edge. Burnish the edges of any masking before spraying paint. Cut complex curves on a cutting mat instead of trying to curve tape on a model.

8. Screw-ups Happen

Following your usual painting routine won't always work. Weather might be too hot, too cold, too dry or too humid. Paint may be contaminated or improperly thinned. If a job isn't going well, stop the work and analyze the problem.

"Airbrushes are easy to use and difficult to master. Picking the right tools and paints makes life easier but don't be shy of experimenting. If you see well-finished models, ask the owner about painting techniques."

9. Hands Off

Don't hold the work in your hand while painting. That increases the chances of dropping the project or embedding a fingerprint in the finish. Placing a model on a stand and/or on a turntable lets you spray all sides of it. Clamps, clothespins, wire clothes hangers, paper towel tubes and other items can be pressed into service.

10. Your Mileage Will Vary

As soon as this article is published, people will post their own painting stories. Read them carefully. There will be a lot of useful information in these posts. Bear in mind that your experiences painting blue Bangor and Aroostook BL2s in your coastal home at Bar Harbor, Maine, will be different than those of the fellow who is living in Flagstaff, Arizona and painting red-and-silver Santa Fe warbonnets. ☑

Links to learn more

www.iwata-medea.com

www.badgerairbrush.com

www.paascheairbrush.com

www.modeltrainsweathered.com

airbrushtips.110mb.com

www.mcr5.org/NMRA/articals/index.htm ('articals' is not a typo ...)

www.scaleworkshop.com/workshop/sprayingpollyscalebg_1.htm

Book

"Basic Painting and Weathering for Model Railroaders", by Jeff Wilson. Kalmbach, 2003. 88 pages of the basics including cleaning tips, trouble-shooting guides, paint/thinner ratios, basic weathering data and other useful information.

Putting a GP7 into service

Reader Feedback (click here)

by Charlie Comstock

An Atlas GP7 in D&RGW tiger stripes followed me home from my LHS several weeks ago. Finally it was time to put it into service on the Bear Creek and South Jackson.

This loco is DCC ready with a NMRA DCC socket on the motherboard. But I had a Digitrax DH165KO replacement-mother-board decoder on hand that fit Atlas diesels so I used that instead of a piggyback decoder. Before starting decoder replacement I checked the gauge of all the wheel sets (figure 2).

I carefully pulled the GP7's shell off, trying hard not to break the delicate handrails (figure 3). The best way to preserve handrail integrity is to pop loose the ends attached to the cab before separating the hood from the frame. This exposed the PC board (figure 4).

Tiny clips hold the wiring in place on the PC board terminals. I used a pair of pliers to remove the clips (figure 5), then removed the board.

Refer to figure 6. The DH165KO is below the Atlas PC board. The decoder came with four bare wires soldered to the

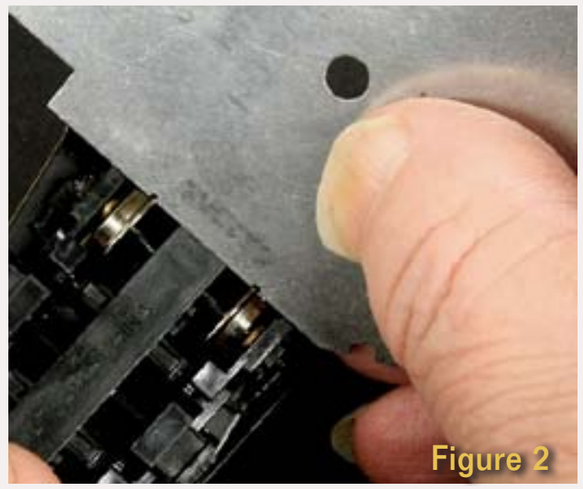


Figure 2

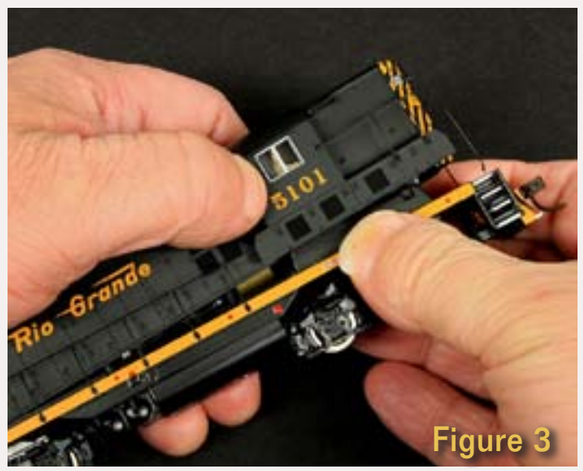


Figure 3


Figure 4

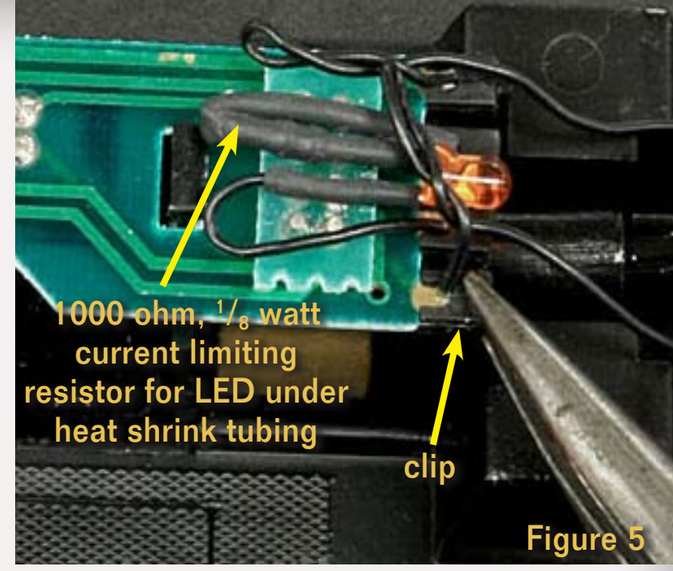


Figure 5

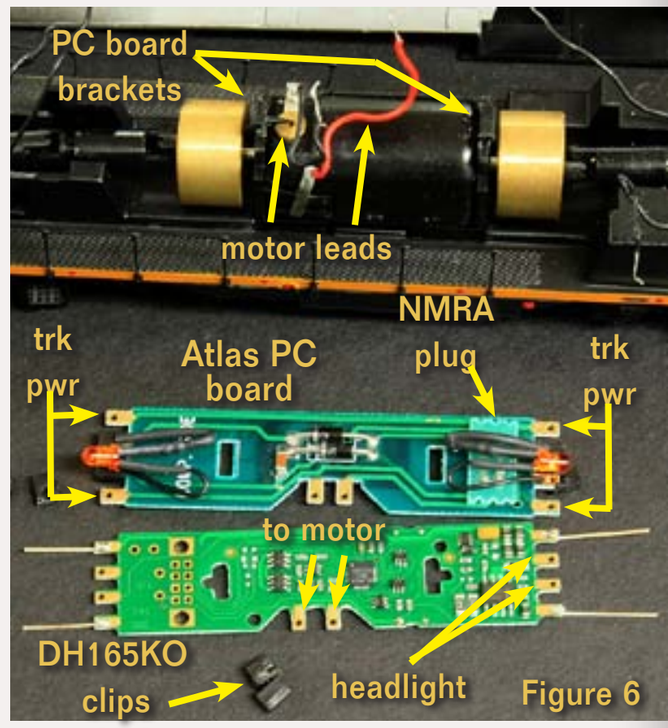


Figure 6

Figure 1

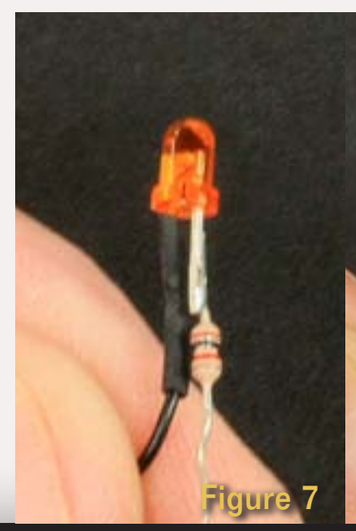


Figure 7


Figure 8

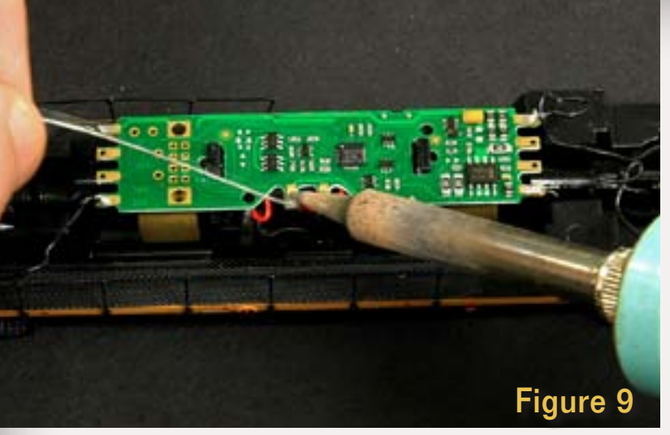


Figure 9

corner pins. I unsoldered them using a plunger type solder sucker.

The loco's LED headlights came with 1K ohm current limiting resistors (under heat shrink tubing, figure 5). The LEDs seemed overly bright so I replaced them with 3.3K ohm resistors (figures 7 and 8), insulating them with heat-shrink tubing.

I mounted the new decoder on the loco, soldered the track power, motor wires, and LEDs to it, and tested the loco's operation (figures 9 and 10).

I used my double-action airbrush to spray the frame with some Com-Art Real Deal weathering colors. While the loco was on the track and moving, I lightly sprayed a mix of "Dark Rust" and "Blue Grey Smoke" on the trucks. When dry I added "Fertile Soil" highlights on the trucks and fuel tank. The exact colors aren't important. I inserted a scrap of plywood in the shell for a handle then lightly sprayed it with layers of "Dark Rust" and "Blue Grey Smoke" grunge. On my 1952 railroad, this loco would have still been fairly new, so I kept the weathering to a minimum.

When the paint dried I snapped the shell back on, being sure the LEDs were positioned correctly. I changed the couplers to Kadee #58s, then brush-painted the ends of the MU hoses PollyScale flat aluminum.

Finally, I programmed the decoder's address. D&RGW 5101 is ready for service (figure 1)!

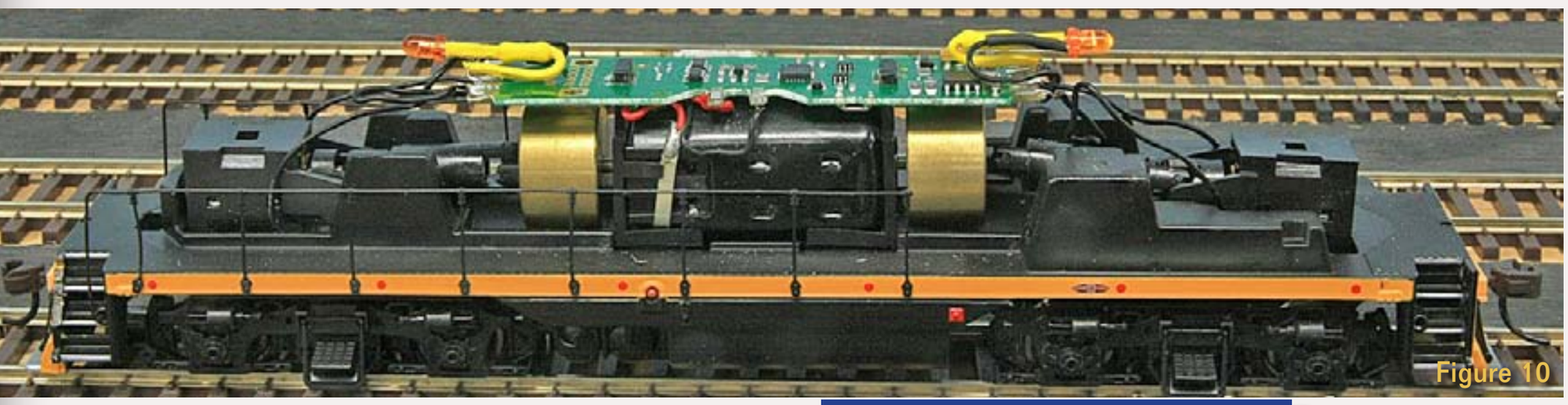


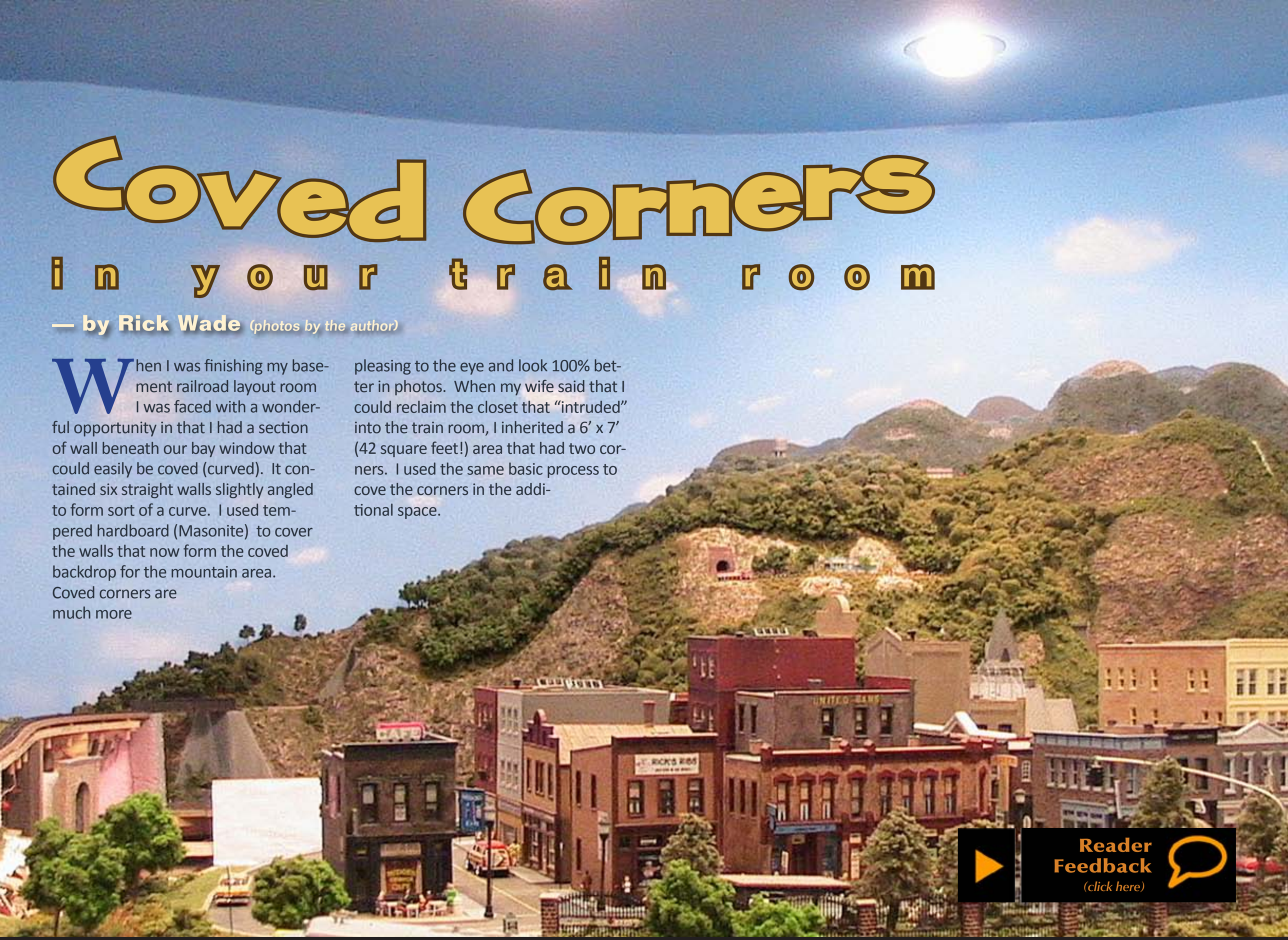
Figure 10

Coved Corners

in your train room

— by Rick Wade *(photos by the author)*

When I was finishing my basement railroad layout room I was faced with a wonderful opportunity in that I had a section of wall beneath our bay window that could easily be coved (curved). It contained six straight walls slightly angled to form sort of a curve. I used tempered hardboard (Masonite) to cover the walls that now form the coved backdrop for the mountain area. Coved corners are much more pleasing to the eye and look 100% better in photos. When my wife said that I could reclaim the closet that "intruded" into the train room, I inherited a 6' x 7' (42 square feet!) area that had two corners. I used the same basic process to cove the corners in the additional space.



Reader Feedback *(click here)*

"Getting rid of corners in the sky pays big dividends in scenic realism!"

Figure 2

Figure 2: Here is the reclaimed 6 x 7 space looking from the existing train room. I've studded-in the old closet entrance in the back wall and will close up the entrance that already existed to the right.

I've learned the hard way that BEFORE I cover up a wall, it's a good idea to document the location of everything inside the wall (just in case something, a train, ever needs to go into the wall. I used my graphics software to mark dimensions on a photo I shot of the uncovered wall. I did the same thing for the right side wall as I'll definitely be running a tunnel through it to the next expansion area in the future.

Be especially sure that walls with pipes and wiring get well documented this way. It may save you from driving a 3" deck screw into a piece of live house wiring. Zap!

Figure 3

Figure 3: The first thing that I did was test-fit a piece of 2' high by 4' long by $^3/_{16}$" thick hardboard in the corner using some drywall screws screwed into the studs (not through the hardboard) to hold it in place. The stud spacing, 28$^1/_2$" from the corner in both directions, allowed for an attractive curve with the hardboard fitting flat against the studs. If the stud spacing wasn't acceptable, I would have added intermediate studs.

Figure 4: Since the hardboard butts up to $^1/_2$" drywall, I laminated a 1$^1/_2$" wide strip of $^3/_{16}$" thick hardboard to the unfinished (back) long edge of the 4' x 8' sheet of hardboard using white glue. Drywall that is $^1/_2$" thick tapers to $^3/_8$" on its long edge. By doubling the thickness of the hardboard with the additional strip, it becomes $^3/_8$" thick – the same thickness as the edge of the drywall.


Figure 4


Figure 5


Figure 6

Figure 5: I've read and heard a lot of discussion about using hardboard in model railroad construction. The common concern is expansion and contraction with changes in humidity or temperature. I always coat all sides of the hardboard with sealer and optionally paint. For this backdrop I coated the back of the hardboard with two coats of high quality sealer. Next I painted the back of the hardboard with "junk" paint My personal experience has been that as long as all sides of the hardboard are sealed with two coats of sealing material and the environment is temperature / humidity controlled then there won't be any problems. I keep my train room between 65 and 75 degrees F and between 40 and 55 percent humidity. So far, I've not had any problems with backdrops shrinking or warping.

Figure 6: My train room has 9' ceilings. I used 1' high sections at the bottom of each 8' piece. You can see the 1' x 4' pieces along with the narrow pieces I used to reinforce the seam between the 8 foot and 1 foot pieces.

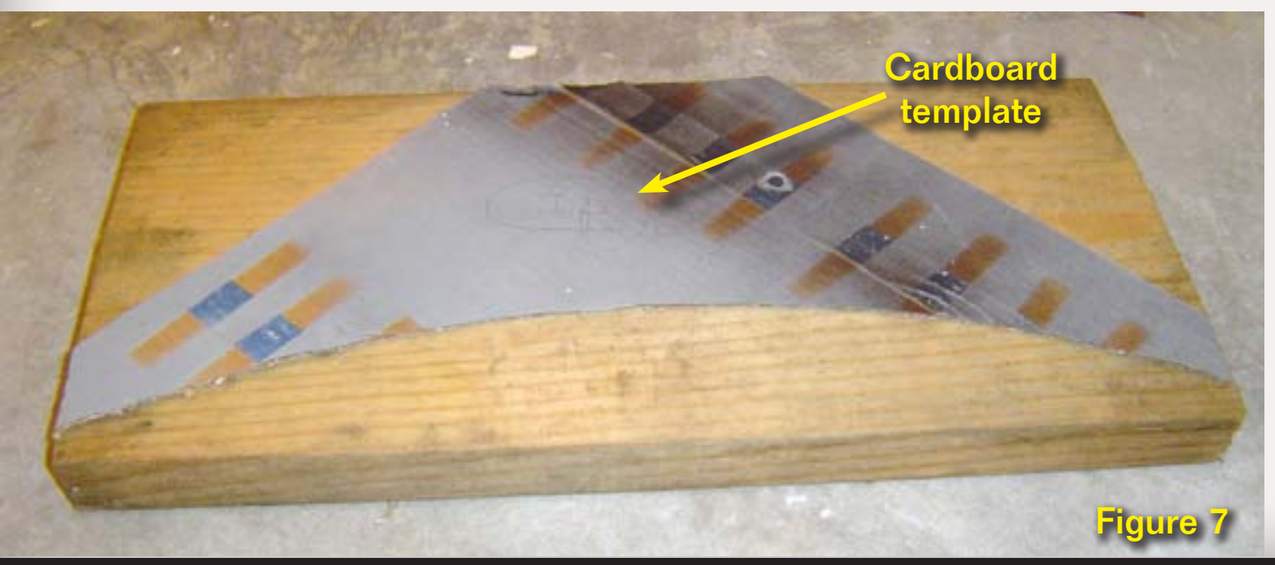


Figure 7


Figure 8

Figure 7: The back of the hardboard should be braced, at least at the top and bottom. The bottom bracing is important as I'll be screwing the baseboard trim to it. I used a piece of cardboard to make a pattern which I transferred onto scrap pieces of 1"x12" lumber – pressure treated, since it is in direct contact with concrete.

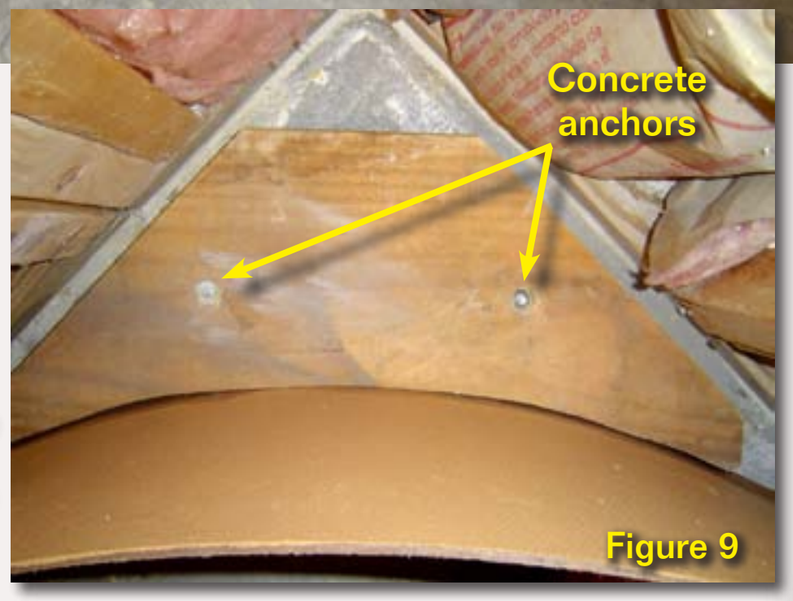


Figure 9

Figure 8: I put a piece of 1'x4' hardboard in place in the corner, then put a brace I'd made behind the Masonite. I marked the brace's position, carefully removed the hardboard and placed the cut out support in position. I attached the support to the floor using drilled holes and countersunk Hammer-Set ¼" x 2" Nail Drive Anchors. You don't have to use 1" x 12" lumber to make the supports – I just happened to some on hand.

Figure 9: Seen from above: the brace, attached to the floor with concrete anchors and the 12" tall piece of hardboard in front of the brace. This lets me see if I got everything positioned correctly. If not I'll need to move the brace.

Figure 10

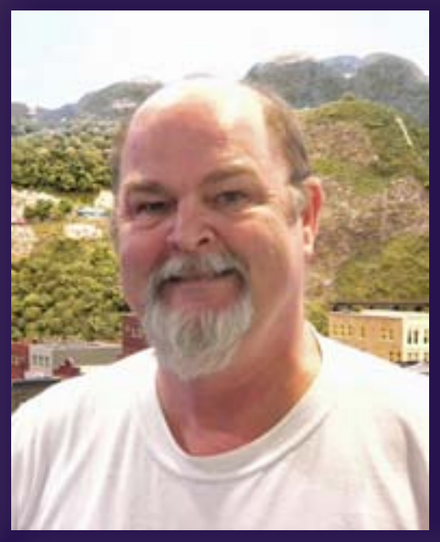
Figure 10: I attached two more braces, top and middle, cutting them following the same pattern.

Figure 11: A few hours later both hardboard corners are in place. I added another piece of hardboard (painted blue) between them to maintain thickness from left to right. It's very difficult to tape and mud the coved hardboard pieces where they meet the ceiling, I used latex caulk to fill those joints, spreading it smooth with a putty knife.

Figure 12: A couple of coats of my flat "Railroad Room Blue" and the alcove is nearly finished. Notice how the coved corners "fool" the eye into believing that the room is deeper than it actually is. You have to look at the ceiling to see the actual depth of the area. After finishing the walls, I painted the floor in this area to match the rest of the floor.

Figure 11

Figure 12

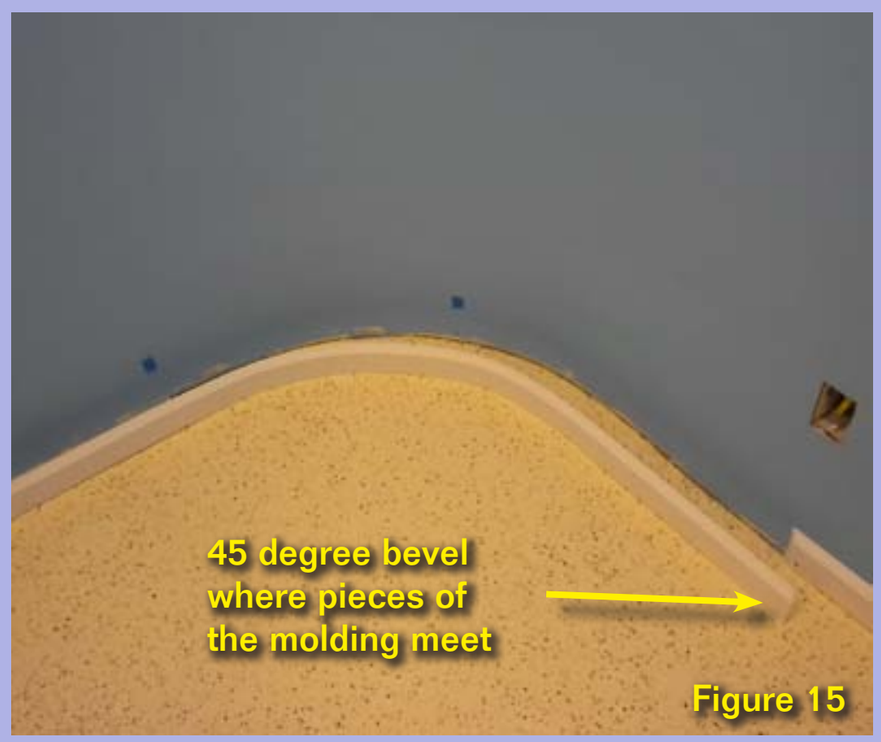


Rick grew up in Louisville, Kentucky in the '50s and '60s with L&N trains passing only 200' behind his house. He was 8 years old when he and his dad built his first HO layout.

A spell of boredom in 2006 due to a drought and lack of sufficient water for boating led to his building a DPM 1st National Bank kit. Another kit or two and he was hooked. Again.

Rick's Richlawn Railroad is named after his childhood neighborhood. He belongs to the NMRA Piedmont division in Atlanta, Georgia and looks forward to having op sessions on his layout in the near future.

Baseboard Installation



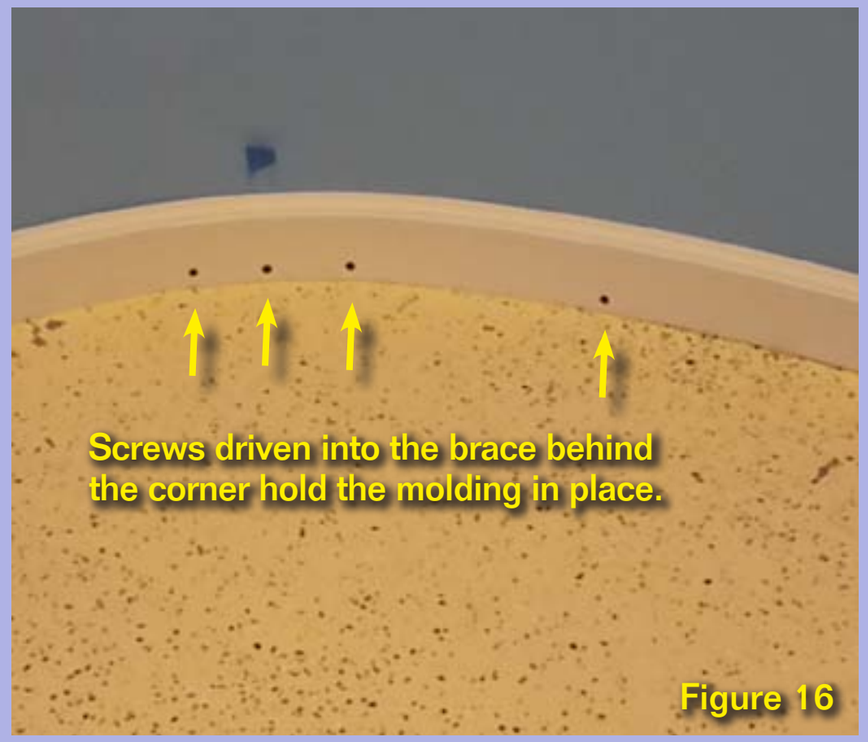


Figure 13: Curving PVC molding to conform to the coved corners was easy using a heat gun! I used 12' lengths of PVC molding, softening them with a heat gun. I attached the molding to the wall in a straight area with counter-sunk drywall screws.

Figure 14: I applied pressure to the unfastened end to bow the molding and continued heating. I kept the heat gun moving to avoid melting the molding. Take your time and you will feel the molding relaxing and forming a curve. Once I got the curve to match the coved corner I held the molding in position until it cooled.

Figure 15: This molding has cooled enough to hold its shape. Note the 45 degree beveled ends where pieces of molding meet.

Figure 16: The finished baseboard molding screwed in place

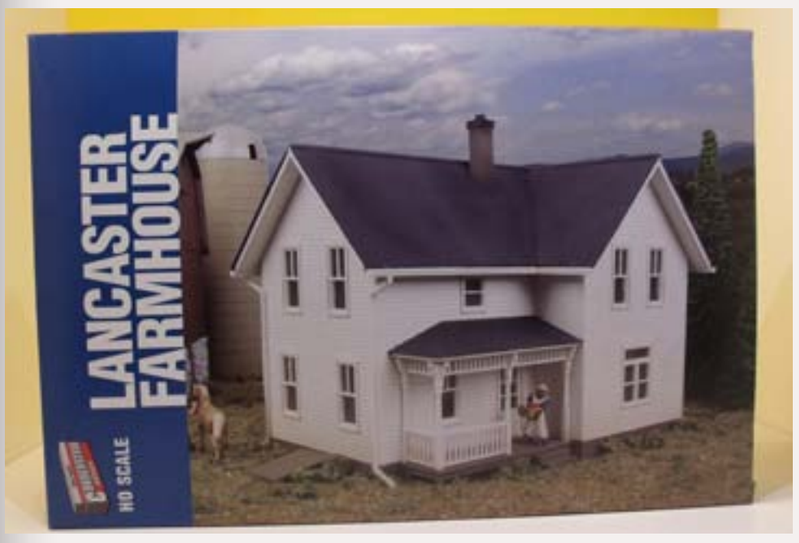
Coving the corners in my train room dramatically improved the look by softening abrupt angles. The process is not that difficult and can be done at modest cost using common materials and a little elbow grease. As I continue to expand my railroad I'm planning to continue coving corners whenever possible. ☑

Reader Feedback
(click here)

Walthers' HO Rural USA Lancaster Farmhouse

First Look

Reader Feedback (click here)



New Lancaster Farmhouse ...

– by Jeff Shultz

For 2011, Walthers added a new collection to their Cornerstone Series structures by introducing "Rural USA" (http://www.walthers.com/exec/page/rural_usa) - a series of buildings that might be found on a typical farm nearly anytime in the late 19th and 20th centuries. These farm buildings are on the other end of the railroad from their 2009/2010 North American Ethanol plant releases.

Walthers' Lancaster Farmhouse kit (http://www.walthers.com/exec/productinfo/933-3333) is a model of a two-story farmhouse with a storm cellar entrance. Cast in two colors as well as clear styrene, the kit includes a single-piece base that the rest of the model is built up from. The model features clapboard siding, separate window and door castings, and a simulated asphalt shingle roof.

Construction begins by installing the windows and doors in the walls, which are then added to the base. The roof and soffit detail are separate pieces that are then assembled prior to adding the rest of the structure. The roof peaks are separate parts, emulating the cap of overlapped shingles used on asphalt shingle roofs. Front and back porches come next, followed by the gutters and trim, finishing up with the chimney, downspouts and cellar doors. The base of the model is open, so if you want to fit window treatments or even photo interiors after construction it should be possible to do so.

For my model I decided I wanted to have different trim and roof color. On my model the trim and windows are brown, and the roof is a textured brown spray paint that I originally bought to paint SuperTree™ tree trunks but that has a bit of sparkle and a shingle texture appearance.

The Walthers Rural USA Lancaster Farmhouse is available now through your hobby shop or online at http://www.walthers.com/exec/productinfo/933-3333. Its MSRP is $39.98. ☑

FIGURE 1: Assembled Lancaster Farmhouse.

Four from ANE

First Look

Spacers, rulers, semaphores, and 3 position controllers ...

– by Jeff Shultz

ANE Model Co. (www.anemodel.com) has recently introduced three new products and added functionality to one of their previous ones.

Reader Feedback (click here)

The first is a spacing jig, described by ANE as a HO sleeper spacing caliper, that is used for establishing an even spacing between ties on both mainline and branchline track. Cut from 5mm thick clear plastic, one edge has the mainline tie spacing (3mm gap between ties) and branchline tie spacing (approximately 6.5mm gap between ties) on opposite sides of the jig. Cleverly, the name of each spacing is etched on opposite sides of the jig, so that if you can read it, the edge that is down is the matching one. MSRP for the LA002 HO Sleeper spacing caliper is US $8.99 (Figure 1).

The second new product is also related to handlaying track – HO scale PC Ties, measuring 2.5mm x 200mm (0.1" x 7.8") with copper cladding on both top and bottom of the tie. Each pack includes 10 pieces. With a standard tie length of about 1.71 inches, you can get 4 or so ties out of each piece. MSRP for the PC001 PC tie is US$4.50 (Figure 2).

The third new product is an HO Brass Semaphore arm kit, based on Australian prototypes. Each kit contains two each of three different types of arms (Types MLS, L, and D), for a total of six semaphores. Since I personally don't know anything about Australian prototypes and couldn't find anything that looked the same on the Internet, I put out a call for help in identifying the prototype. Andy May, an S scale modeler in the UK who is considered a bit of an expert on Western Australian railroads, was able to identify them as similar to pressed steel semaphore arm used in New South Wales. The MLS type appears to be the "Stop" type of arm that displays the immediate indication and the D type with the fishtail notched end matches the general shape of a "distant signal" type of semaphore. The third arm, labeled

FIGURE 1: LA002 HO sleeper spacing caliper.

FIGURE 2: PC001 PC Ties.

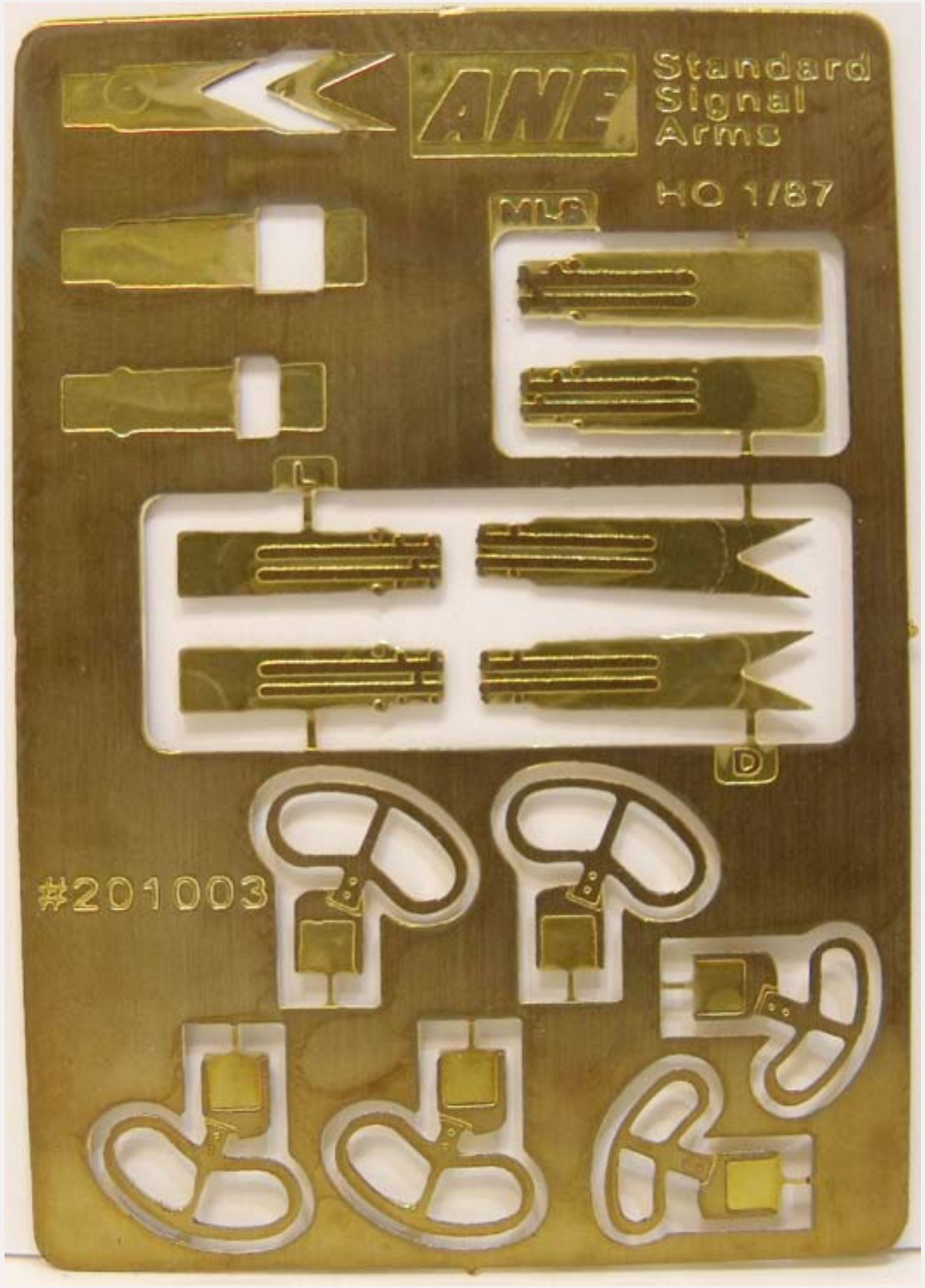


FIGURE 3: BP001 HO Brass Semaphore arm kit.

L type, may represent a type of shunting signal. The kit includes only the arm and the spectacle, so the modeler will need to acquire the pole, lights and mechanism separately. The etched-brass sheet also includes a painting mask for each of the arm types. MSRP for the the BS001 HO Brass Semaphore Arm Kit is US $14.99 (Figure 3).

The last product in this First Look is an update of the ANE SmartSwitch board, used to control the ANE servos. The latest version of this board includes a three position mode, making it capable of controlling both three-way stub switches and 3-position semaphores.

The updated board has two significant differences from the original SmartSwitch, which was covered in a First Look in the Jan/Feb 2010 issue of MRH. Since it is capable of three positions, the Red/Green LED indication light connectors have been eliminated. Also, instead of having screw-type connectors for toggle switches and power, the updated SmartSwitch board has pigtail wires soldered directly to the board. MSRP for the updated AP012 SmartSwitch board 5V version (three position) is US $30.79 (Figure 4). ☑

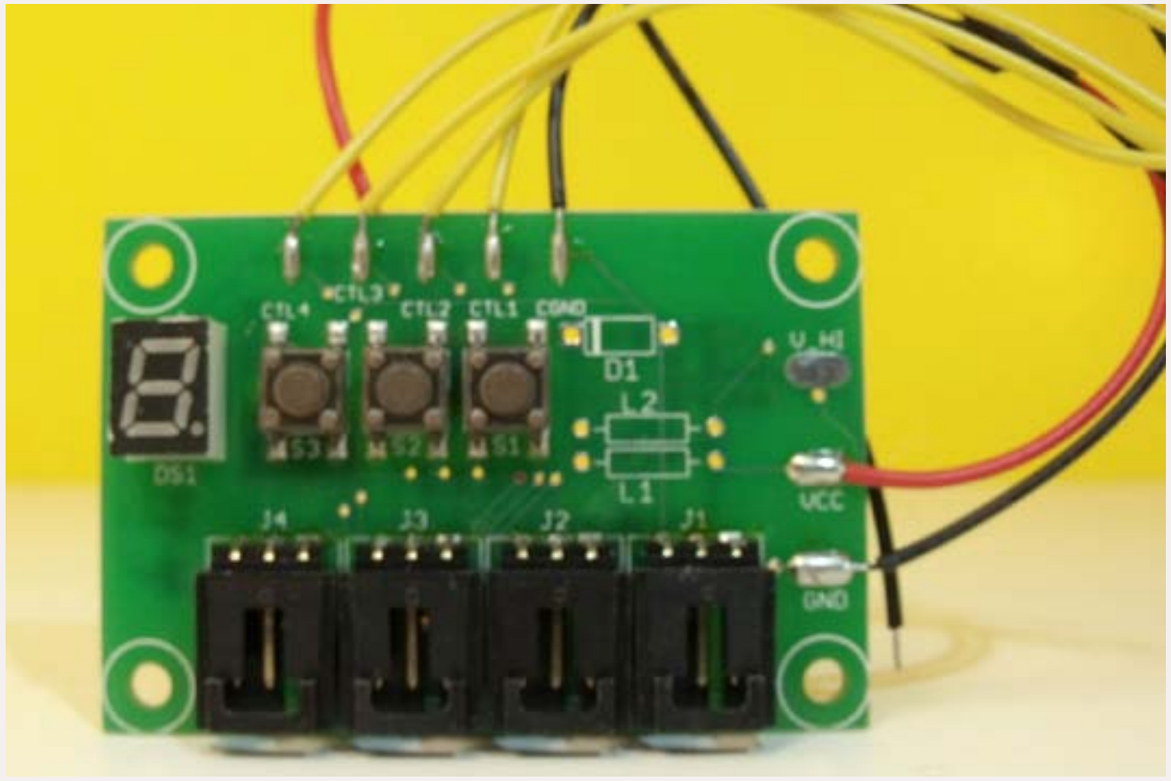


FIGURE 4: AP012 SmartSwitch board 5V version (three position).

About our layouts columnist

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

Click here to learn more about Charlie.

Charlie Comstock is ...

UP THE CREEK: Installing a Framed Wood Trestle - part 2

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

A wooden trestle spans Baynes Valley on the BC&SJ. Here's the history of that location on my layout ...

Last month I described preparing the bench-work around the site of a bridge, building up basic land-forms, and got into the con-struction of the trestle itself.

This month I'll install diago-nal bracing and guard timbers on the trestle and update the scenery under and around it.

You may have the impression that I assembled and installed this trestle all at one time. Not true. The Baynes Valley trestle was in service for two years without diagonal bracing and guard tim-bers before I finished it.

Figure 1

Reader Feedback *(click here)*

I like my bridges to be removable so I connect the rails with rail joiners at each end of the bridge (figure 2). By sliding the rail joiners, I can easily remove the trestle which was handy when I resumed work on it. The track on this bridge is Micro Engineering bridge flex track. It sits on top of, but is not glued to, the longitudinal stringer and bents assembly.

I slid back the rail joiners and removed the bridge track and stringer and bent assembly in preparation for finishing the bridge (figures 3 thru 5).

Diagonal Bracing

Scale 4”x10” stripwood boards form the diagonal bracing. Refer to the prototype pile trestle (figure 7) and note how the bracing meets on either side of the outer bent timbers.

On my framed trestle the sway braces interfere with where the diagonal X bracing goes (figure 8). I added the diagonal bracing with the bridge off the layout. First I held a piece of 4”x10” timber in place to size it (figure 8), then I cut it to length and added tiny drops of yellow glue on each end (figure 9). I held it in place long enough for the yellow glue to ‘grab’ – about 15 or 20 seconds since the diagonal bracing timbers are so light.

Add all the bracing to one side of the trestle, then put it back on its concrete footings to make sure the bents were still positioned correctly before the yellow glue set completely. I needed to nudge a bent which had gotten a little tweaked. Let the yellow glue dry for several hours before adding the diagonal bracing on the other side.

Figure 11 shows the trestle with all bracing in place. I let the glue dry overnight to achieve full strength.

I used a #72 (.025”) drill to bore pilot holes in the diagonal brace ends for some Grandt Line NBW (nut-bolt-washer) castings. These come with stems attached. I snipped off the NBWs and inserted the stems in the holes.

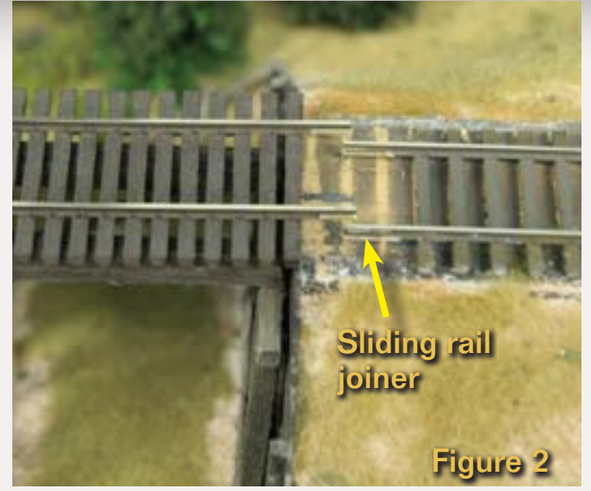


Figure 2: Sliding rail joiners allow removal of the bridge’s track. For better electrical properties, the joiners can be soldered at one end. Snip ‘em with rail cutters to remove the bridge should if necessary.

Figure 3: Preparing to remove the bridge track.

Figure 4: Bridge track is removed, but the longitudinal stringer and bents assembly is still in place.

Figure 5: The bridge is completely removed showing the ‘concrete’ footings and the sorry state of the road underneath the bridge.

Figure 6: Removing the bridge exposes the timber abutment. I built these from 4”x12” board and 12”x12” post scale stripwood.


Figure 7

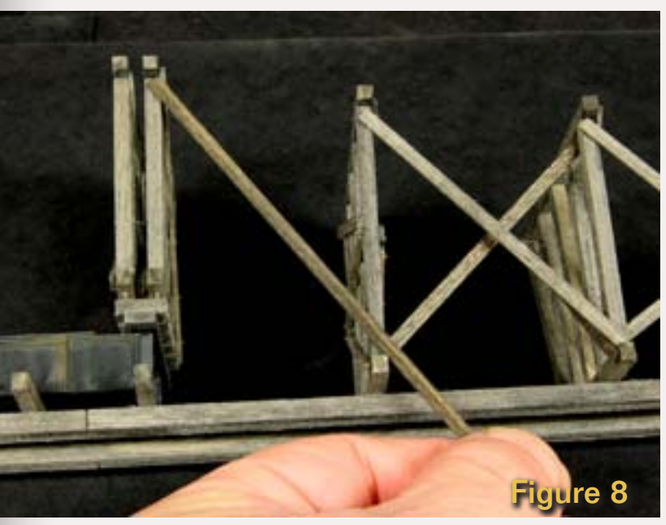


Figure 8

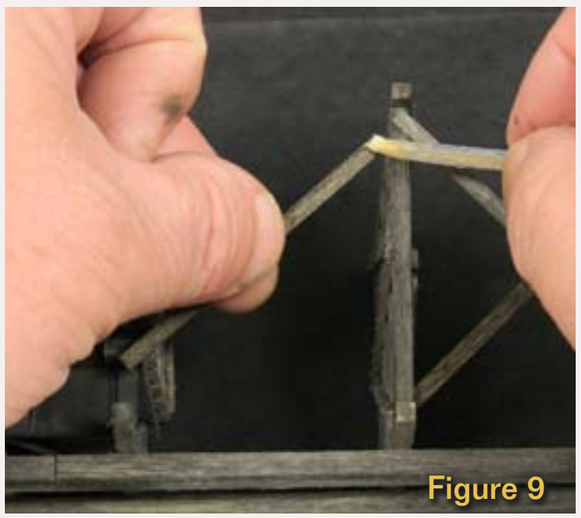


Figure 9

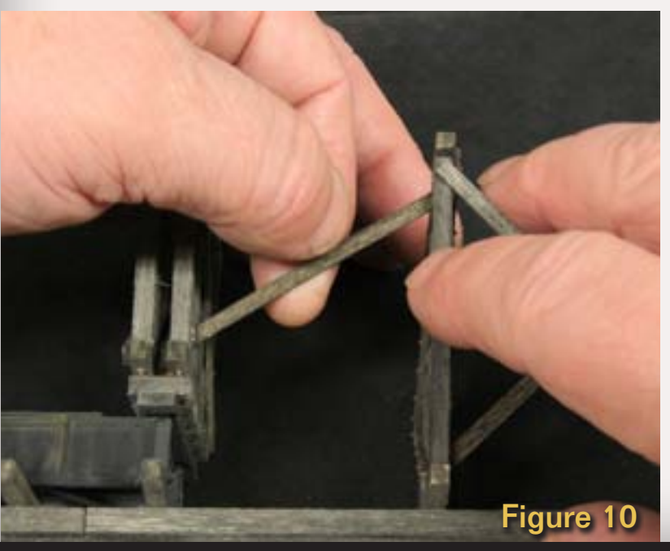


Figure 10

Figure 7: Bracing on a prototype pile trestle.

Figure 8: Sizing a diagonal brace.

Figure 9: Applying a drop of yellow glue with a toothpick.

Figure 10: Holding a brace in place long enough for the glue to grab.

Figure 11: The bents with all diagonal bracing installed.

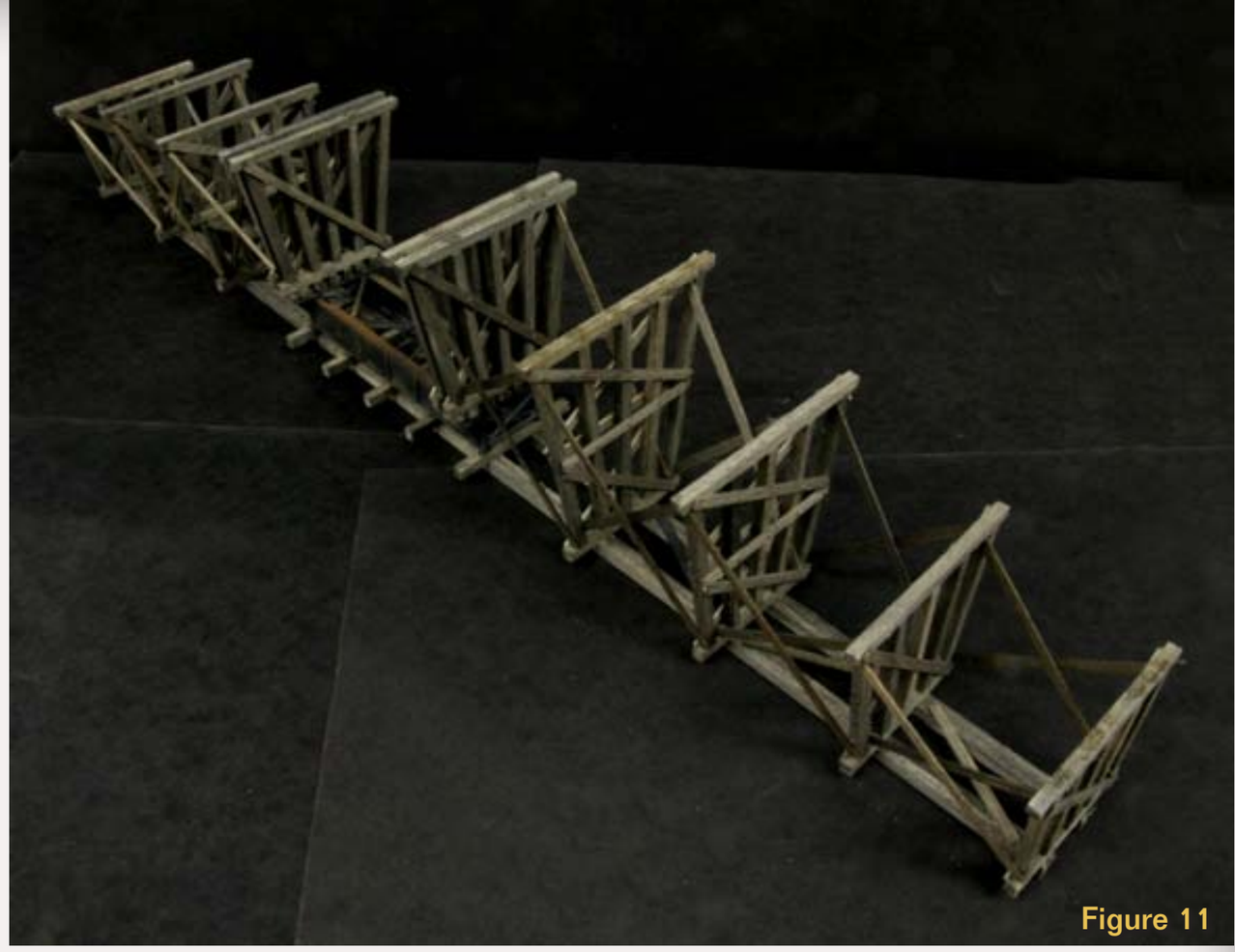


Figure 11

I describe using NBW castings in more detail in the Up the Creek column of the July/Aug 2010 issue of MRH on page 140.

With the stringer and bents assembly complete it was time to move on to the track assembly.

Guard Timbers

Wooden trestles usually have wood guard timbers (figure 10). Timber length varies from railroad to railroad and whether the bridge is curved or straight.

The Micro Engineering bridge track package includes plastic guard timbers complete with nut-bolt-washer detail and wood grain cast in. I chose to use these.

The instructions say to glue the guard timbers to the ends of the ties using ACC. I used Zap-a-Gap that I had on hand. I removed the guard timbers from their sprue (figure 11) using de-spruing nippers that cut very cleanly. I dressed the ends and sides with a jewelers file to get rid of traces of flash.

I ran the Zap-a-Gap along the ends of the ties for one guard timber length and used tweezers to put the timber in place (being careful NOT to glue my fingers to the bridge!) (figures 12 and 13). I had to cut the last guard timber on each side to get the right length for my bridge.

After the ACC had set, I pulled out my iwata airbrush, loaded it with some Polly Scale Railroad Tie Brown (the color I'd


Figure 10


Figure 11

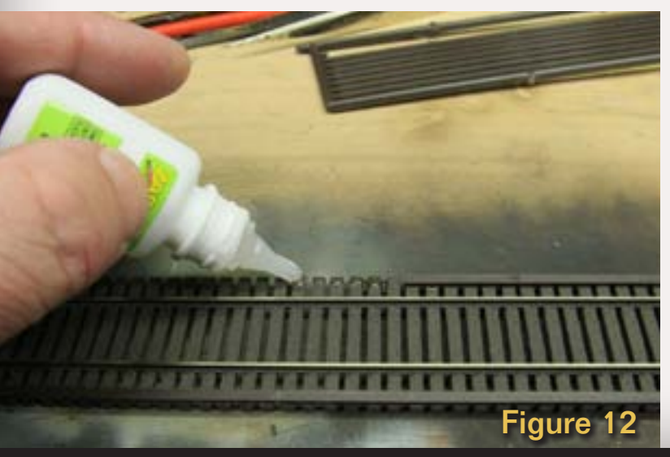


Figure 12

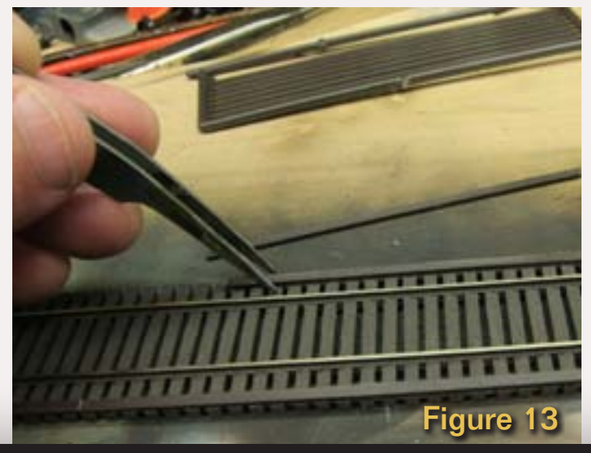


Figure 13


Figure 14

painted the ties) and airbrushed the guard timbers and anywhere I could see the tell-tale shine of excess ACC. The double-action airbrush gave me enough control to avoid painting the rail heads.

Once the paint dried I pulled out a Rust color Floquil Paint Marker and colored the sides of the rails.

I decided against using guard rails. I'm modeling a SP flavored version of Oregon and I don't see guard rails on the local bridges. I also concluded that a short trestle would not have refuges – these are usually several times farther apart than my bridge's 140' length.

Scenery Upgrade

Next, I looked at upgrading the scenery under and around the bridge.

Take another look at figure 2 and note the lack of ties. I supplied the missing ties at the ends of the bridge using Micro Engineering wood ties, coloring them with a Floquil Paint Marker, and stuck them in place with yellow (figures 15 to 17).

The concrete footings for the trestle looked entirely too clean to me. I used some alcohol and black powdered chalk to weather them. I was careful to use lots of alcohol and not much chalk to avoid making them appear to be made of coal. I used a $\frac{1}{2}$" brush to paint the weathering mixture (and I came back with plain alcohol to wash off excess chalk when I got careless (figure 18).

I wasn't satisfied with the static grass that was 'growing' under and around

Figure 10: This prototype trestle has guard timbers, but not guard rails.

Figure 11: The Micro Engineering guard timber styrene castings.

Figure 12: Adding drops of ACC to the end of each rail. I'm afraid my drops were larger than needed.

Figure 13: Placing the guard timbers in place. Be VERY careful not go glue fingers to the track!

Figure 14: The trestle with bracing, guard timbers, and rusty rails.

Figure 15


Figure 16

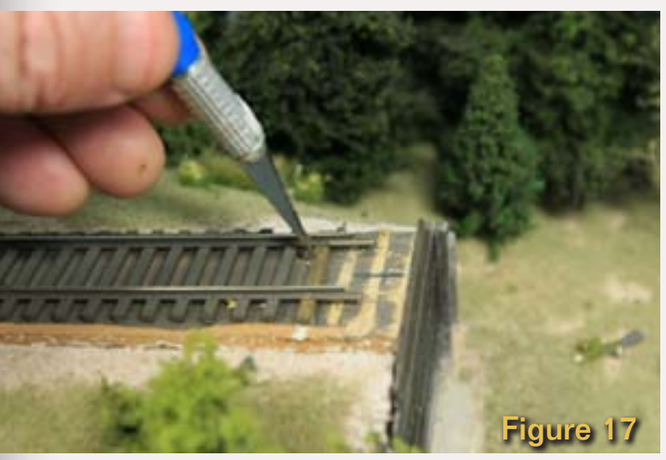


Figure 17

Figures 15: I used a Floquil Paint Marker to color a few ties Railroad Tie Brown.

Figure 16: When the paint dried I speared the ties with an X-acto knife and dipped the unpainted (bottom) side in yellow glue.

Figure 17: Then, using the X-acto as a handle, I stuck them on the road bed next to the abutments where there weren't any ties.

the bridge. It was a too-uniform coat of 2mm light green flocking. I loaded my airbrush with a 50/50 mix of white glue and water and sprayed it on the existing static grass (figure 19). Clean the airbrush immediately afterward! Then I loaded my Grass Master (electrostatic grass applicator) with some 4mm SIlfor autum with a bit of Woodland Scenics 2mm Harvest Gold flocking. I stuck the ground clip in place and added another layer of flocking where I'd just sprayed the glue (figure 20) hoping I could get the new layer to stick to the tops of the existing grass for a two-tone effect. Figure 21 shows the results though it's a bit hard to see the taller grass.

Next I airbrushed the road with Polly Scale Grimy Black (diluted 50/50 with 70% alcohol). I used a 4" putty knife as a mask to keep the paint from getting all over the scenery. I also added piles of gravel next to the road and a few other places plus some conifer debris (ground up cedar shavings dyed with India ink and alcohol). I dribbled alcohol on these to wet them down, then dribbled on some 50/50 white glue and water to secure them in place. (figure 22).

I wanted a largish tree against the backdrop (figure 23) . But its 'branches' pushed it away from the backdrop making it look as though it was drunk. I used tin snips to cut off the branches on one side of the trunk (figure 24). Now it fits nicely against the backdrop.

I added some color variations to the static grass by loading my airbrush with


Figure 18


Figure 19


Figure 20


Figure 21

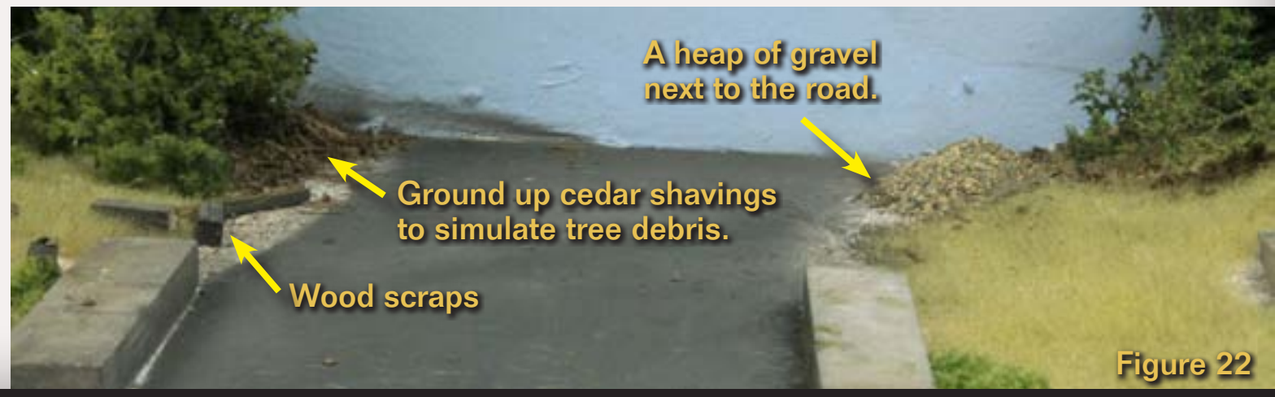


Figure 22


Figure 23

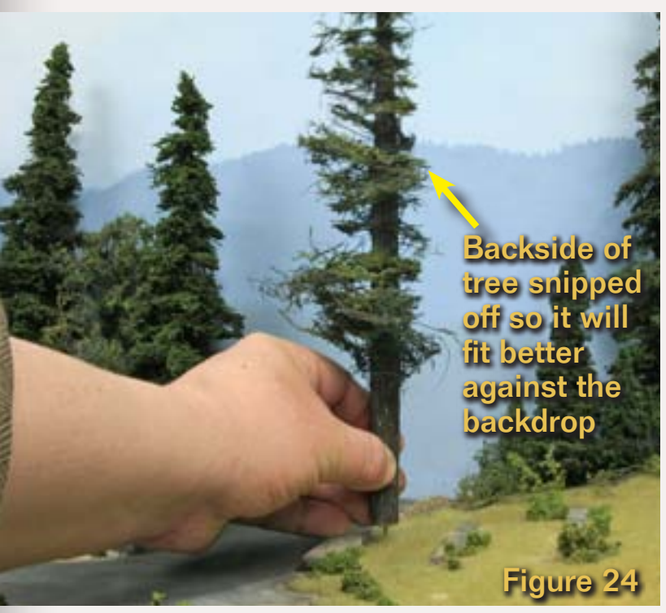


Figure 24


Figure 25

some yellow and gently spraying the installed grass. It's easy to get too much paint on the grass so go slowly. And don't try to spray an even coat of color.

I dipped a few stumps (twigs I sawed up with my bandsaw) left over from a previous project in full-strength white glue and planted them in likely places.

Finally I dunked a number of pieces of Woodland Scenics Fine Leaf Foliage, Silflor autumn medium lawn, and Silfor flowers in white glue and stuck them around and under the trestle. I always shred Silflor mat products before using them.

Finally, I re-installed the trestle pieces, sliding the rail joiners in place to hold the track. Then I ballasted the track next to the bridge using my Ballast Rake to spread Smith and Sons #40 gray limestone (figure 26).

The Result

I think the scene around Baynes Valley looks much improved now. Check it out yourself on the next page.

Reader Feedback
(click here)

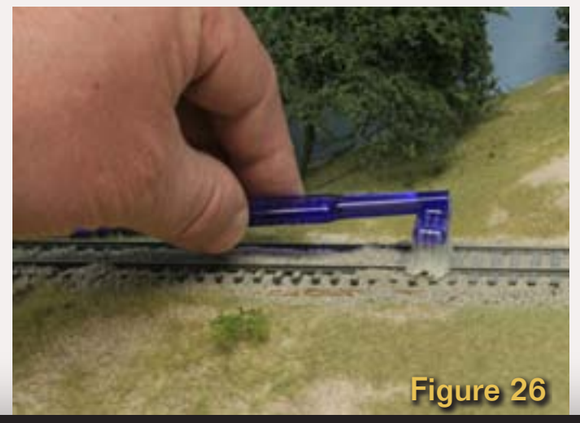


Figure 26

A clipping from the

South Jackson Gazette

X-Men!

For the last couple of years, trains passing above Baynes Valley have traveled on track supported by a framed timber trestle.

Recently though, a team of engineers inspecting the railroad infrastructure found an alarming problem. It seems the Baynes Valley trestle has been , in the words of Horace Fithers "unsafe, unfit, and more than slightly dangerous to be a ridin' across in a train!".

The problem is that in their eagerness to get the bridge finished it appears certain parts of its 'anatomy' were omitted! In particular diagonal bracing and guard timbers got left out.

Explained Ace Wheeler, engineer for the BC&SJ, "I thought there was something a bit off with that bridge. Those missing guard timbers are downright unsettling!"

When asked what guard timbers guard, Ace was unable to provide an answer other than "Well, they just should oughta be there!"

Charlie Comstock, Superintendent of Nearly Everything of the BC&SJ shook his head sadly when informed and promised to get to the bottom of this mess.

Word is out that Lloyd and Jeff, a team of crack bridge engineers have arrived on the job. This reporter headed out to the trestle site to check this out. Upon arriving, the X-men as the bridge engineers referred to themselves, were hard at work.

When asked why they called themselves X-men, Lloyd responded, "Well, ya see, it's like this. With a bridge like this here trestle, the bracing always comes in pairs. There's two sway braces and there's two diagonal braces. And ya see, it's like this, them braces always cross over each other makin' a sort big old X. So ya see, that why we call ourselves X-man, ya see."


The refurbished trestle with X bracing

Whatever they call themselves, they do seem to know their way around trestles. It was only a few days before the trestle had proper diagonal X braces and guard timbers and was back in service.

Reportedly the original builders plan to plead innocent to charges, claiming they were framed and decrying the charges piled on them.

All the locals, train crews and passengers alike seem relieved.

* Enjoy the Gazette? Read more at bcsjrr.com

Figure 27

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.

THE LITE *AND* NARROW: West Side Lumber Co. Wooden Water Tank Car

Ramblings on Narrow Gauge and Branchline Modeling

Reader Feedback (click here)

The Pequea Mining RR adapts a western logging tank car ...

The nice thing about a free-lance railroad is that you can have any equipment on it you want. A West Side Lumber Company big, beautiful, and boxy wooden water tank car can be used on my On30 eastern narrow gauge railroad, the Pequea Mining and Chemical Railroad (see October 1983 RMC for the HO version of this railroad).

Russ Simpson found a wrecked WSLC water car in 1986 and drew plans for the car from the debris, in O scale. The model car in On3 is 24' long. I wanted a smaller car for my railroad so I did a "Honey, I shrunk the car" version and now have a 20' car that is not quite as tall or as wide as Russ' drawing indicates. I redrew the car to be slightly smaller, but while building it, I shortened the car even more than my drawing.

WSLC used the Carter Car Co. design for their flat cars, and the WSLC water car is a rectangular wooden tank sitting on a Carter-design wood flat car. I considered building the car completely from scratch but then decided to use up some of the old 40' HO revenue cars I have, which would result in a car with a maximum O scale length of 20'.

The construction is divided into two parts, the wooden flat car, and the wooden tank. I cut the center portion from the chassis of an HO 43' stock car to reduce the length but retain the stable platform with bolsters to stabilize the trucks (Figure 2 next page). I discarded the trucks and replaced them with Kadee's HO arch bar trucks with 36" metal replacement wheels. O scale 6" X

FIGURE 1: The locals and employees of the Pequea Mining and Chemical Co. congregate to see the water tank car purchased from the West Side Lumber Co. This car will ensure that Pequea Village will not be short of water during the dry month of August.

12” timbers were added to either side of the stock car chassis to bring the car into correct width, and appropriate timbers were added to the car ends.

The deck of the flat car was planked with coffee stirrers that scaled out to 2-1/2” X 12” lumber (Figure 3a, 3b). I poured lead bird shot into the frame and put two ¼ oz. stick-on weights on the deck.

All wooden parts were scored and scratched to look like wood grain and every piece was stained with a shoe dye and alcohol mixture, in brown and black, to give a

Figure 2

FIGURE 2: The nondescript HO stock car gave its life to make the short version of the West Side Lumber Co’s. wooden water car. The HO underframe was shortened and boxed in with O scale 6” x 12” timbers. The plastic HO underbody is filled with lead birdshot.

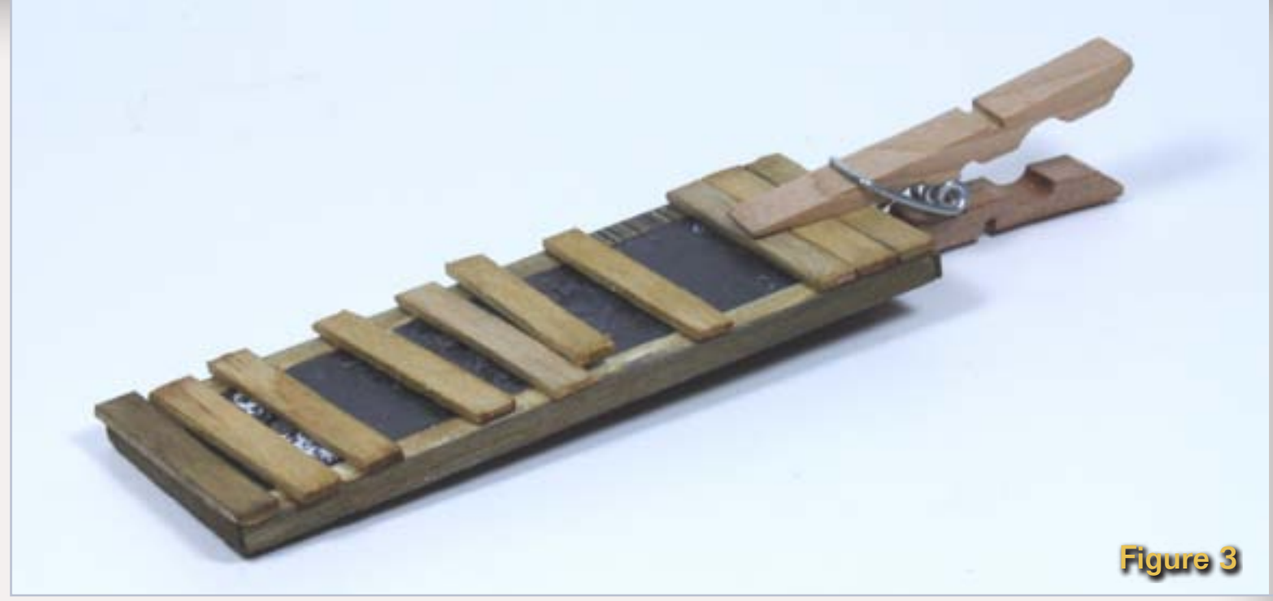


Figure 3

FIGURE 3a: The deck of the Carter-style flat car was planked with coffee stirrers and glued to the wood 6” x 12”, then clamped with redesigned clothespin clamps. All the wood construction pieces are scraped with a razor saw to create wood grain and pre-stained with brown and gray shoe dye diluted with alcohol.


Figure 4

FIGURE 3b: Every deck plank is glued and clamped on the outside edge on both sides to ensure a solid base. Plank the car from each end toward the middle to avoid a narrow plank on the end.

weathered gray-brown look to the wood. The original WSLC water car did not have decking under the tank but I decided to use it, as the bare space under the water tank showed too much of the HO car.

The sides, end, and top of the water tank were made the same way as the deck. At first, I didn't allow for the inset of the tank ends and had to remake the internal structure for the sides. The outside face of the ends of the tank is recessed from the end of the side. Measure your internal braces for the sides accordingly (Figure 4 next page).

I worked on each side and the top separately to apply all the detail before I assembled them onto the ends (Figure 5). The ends received their details after I assembled the tank. I used staples for the 24" grabirons. The discount price "made in China" staples look better as grab irons than the quality brand staples. The cheap staples are made from round steel wire, not square, are

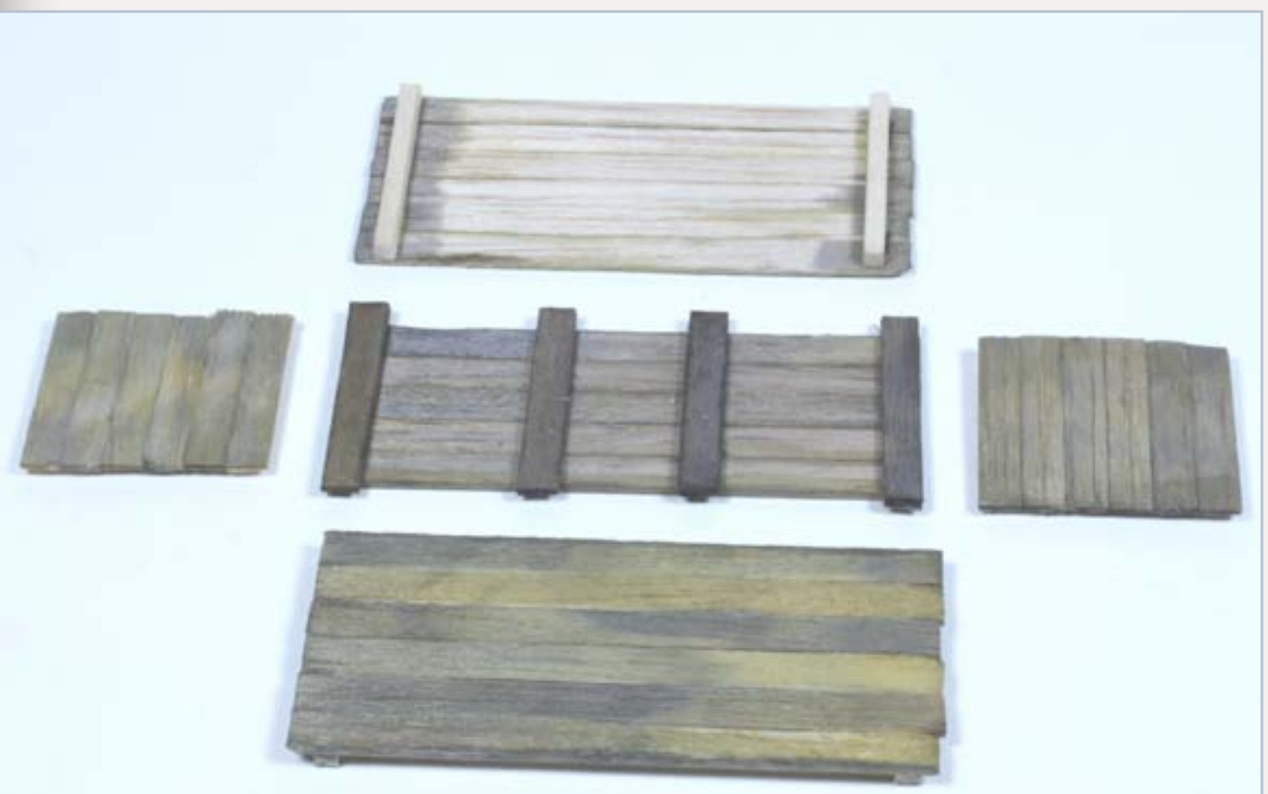


Figure 4

FIGURE 4: The water tank's sides, ends and top were constructed and detailed before assembly. It is important to label the edges that will be glued together to be able to repeat the construction pattern and ensure a tight fit.

Figure 5

FIGURE 5: The box has been temporarily assembled with a tiny amount of paper rubber cement. The edges must be carefully checked for squareness and no gaps at the joints.

.020” in diameter, thinner than the brand name staples and just the right size for O scale grab irons. I blackened the staples with Birchwood Casey gun blue before installation.

The stay-braces on the ends were fabricated from .024” brass wire. I blackened the wire with Blacken It before I installed it. All the nut-bolt-washer castings are from Tichy and represent the ends of the threaded rod running through the tank to hold the sides together to withstand the water pressure pushing out.

I couldn’t find my white glue bottle, so I used the yellow carpenters glue; there’s not much difference between them. The NBW castings were painted a dark orange rust color and were attached with CA. I drilled holes slightly larger than the stem of the NBW so I wouldn’t have any problem getting them into the hole. I got the first dozen NBWs in place with no problem, then started shooting the rest all over the room. Good thing I had a lot of spares.

The truss rods were made from blackened .020” brass wire. No turnbuckles were added, as the WSLC tightened the rods for the Carter flat cars from the car ends. The queen posts were from a bag of DRGW needleposts for the high side gondola. I had these in my stock for over 40 years and this was the first time I remembered to use them! The brakewheel is a brass casting I picked up at the Mid-Atlantic Narrow Gauge Guild Meet in Kimberton. I forgot to thread the pawl on the shaft when I glued the brakewheel in place with CA. Now I have an extra pawl casting. Life is good!

The water valve is the center of a Kadee sprue, drilled to make a pipe fitting. An HO plastic brakewheel is the valve handle. I’m going to try another one using the same sprue but with 2-56 nuts under the valve stem and at the outlet. The water hatch in the roof is a DRGW refrigerator car ice hatch. I glued it directly to the roof surface, but in retrospect, I think it should have a shallow frame under it to bring it up higher (Figure 6 next page).

I finished the car by powdering some Madder Lake pastel, filing it with a mill file. I allowed the scrapings to lightly fall on the car and then scrubbed them in with an artist bristle brush. The red looked too intense so I went over the whole car with Vandyke Brown, using the same process. The brown toned the red nicely and left an uneven color over all. As soon as the cold winter weather breaks, I will go outside and give the car a coat of flat spray and go over the whole car lightly with medium gray pastel dust to mute the colors. The trucks were washed, then drybrushed with some acrylic rust colors. The hinge and latch on the roof hatch were blackened with a fine-tip drafting pen. After the wood is sealed, I am going to put a few drops of CA under the water valve to look like a drip or spill (Figure 7).

I started to detail the underbody but the car sits so low on the HO trucks that the detail can’t be easily seen. I only used the two outside truss rods. Rather than waste the underbody castings, I’ll save them to use on a car that sits higher. I have an O scale, narrow gauge, K brake system that is rather large for this car and an HO passenger K brake that is just about the right size. The HO freight K brake looks too small.

The water car turned out OK despite several blunders. The next one will be better. I hurried through this car to meet my publishing deadline and the result is definitely not a contest-quality build.

The car looks pretty good behind a Heisler! I have several hundred HO freight cars that are of low quality and will lend themselves well to On30 kitbashing. Cheap modeling is great! ☑

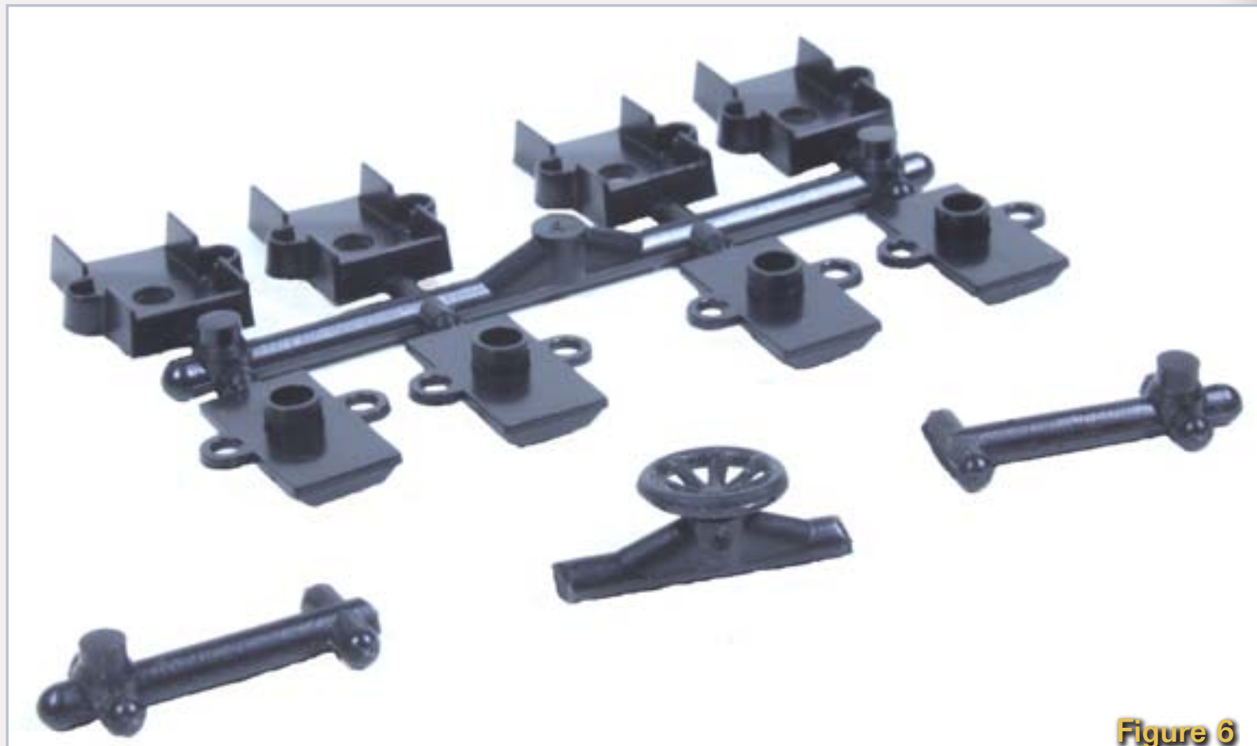


Figure 6

FIGURE 6: The water outlet valve was constructed from the center of a Kadee coupler sprue, drilled to be a pipe and assembled with an HO brake wheel as a valve handle. The valve was inserted into the tank on the end opposite the brake wheel just to have a detail of interest at both ends.

Figure 7

FIGURE 7: Three-quarter view of the water valve end of the car. The coloring was Madder Lake pastel dust, toned with Vandyke Brown and rubbed into the wood grain with a bristle brush.

FIGURE 8: Three-quarter view of the brake wheel end of the car. The rusty metal reinforcing straps are scale 3” wide strips of copy paper colored with a brown permanent marker from the backside. A small amount of orange marker was touched to the back to give the rust an uneven color.

The nice thing about a freelance railroad is that you can have any equipment on it you want ...

Reader Feedback *(click here)*

Figure 8

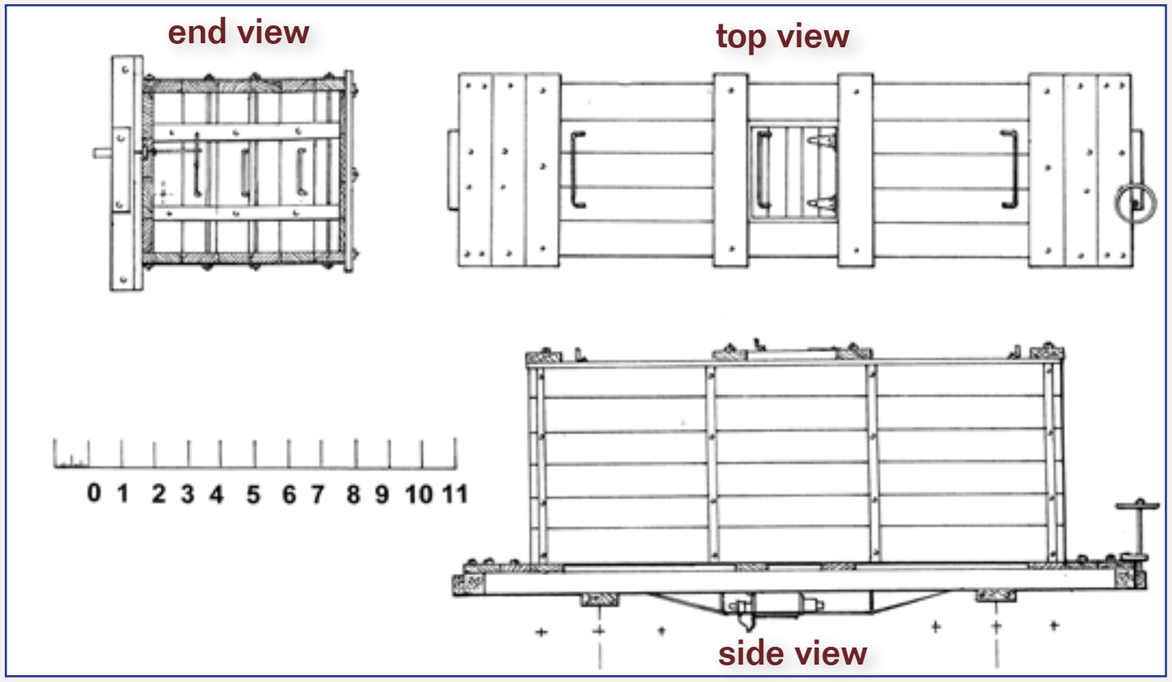


FIGURE 9: A drawing of the West Side Lumber Co. water car. A a pdf magnification of 100% this drawing is scaled 1/4” = 1’. These plans dimensions are shrunk from the prototype size to make an On30 car.

About our N-scale columnist

John Drye is our N scale editor and columnist.

Click here to learn more about John.

COMME-N-TARY: Building Altoona
Update on My N Scale Horseshoe Curve Layout
Modeling in the hobby's most eNgaging scale

Reader Feedback *(click here)*

Designing complex trackage to support realistic operations ...

Horseshoe Curve is the scenic highlight of the layout taking shape in my basement. However, as with the prototype, it is the city of Altoona that acts as the operational center of my N Scale Universe. Considerable activity will take place in the 20 feet devoted to Altoona on the layout. This article discusses how I went about designing the track plan to support desired operations.

Operational Requirements

As drawn on the original track plan, Altoona was simply four straight lines along the 21-foot wall next to the stairs. Detailed track planning was left "for later". Actually, the layout includes only West Altoona. The city's gigantic yard, engine facilities and shops are represented by staging. Nevertheless, quite a bit of activity is planned for the visible portion of Altoona (Figure 2 next page).

The Altoona area includes key design requirements:

- The four mainlines need to be maintained through town to allow uninterrupted passing of four trains at a time.
- Eastbound passenger trains need to cross westbound tracks to get to the station and then cross back on the way east.
- There needs to be an extra track at the passenger station to allow switching of trains with lots of head-end cars without interrupting the Blue Ribbon Fleet of First Class trains.
- Helpers need to be attached to heavy westbound trains and need an out-of-the-way place to wait between "snaps".
- Access is required to the freight station for baggage and express coming off passenger trains and for LCL cars on freights.
- At least one extra track is required to allow priority trains to run past lower class trains, especially for uphill westbounds.
- The beginning of the Hollidaysburg Branch needs to be modeled, allowing space for several industries, most importantly the landmark Boyer's Candy structure.
- The mains need to move closer to the wall as trains head west to allow room for the freight station against the wall and the Hollidaysburg Branch against the aisle.

FIGURE 1: Scenery is taking shape at Horseshoe Curve, the scenic center of my PRR Layout.

- The center three feet of the mainlines need to be straight and without turnouts in order to accommodate a lift bridge for access.
- There is room for up to five #10 crossovers on either side of the central lift bridge.

In other areas of the layout, most of the mainline trackplan is maintained, making design easy. MG Tower is a good example, retaining the prototype's full four-track interlocking. The track at Gallitzin is a slightly-modified version of the prototype, subtracting some parallel tracks from the Pennsy's version.

At Altoona, however, the prototype plan is massive. Even discounting the main yard and shop facilities, there are a dozen or more parallel tracks in many places between Works and Slope. Clearly, the N scale plan would have to vary from the prototype. The key question was: how to slim down the prototype plan and retain all the operational capability desired.

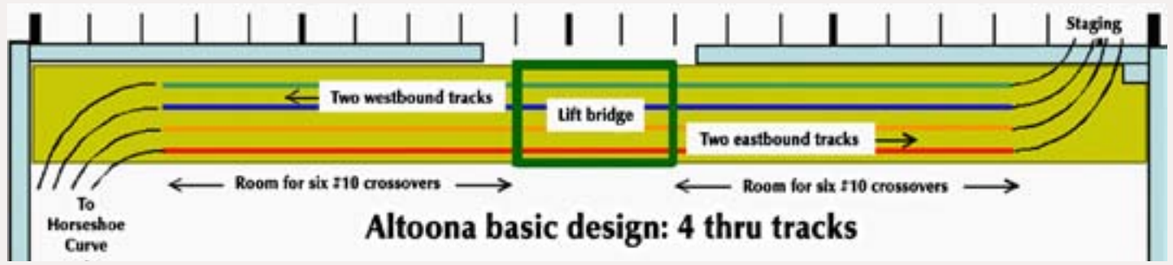


FIGURE 2: Pennsy's four-track main exits staging at West Altoona, runs along 21 feet of the layout room wall, then curves to head uphill.

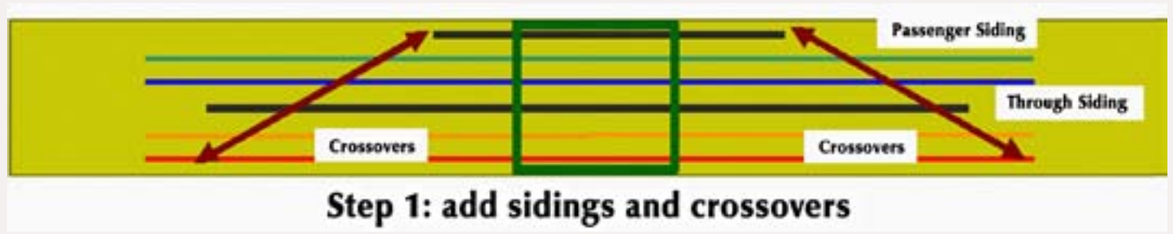


FIGURE 3: Initial step in the design process was to add the required sidings and place crossovers to allow trains to reach appropriate locations, especially at the passenger station.

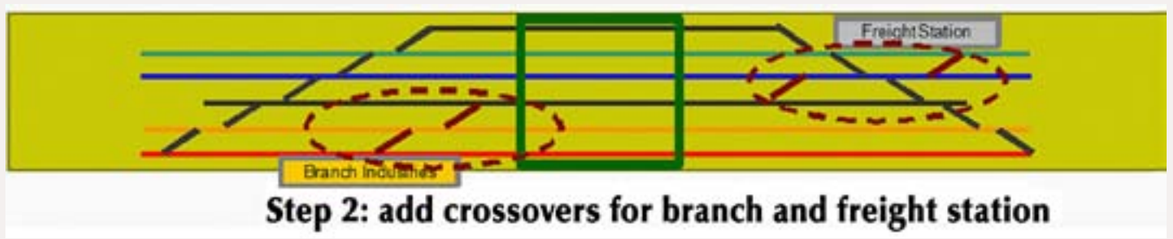


FIGURE 4: Additional crossovers are needed to allow access to the Freight Station and the Hollidaysburg Branch.

Design Process

As with many complex problems, the solution came from breaking it up into smaller pieces. Here is how Altoona (the N scale version) was designed and built.

The basic arrangement consists of parallel tracks along a 21' wall, curving into staging at one end and uphill at the other. Step 1 was to add the passenger and through sidings plus the crossovers required to get the varnish into and out of the station (see Figure 3).

Next was to add another set of crossovers to allow reach the Hollidaysburg Branch and to the freight station as shown in Figure 4. These crossovers allow both eastbounds and westbounds access to these locations. Operationally, a switcher will be assigned to handle head-end cars from passenger and mail trains and to switch the freight station. The Hollidaysburg local will confound the dispatcher by needing to cross over all four mains to get to the branch.

One of the key steps in the design process was developing a way to allow for space next to the wall for the freight station (located on the north side of the tracks) and to allow room for Hollidaysburg Branch industries on the south side. The mains are essentially straight in this area, and an "S" curve would look out of place. Fortunately, the prototype's evolving track arrangement allows for a convenient alternative.

As the prototype added or deleted tracks, crossovers often assumed "odd" shapes. Not all were composed of a pair of opposing left-hand (or right-hand) turnouts.

"Re-aligned" Crossovers

The trick turned out to be these "re-aligned" crossovers. Such a crossover is created by aligning the turnouts so that in the process of crossing over, both tracks step a bit north or south. Figures 5a and 5b (next page) show one example of how this can be done. The result is the "S" curve we are looking for, hidden in a crossover.

Such re-alignment is simple in concept, but can be tricky in execution. The solution is to begin with an end in mind. In the case of Altoona, creating enough space requires a total of four "steps". Figure 6 (next page) shows the result of a considerable amount of re-aligning. Once the tracks are drawn in represent the required steps (as in Figure 5a and 5b next page), the re-aligned crossovers can be inserted where they are needed.

Testing Operations

With a complex plan like this, a thoughtful civil engineer / dispatcher will spend some time examining whether the track arrangement can actually support planned operations. It is much easier to make adjustments on paper than on the layout. So, I created a "paper layout" in order to test out the operating scheme. Tracks are printed

out on 8 ½ x 11 sheets and "trains" labeled and cut out of heavy paper.

The two-dimensional layout works pretty much the same as any three-dimensional one, except everything moves by hand. And it's not quite as much fun. My Paper Pennsy suggested some relocation of crossovers and sidings to support more efficient railroading.

After all the planning, it is time to finally lay some track. Don't be afraid to continue to look for adjustments and efficiencies. Keep the operational scheme in your head and imagine how the actual models will interact. It is often a good idea to have at least mockups of the structures to be used on the layout to ensure that tracks, structures and trains will all fit.

Sometimes there are pleasant surprises. It wasn't until track was being laid opposite the freight station that I realized there was still room on the aisle side of the layout for some of the PRR car shop facilities. Adding another turnout off the main and a few brick structures will create another job for the operating crew.

Planning Altoona has been an interesting process and now that trackwork is almost complete, it is becoming easier to imagine how this recreation of 1950s Pennsylvania might provide a look back at operations on the PRR.

Tackling complex tasks like this one can be easier if taken in small steps, especially if you keep options open as you proceed. ☑

FIGURE 5a

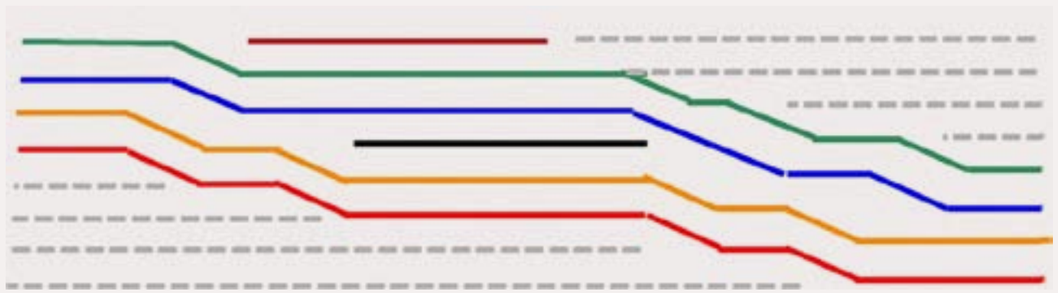


FIGURE 5b: Re-aligned crossovers allow adjustment of track locations without an obvious "S" curve. When applied in multiples, they can move tracks north and south as desired.

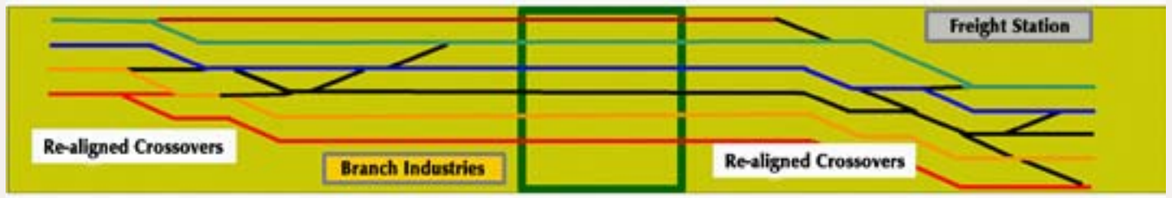


FIGURE 6: Re-aligned crossovers in the Altoona trackplan move the mainlines away from the aisle to allow space for industries both north and south of the tracks.

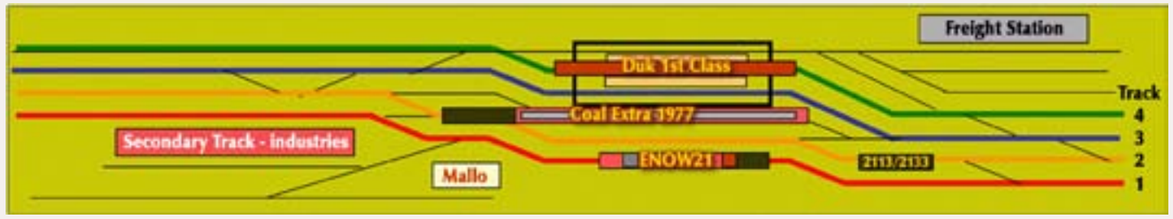


FIGURE 7: A "paper layout" was used to test Altoona track arrangements. Here, on an early design, a passenger train pauses at the station while a coal extra waits its turn to head uphill. A short eastbound passes a pair of helpers idling in anticipation of their next shove.

FIGURE 8: A passenger train crosses over from the Altoona station to eastbound tracks while a switcher shuffles cars at the freight station.

Model Railroad Hobbyist newsletter™

April 2011

Reader Feedback (click here)

The Old Yardmaster

The latest model railroad products news and events

Our thoughts and prayers go out to the citizens of Japan who continue to suffer in the aftermath of the devastating earthquake and tsunami that struck their nation. Contrary to general opinion, the closing of the international on-line operation of **Hobbyworld Aoshima** on March 15 was not related to the natural disaster that occurred four days earlier. Although one of Japan's most successful hobby sales operations, the international segment of Hobbyworld Aoshima's on-line business was under the sole management of Aiko, an English-speaking employee who left the company in a career move. We're told that all back orders and advance reservations have been cancelled. Questions should be directed to Mr. Yoshida at hwj@mail.aoshima-bk.co.jp....

The granddaddy of prototype modelers meets, formerly known as Naperville, has a new name and new venue for its 18th annual event. The newly christened **"RPM-Conference"** will be held October 20-22 at the Hickory Ridge Marriott, Lisle, Illinois. (For reservations call 630-971-5000). The announcement was made by Joe D'Elia, owner/producer of the popular event, who noted that Lisle was about five miles from Naperville. A list of speakers for the 2011 RPM-Conference is expected to be announced soon. In a related story, the shuttered Holiday Inn in Naperville is scheduled to reopen in 2012 as a Marriott…

Bar Mills named their new Higgenbotham Coal Company kit in honor of then 14-year-old Shorpy Higgenbotham, who worked on the tipple at Bessie Mine in Alabama in the early 1900s. Many modelers have come to know Shorpy through the incomparable treasure of early photographs accessible at www.shorpy.com. Associating Shorpy Higgenbotham with their coal company kit makes perfect sense, but it also makes us wonder what inspired the folks at Bar Mills to name their next structure kit, *Sweaty Betty's*…

Al Westerfield, the HO scale resin kit guru, says he has been deluged with orders since announcing his retirement and the impending shutdown of Westerfield Models. The company's normal 3-day turnaround to fill orders has suddenly jumped to 12 weeks. Rather than use Westerfield's on-line store, which processes card charges when an order is placed, Al suggests customers order by phone (913-484-7233) or email (westerfield@charter.net) in which case charges will not be processed until the shipment has been made. Photos of available kits can be viewed at www.westerfield.biz...

Bill Gustafson of **Western Scale Models** has donated his entire overhead-driven machine shop to the Western Antique Aeroplane & Automobile Museum in Hood River, Oregon. The collection of 100-year operating equipment includes the overhead hangers, pulleys, and belting that powers the antique machinery. Meanwhile, Bill, who is now semi-retired, continues to create large scale kits of many of his beloved tools…

Mark your calendar for **National Train Day** on May 7, 2011. That's the day when all Americans have the opportunity to show their unabashed love of trains. Visit www.atdlines.com/ntd-day.htm to learn what special events are planned in your state…

Smoky Mountain Model Works of Ashville, North Carolina, is celebrating its 17th anniversary with a revamped web site and a renewed commitment to focus on HO scale products. The fun side of SMMW's manufacturing business – they also have an industrial products operation – uses 3D CAD software and rapid prototyping technology to create state-of-the-art prototypically-accurate kits for model railroad hobbyists. By May or June we should see the

introduction of resin kits for an Erie Lackawanna transfer caboose, and a B&O wagon-top caboose…

The departure of **Chris Clune** from ExactRail and the elevation of co-founder **John Pestana** to CEO, has prompted some other shifts in titles and duties. VP Blaine Hadfield has taken over product responsibility and newcomer Tasha Oates has been appointed director of sales & marketing. Miss Oates will continue as editor of TrainLife, another Pestana enterprise…

Diane Schaffan Haedrich, president of **Atlas Model Railroad Company,** has made it official. The granddaughter of **Stephan Schaffan**, who founded the firm more than 85 years ago, says Atlas will offer both kit and ready-to-run versions of its recently-acquired **Branchline** line of HO scale rolling stock. This will certainly come as good news to those frequently-vocal hobbyists who say they prefer kits to factory-assembled models. And there's more good news for kit fans: **Rapido** says its recently-announced steam-era wood reefer will be offered in three formats – fully decorated, assembled and painted but without lettering, and in kit form. Okay kit lovers, now that both Atlas and Rapido have responded positively to your requests for more unassembled models, it is up to you to make reservations at your favorite dealer without delay. Neither company can be expected to keep kits in their product line if they don't meet minimum sales levels…

Congratulations to **CN** on the 50th anniversary of its "wet-noodle' logo. CN changed its image in 1961 following a nationwide survey in which officials of the Canadian rail company were shocked to learn their company was perceived as stodgy, old-fashioned, and hostile to innovation. Their response was both fast and effective with bright colors and the memorable wet-noodle quickly replacing maple leaf heralds and green and gold livery reminiscent of the Victorian era…

You don't need to be a member of the **National Model Railroad Association** to access the NMRA's Online Archives. The collection contains over 10,000 B&W photos, drawings, erection elevations, paint schemes, logos, heralds and images of locomotives, rolling stock and structures. NMRA members can download scans for $2 per image. Non-members will be charged $4 per image. Browsing is free. To access the collection go to archive.nmra.org. In case you are wondering, NMRA's annual base membership is $39, or $58 if you want to receive their monthly *NMRA Magazine.*

We agree with the clever tag line *"Don't just stand there, build something"* that **Fos Scale Models** is using in their ads and correspondence. Unfortunately, we know too many "modelers" who seem to have lost their passion for actually building a model…

Our deepest sympathy to MRH editor **Charlie Comstock** who lost his mother March 14th. Our thoughts and prayers go out to Charlie and his family…

Bill Kratville 1929 – 2011

William W. Kratville, author, photographer and professional railroader, passed away in his hometown of Omaha, Nebraska on March 14. Bill was widely-known by railroad fans, hobbyists, and manufacturers through his research and documentation of the Union Pacific Railroad. Bill wrote many articles on the subject and authored more than a dozen books centering on the UP. He served as Amtrak's chief photographer as well as consultant and advisor to the mayor of Omaha and the Union Pacific Museum. Bill owned his own private railroad car as well as Auto-Liner Inc., a company that specialized in restoring and servicing passenger cars. He was a founding member of the Durham Western Heritage Museum, and the Omaha Press Club, and was active in the Douglas County Historical Society. Bill Kratville is survived by his wife Anita, son Michael and daughter Catherine...

There are lots of new products to tell you about this month, so let's get started.

NEW PRODUCTS FOR MULTIPLE SCALES

Bachmann's free downloadable catalog

Bachmann has released its 2011 Bachmann/Williams catalog in pdf format that can be downloaded at no charge. A printed 6.5" x 8.5" digest-size copy is also available at $8.50. The catalog covers N, HO, On30 and O scale products. Visit www.bachmanntrains.com for details.

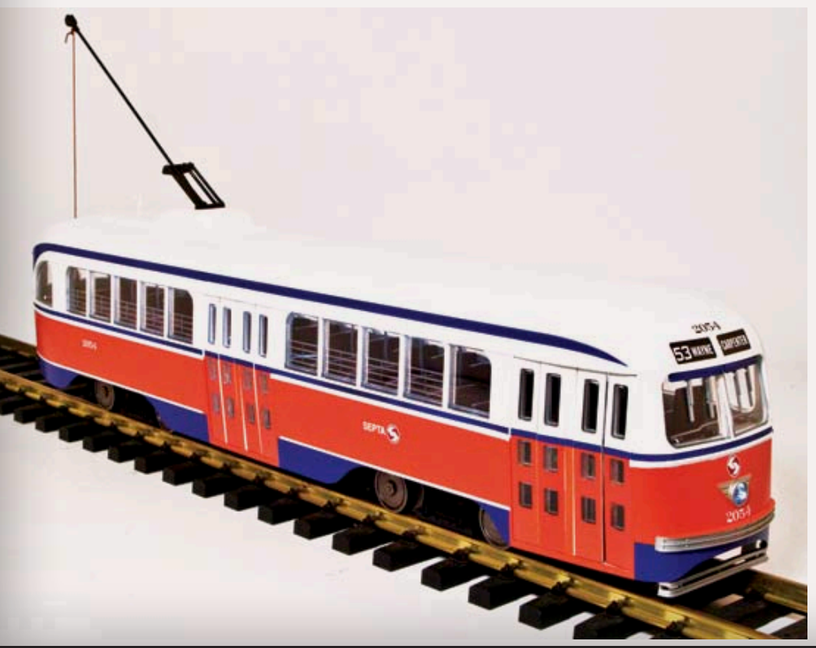
Scenery Book from Randy Meyers Announced

The latest book in **BHI Publication's** Mastering Model Railroading Series is *"Scenery Volume 1"*, by Randy Meyer MMR. The author describes the same steps he demonstrated in his clinic at the Narrow Gauge Convention in St. Louis last September. Although Randy models Colorado, his techniques apply to creating rocks, outcropping, cuts, rocky shore lines, and riverbanks for any region of North America. Chapter subjects in the 44-page book include supporting base structure, dealing with plaster, making rock molds, adding and coloring rock castings, ground cover, making and planting trees, and successfully coloring scenery. An abundance of photos and drawings are followed by eight pages of full-color photos. The book is priced at $19.99. To order go to www.quickpicbooks.com.

How-To DCC Wiring Guide
Kalmbach Publishing (www.kalmbachstore.com) has released *"Basic DCC Wiring"* by Mike Polsgrove. Priced at $15.95, the book is intended primarily for hobbyists just getting started with DCC. In addition to a general explanation and overview of DCC, author Polsgrove, who has been writing a DCC column in *Model Railroader* magazine for the past 8 years, covers track wiring, cab bus wiring, installing decoders, and converting a standard DC layout to DCC.

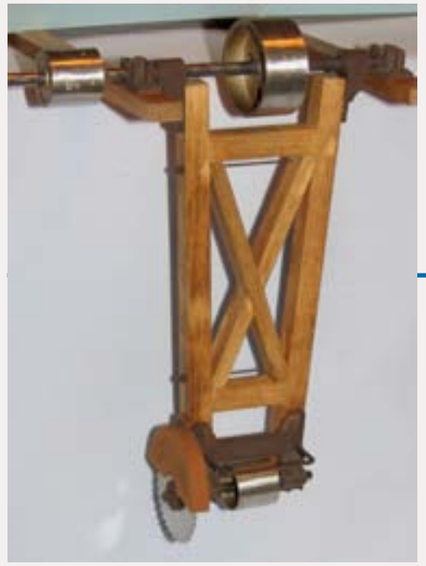
Precision Rail-bender from Fast Tracks
Fast Tracks (www.handlaidtrack.com) is selling a rail roller that is applicable for code 40 through code 148 rail. The well-designed tool can be used to produce consistently smooth bends as well as straighten previously bent or misshapen rail. It can produce curves as small as 1.5 inches. An integrated vernier scale ensures consistent bends. Cost of the rail roller is $79.95.

Southern Pacific Historic Diesel Chronicle Ready
Shade Tree Books has released *"Southern Pacific Historic Diesels, Volume 16."* This latest release covers Electro-Motive diesel switchers from the SW1 of 1939 to the MP15AC of 1975. Each locomotive model is chronicled in detail including photos of all paint schemes. The 144-page book features B&W photos with a color cover. Volume 16 is priced at $35 and is available direct or through hobby dealers. To order direct send an email with your phone number to Joe Strapac at josephstrapac@ca.rr.com. Joe will return your call and make arrangements for the purchase.



LARGE SCALE PRODUCT NEWS

Multiple Paint Schemes Available for PCC Trolleys
Aristo-Craft Trains (www.aristocraft.com) has 1:29 scale models of popular PCC trolleys that replicate the original pre-war design. The ready-to-run models feature functioning trolley poles, working doors and lights, and full interior detail. The models are available decorated for Brooklyn, MBTA-Boston, Philly Traction, SEPTA-Philly (above), San Francisco, Los Angeles, Toronto, CTA-Green Hornet, and undecorated. The list price is $330.



Overhead Swing-frame Saw from WSM
Western Scale Models (www.westernscalemodels.com) is selling a kit for this 1:20.3 scale cut-off saw. Kit MF-105 includes the swing-frame, belt pulleys, and 24" circular blade. It sells for $29 plus $9 shipping.

O SCALE PRODUCT NEWS

Reservations underway for Fall Delivery of Atlas-O GP7
Atlas O (www.atlaso.com) will release 2-rail and 3-rail versions of its GP7 diesel locomotive this coming November in several new road names including the Erie Lackawanna livery shown below. Additional roads will be Clinchfield, Detroit Toledo & Ironton, Missouri Pacific, New York Central, Rio Grande, Union Pacific, and undecorated. The 3-rail version will feature Lionel TrainMaster® Command Control and RailSounds™ digital sound system. Both 2 and 3-rail models will be priced at $499.95. Unpowered versions of the O scale model can be reserved at $229.95 each.

Contemporary Railbox Coming from Atlas-O
Atlas O has also scheduled another release of its popular Trainman® 50' 6" ACF-built Railbox car for delivery in November. New road names for the O scale car will include Family Lines (A&WP), Clarendon & Pittsford, Kansas City Southern, Missouri Pacific (TP), National of Mexico (NdeM), and Pan Am (MEC), plus a rerun of the RailBox scheme seen here. All road names will be available in two new numbers. The 2-rail version ($52.95) comes with scale wheels and body-

TrainTroll Has Laser-cut Fisherman's Cart
TrainTroll (www.traintroll.com) has released an O scale kit for a unique handcart used by New England fishermen. The kit includes laser-cut components and brass rod. The cart sells for $5.95 each or $19.95 for a pack of four. Visit the above web site for ordering information.

mounted scale couplers. The trucks of the 3-rail model ($49.95) are pre-drilled for the Adjust-A-Coupler® system couplers which are sold separately.

S SCALE PRODUCT NEWS

Sn3 K-27s Due from PBL in May
Narrow gauge fans who attended the recent Sn3 Symposium in Monrovia, CA, had an opportunity to inspect the amazing pre-production samples of the Hybrid Sn3 K-27 locomotives being imported by **PBL** (www.p-b-l.com). Boo-Rim Precision is scheduled to ship production quantities from Korea about the first of April. As the K-27 project nears completion, PBL is seeking input from Sn3 hobbyists regarding their preference for future locomotive projects. You can send a brief note or comment to the above url.

HO SCALE PRODUCT NEWS

Data-only car kits ready for decals of your choice
Accurail (www.accurail.com/accurail/) has HO scale data-only kits for two popular steam-era freight cars that hobbyists can readily letter for the road of their choice. Item 2797 is a 55-ton, wood-side, twin-bay hopper equipped with Bettendorf-type trucks. It is painted black and sells for $12.98. Item 4699 is a 40' USRA double-sheathed wood boxcar with a "stem-winder" hand brake and Andrews trucks. It retails for $13.98. These easy- to-assemble kits are fully painted and lettered with basic data information, but no road name.

Laser-cut Craftsman Kit for Drover Caboose
This HO scale Missouri Pacific drover caboose is among the latest additions to the extensive collection of laser-cut kits for wood cabooses available from **American Model Builders** (www.laserkit.com). The model accurately represents one of a group of 20 cars (series 1100-1119) the St. Louis Car Company built for the MP in 1930. In addition to normal caboose duty, the 42' cars provided seating and sleeping space for men who accompanied shipments of livestock. Laser-cut components in the kit include the underframe, end platforms, toolbox and custom laser-scribed sides and end walls. Additional specialized parts include ladders, end railing, roof vents, cupola hand grabs, brake stand, brake wheel, cast resin platform steps, white-metal smokejacks, and color window shades. Illustrated instructions provide information on painting and decaling the assembled model. Kit #883 sells for $61.95. Suggested items for

Model by Bill Herbert

completing the prototypically accurate model, but not included in the kit, are Oddball Decal's set No. 87-284, Tahoe Model Works Barber-Bettendorf swing-motion caboose trucks, and Kadee No. 5 couplers with draft gear boxes.

Delivery Update from Athearn

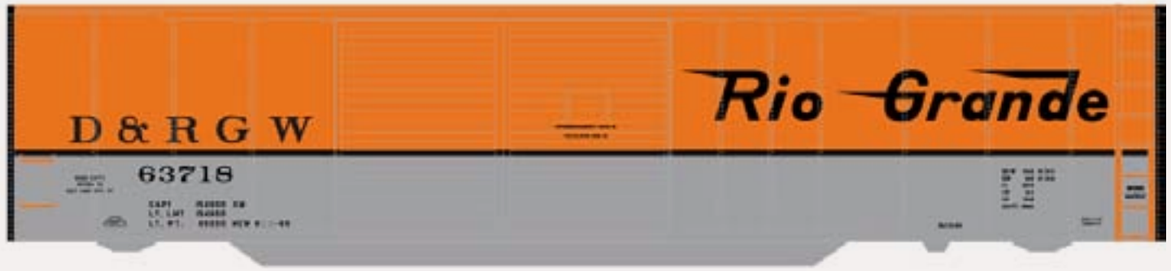
Athearn (www.athearn.com) will release its new Genesis Union Pacific DDA40X diesel in December. Two variations of the UP shield will be offered plus an undecorated version. All will have dual motors and 16-wheel drive and pickup. DCC versions will use two decoders. Models with Soundtraxx Tsunami® decoders with sounds specially recorded from the prototype No. 6936 will have an MSRP of $499.98. Standard DC models will be priced at $369.98. The models will be loaded with special details including separately applied wire grab irons, and see-thru brake intakes. The windshield wipers, walkways above the fuel tanks, and grilles on the radiator and dynamic brake are all etched metal.

New roads for the second release of the Genesis series 50' PC&F boxcar with 8'+8' Landis doors will include an SP car and two Evergreen versions (below), plus an undec kit. They are scheduled to arrive in October. The first cars (SP and SSW) from the upgraded tooling to accommodate the Landis doors are due next month.

Also due from Athearn in October is an SD45 decorated for Norfolk & Western, Pennsy, Union Pacific and, as seen below-left D&RGW. The DCC-ready locomotives have a list price of $119.98 and will be available in three numbers for each roadname.

With economy in mind, Athearn has scheduled several GP38-2 diesels to arrive in October with a list price of $79.98. Three road numbers each will be available for CP Rail (below), Lehigh Valley, Missouri Pacific and Southern Pacific.

Other reruns due to arrive in October include three versions of D&RGW 50' boxcars with Youngstown double doors with car bodies painted orange, orange over silver (below), and oxide red; Athearn's standard F7A/F7B decorated for KCS (Executive scheme), ATSF (warbonnet), BN (Executive scheme), CN (zebra),



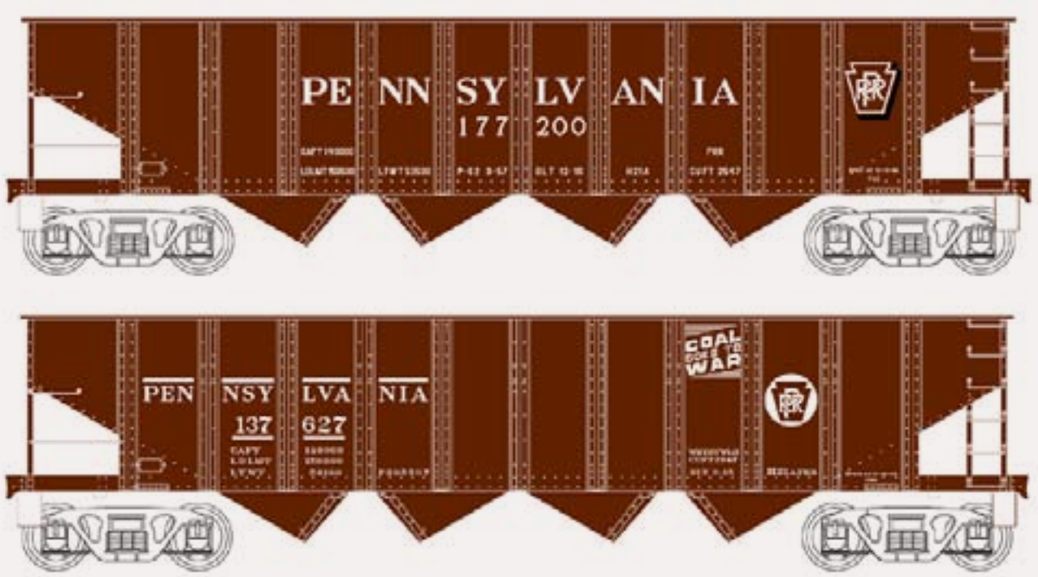
and Union Pacific, all at $74.98; and a 40' modern boxcar with improved Dreadnaught ends, Youngstown door and diagonal panel roof in three road numbers for Santa Fe (large herald), BC Rail (green body), Nacionales de Mexico and Southern Pacific at $19.98 each.

16-position Turntable Ready from Bachmann

Bachmann (www.bachmanntrains.com) is selling an HO scale DCC-ready motorized gear-driven turntable

that features 16 indexed track positions, and direction control switch. The unit is 14” in diameter with the nickel-silver track on the turntable bridge measuring 10” in length. It is also suitable for smaller On30 locomotives. Although intended for use with Bachmann’s E-Z Track®, it can be adapted to other track systems. The MSRP is $140.00.

Reservations for Top Gons underway
BLMA (www.blmamodels.com) has announced another release of its popular Norfolk Southern G-85R and G-86R Top Gon coal cars with 24 new road numbers. Added to the 60 numbers already available, operators will be able to assemble a train of up to 84 cars without duplicating numbers. The reservation deadline is May 15 to insure delivery which is scheduled for later this year. The HO scale cars list at $28.95 each.



Pennsy Class H-21 Quad Hoppers Coming from Bowser
Bowser’s (www.bowser-trains.com) Executive Line of ready-to-run HO scale PRR class H-21 quad hopper cars are due this spring in three different herald styles including circle keystone, circle keystone with “Coal goes to War” slogan, shadow keystone with large road lettering, and Norfolk & Western. The steam-era prototypes first began to appear in the WWI-era and saw service through the 1960s. The fully assembled, ready-to-run cars are priced at $23.95 each and are available in three different road numbers for each scheme.

New Road Names Released for ER Cars
ExactRail (www.exactrail.com) has released its HO scale Gunderson 7466 wood chip gondola with three new road names. In addition to the GFSX version shown here, the ready-to-run Platinum series car is available for Southern Pacific and GFSX. The SP version is available in 24 different numbers while the other two cars come in three numbers each. It is also available in kit form. The model comes with Kadee® #58 couplers and has an MSRP of $36.95, an increase of $2.00 over the previous release.

ExactRail has also released another run of its HO scale Vert-A-Pac Autorack car. The latest road names for the Evolution series model are Southern Pacific, Rock Island (above), Baltimore & Ohio, Missouri Pacific, SLSF, and Southern. The ready-to-run model comes with Kadee® #5 couplers and Barber 70-ton low-profile trucks with 28” machined wheels. It has an MSRP of $29.95.

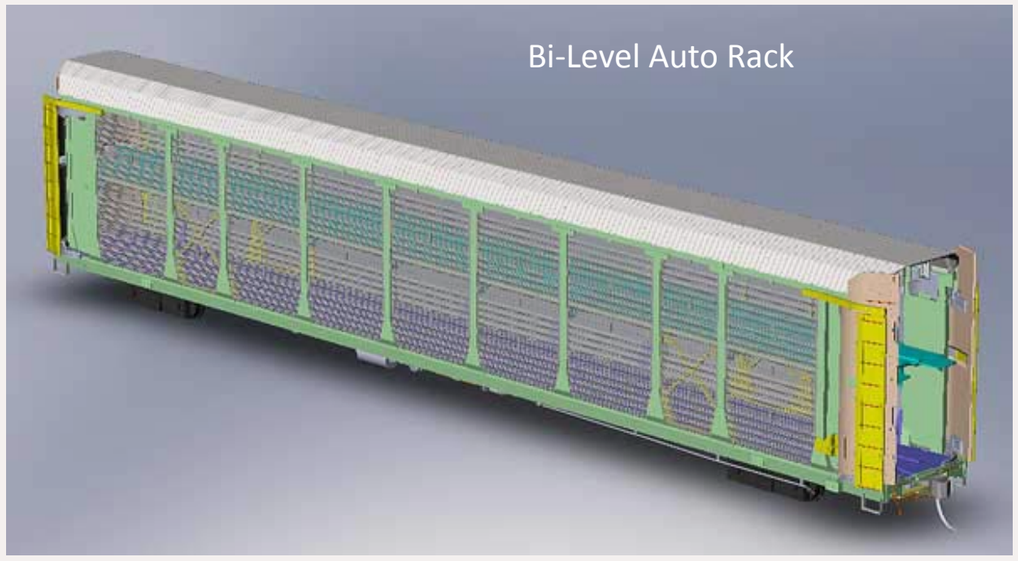
This HO scale Evolution series PC&F 6033 Hy-Cube boxcar has also been rerun by **ExactRail.** New paint schemes include SSW-Cotton Belt (above), ATSF, Union Pacific, Wisconsin Central, BAEX, and SIRX. The HO scale model comes with Kadee® #5 couplers and ASF 70-ton RideControl® trucks with 33" machined wheels. With an MSRP of $26.95, this latest release is up $2.00 over the previous run.

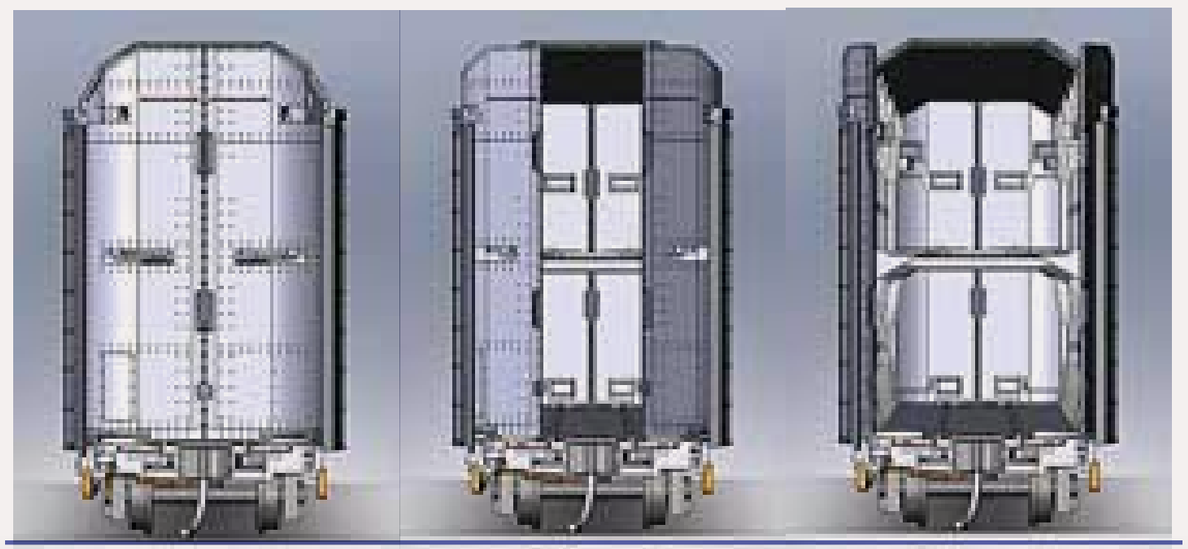
As a followup to the successful sell-thru of the initial run of Milwaukee Road 40' Rib Side boxcars, **ExactRail** has released a new production run of the HO scale model decorated with the "Route of the Electrified Olympians" on the right side of the car. The Signature series car comes with Kadee® #58 couplers and is available in 12 different numbers at $34.95 each. A kit version of the Rib Side car is also available.

Funaro & Camerlengo (www.fandckits.com) is selling craftsman-type resin kits for Virginian class BX-10 single-sheathed wood boxcars. The HO scale model is available as a one-piece cast body kit at $41.99 or as a more challenging flat kit at $31.99. Each version comes with appropriate decals and is available with either AB brake or K brake components. These are body kits only without trucks or couplers. Future products under development at F&C include a 20,000 gallon Jones & Laughlin coal tar service tank car and a General American 1321 cubic foot covered hopper for Royce Chemical Company.

Fos: "One pub is never enough."
Fos Scale Models (www.foslimited.com) has released The Pub Crawl, an HO scale craftsman kit that incorporates four drinking establishments in a single structure. Through variance in roof style and front façade, the four pubs offer great

individuality in appearance. Signage is provided for The Rusty Keg Tavern & Inn, O'Connel's Irish Pub, Beached Whale Ale House, and Leo's Watering Hole Bar & Grill. Alternate signage is included for a hardware store, a meat shop, loan office, and bakery. Laser-cut components in the kit include clapboard walls, storefront windows, awning, and sidewalk. Roofing material includes both rolled roofing and corrugated metal. Additional components provided are Tichy doors and windows, metal details and a rooftop billboard sign. The finished model occupies a footprint of 4 x 9 inches. This is a limited-production craftsman-style kit with only 100 set for production. The retail price is $89.95. Remember: don't just stand there, build something!

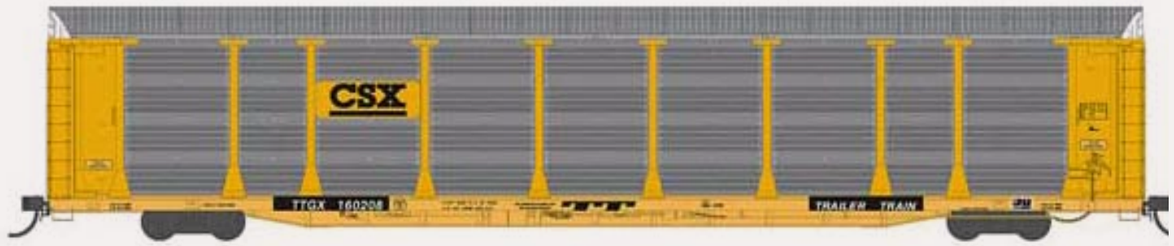




Bi-Level Auto Racks in HO from InterMountain

Here's a look at a computer-generated drawing of an 89' Bi-Level Auto Rack car (left) that **InterMountain Railway** (www.intermountain-railway.com) will begin shipping to dealers this winter. The all-new HO scale ready-to-run model features 18 see-through etched and formed metal side panels, and end doors that can be positioned either open or closed. The interior decking and vehicles (not included) will be visible through the side panels and the open ends.

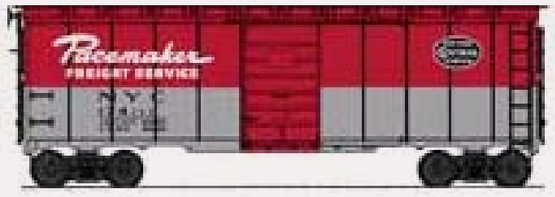
Although TTX owns the majority of the modern-day flat cars, there are more than 35 owners of the auto racks, which makes for some interesting combinations of car/rack names.

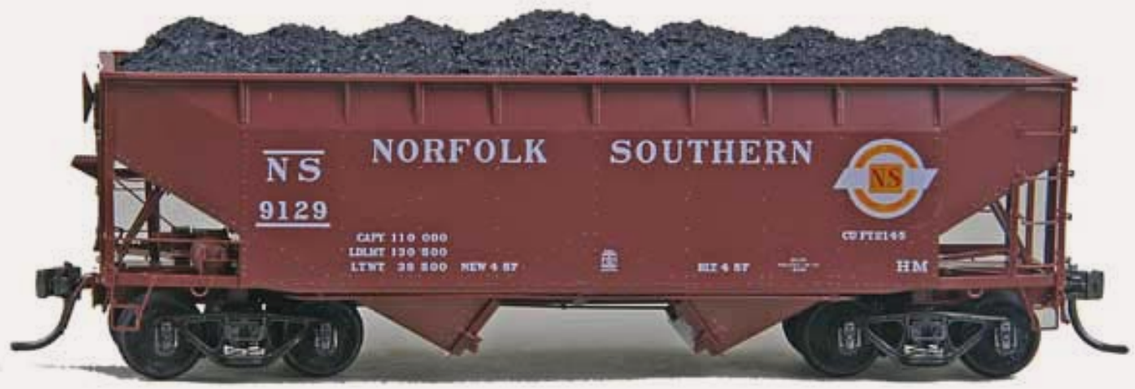


InterMountain's initial release will be for BNSF, BN, Conrail, CSX (above), Norfolk Southern, and Union Pacific racks, all mounted on TTGX flats. Also in the first run are models for ATSF and Southern Pacific which own both the cars and racks. Each version will be available in four different numbers.

Distinctive NYC Pacemaker Cars Coming from InterMountain

InterMountain is taking reservations for delivery this winter of New York Central's postwar series of Pacemaker 40' boxcars. The ready-to-run models will feature etched-metal running boards, 4-3 improved Dreadnaught ends, rectangular panel roof, metal wheelsets and Kadee® couplers. The distinctive red-over-gray Pacemaker cars will be available in four lettering schemes including 1945/46 (white lettering, red herald, below left), 1948/49 (black lettering, red herald), 1955 (black lettering, black herald, below right), and 1960-renumbered (white lettering, black herald). All versions will be available with either Youngstown or Superior doors and in six numbers each, for a total of 48 cars without duplication. The HO scale models have a list price of $31.95.





New Kadee Cars Arriving This Summer

Kadee (www.kadee.com) has several new HO scale cars due in June, including a Norfolk Southern AAR 50-ton 2-bay hopper at $40.95, and a PS-1 40’ boxcar with an 8’ Superior door decorated for Rock Island at $32.95. Both ready-to-run cars feature Kadee’s new 2-piece trucks and number 2100 couplers.

Rapido Pressured to Raise Prices

Succumbing to pressure from subcontractors in China, **Rapido Train’s** (www.rapidotrains.com) has been forced to increase the cost of their forthcoming FP9A diesel by $30. A pre-production sample of Rapido’s GMD-built Canadian National FP9A is shown below. Advance orders booked before March 17 will be filled at the old price ($299.99 DC/DCC and $169.99 DC silent). The post March 17 prices are $329.99 and $199.99 respectively. The deadline for FP9A orders is May 6, 2011. For additional details on the EMD model locomotive, see page 107 of the February 2011 MRH.

In the good-news department, Rapido says it will make all of the detail parts used in its passenger, caboose and freight cars in both HO and N scale, available for purchase separately – including the new 37’ wood reefer car. Parts availability will include such goodies as Heywood-Wakefield rollover seats, P-S sleep seats and roomette curtains, etched-metal Pullman end-gates, meat reefer hatches and latches, passenger car diaphragms with suspension rods and complete underbody details for lightweight sleepers and coaches. For a listing of parts available now, go to www.rapidotrains.com/details.html.

Roundhouse Trains division of Athearn (www.roundhousetrains.com) says it will deliver a series of classic 40’ wood refrigerator cars in October. The HO scale steam-era cars have oxide red Dreadnaught ends and roof, and yellow sides. Decorating schemes will include Nationwide Milk, Red Top Milk and Wilson’s Milk. The ready-to-run models have a list price of $19.98 with three numbers being available for each road name.

Prototypically-Accurate P-S 52’ 6” Gondola from SMMW

Smoky Mountain Model Works (www.smokymountainmodelworks.com) is now shipping craftsman kits for two HO scale versions of a Southern Railway 1953-1958 Pullman-Standard 70-ton 52’6” gondola. The prototypes were built in 1953 (Roman lettering) and 1958 (block lettering) and operated well into the early 1980s with those assigned to non-interchange MOW seeing duty into the 90s. SMMW developed the models using CAD and SLA (Stereolithography Apparatus) technology. The principal components include a one-piece resin body and a separate detailed underframe. Additional parts include a hidden brass weight that fits between the car body and underframe, Tichy ladders, grab irons, brake components and truck frames, Kadee wheelsets and #153 Whisker® couplers. Included with the kit is a 21-page mini-CD instruction guide with 39 prototype photos. The kits come with thin-film decals in either Roman (1950s to mid 1980s) or block lettering (early 1960s to mid 1990s). The kits are $45 each plus $7 shipping for up to three cars.

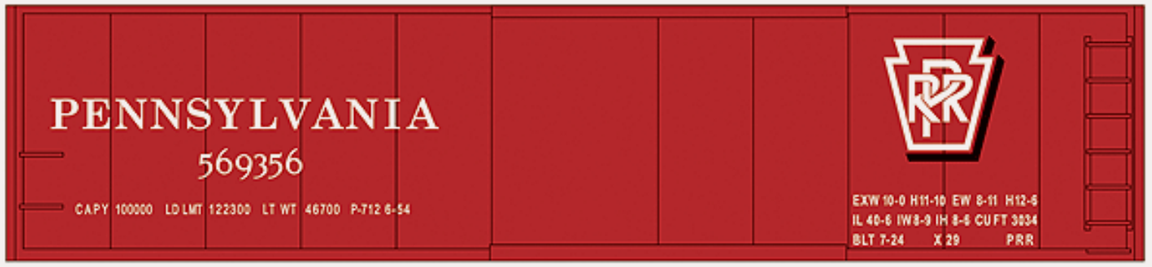
New Resin Kit Released by Speedwitch

Speedwitch Media (www.speedwitch.com) has an HO scale resin body kit for a Norfolk Southern 1932 ARA boxcar with a Viking roof. The HO scale model accurately represents 500 boxcars (nos. 25000-25499) that Pullman-Standard built for NS in 1935 to the 1932 ARA standard design. Identifying features include square-corner 4/4 Dreadnaught ends, Youngstown corrugated doors with early Camel Roller Lift fixtures, and a distinctive Viking corrugated steel roof. The kits includes one-piece cast resin bodies and etched-metal trust plates, plus various resin, styrene, and metal detail parts. The decal set includes the white, red, and yellow emblem shown in the top right hand corner of the above photo. The kit is priced at $40. Trucks and couplers are not included.

Walthers Announces Variety of New HO Models

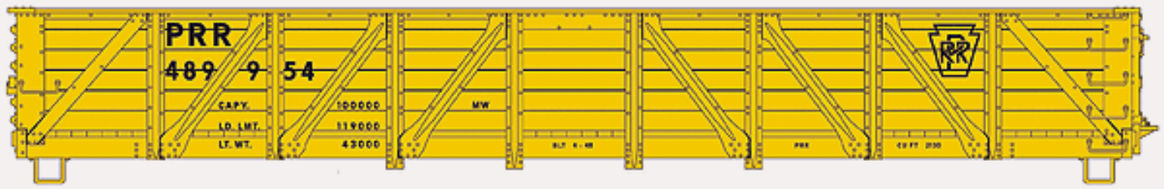
Walthers (www.walthers.com) is preparing a Proto 2000® EMD SD45 diesel locomotive for delivery to dealers in late October/early November. The limited-edition ready-to-run HO scale model will be priced at $289.98 and will come with SoundTraxx® Tsunami® sound and a DCC full-function decoder capable of processing all control, sound and lighting effects. In addition to the sound and DCC decoder, the models will be upgraded from previous releases with a number of features including LED constant and directional headlights, and Proto MAX™ metal knuckle couplers, plus a myriad of special details applicable to specific road names which will include Santa Fe (preliminary art below),

Chicago North Western, Union Pacific, Pennsylvania, and undecorated. For example, late Flexicoil trucks with 2 high outside-mounted brake cylinders will be on the ATSF and CNW models, while the same truck on the PRR model will have the brake cylinders mounted low and inside. The UP loco will have an earlier version of Flexicoil trucks with 3 brake cylinders mounted high and outside. Such details as blower sill ducts, coupler lift levers, beacons, horns, brake vents, antennas, brake frames, cab vents and cab arm rests will vary depending on the prototype road name being modeled.



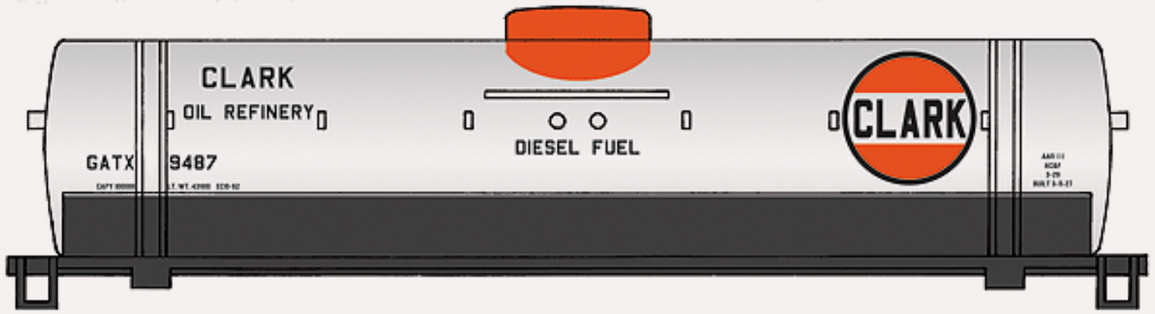
Walthers has several new items scheduled for arrival in late October or early November – just in time for the Christmas season. In the $20 price range are 3 ready-to-run Gold Line series freight cars including an X-29 steel boxcar decorated for Baltimore & Ohio, Chicago Great Western, Nickel Plate Road, and PRR with a shadow keystone (above).

Also scheduled for arrival in late October is a 40’ double-sheathed wood reefer with steel ends decorated for Patrick Cudahy, Atlantic & Pacific Tea Company - ERDX (above), Libby’s - LMLX, and Pacific Fruit Express with both SP and UP heralds.

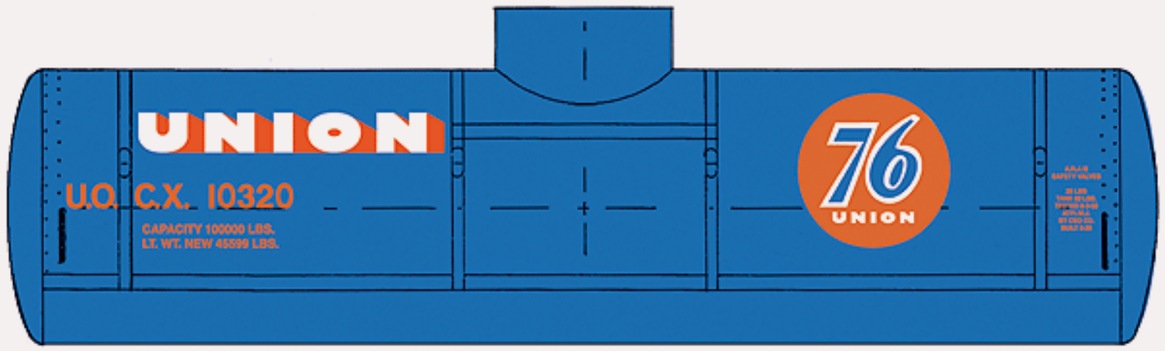


A 40’ USRA drop-bottom gondola will also arrive this winter with MOW paint schemes for ATSF (gray body), Canadian Pacific (black body), Union Pacific (gray

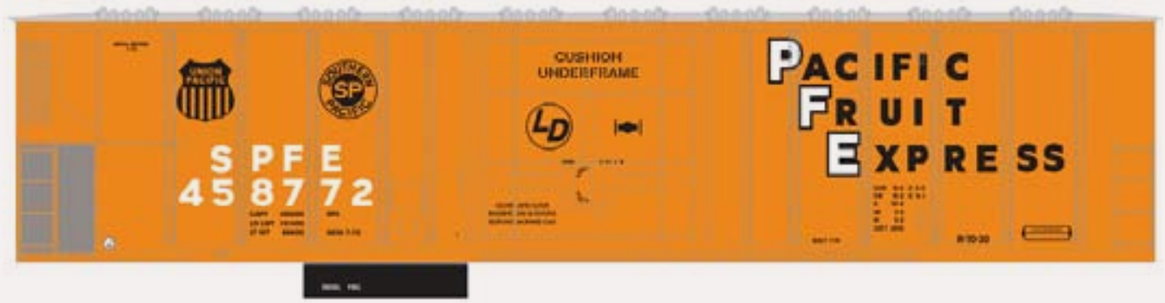
body), PRR (yellow body, previous page) and a gray MOW car with minimal data but no road name.



Late this summer, Walthers will begin delivering a 40’ tank car in its economy Trainline® series decorated for Clark Oil-GATX (above), Bakers Chocolate-GATX, Domino Sugar-GATX, and Godchaux Sugar-GATX. The HO scale RTR car will have a list price of $14.95.



For 2 bucks more ($16.95 list) Walthers will offer an ACF 36’ 10,000 gallon tank car in its Gold Line series decorated in bright blue for Union – UOCX as seen above. For those who prefer black, the tank cars will also be available for Gulf, Shell, and Standard Oil.



in white. Each of the five variations are available in three different road numbers. The models are priced at $17.98 each.

Also coming this fall from Athearn are gray GATC 2600 Airslide covered hoppers featuring etched metal roofwalks and brake platforms, wire grab irons, and a nicely detailed underbody. Road names include D&RGW with a color herald, Monon, GACX/PRR, and Union Pacific with red lettering. The cars have a list price of $22.98 and will be available in three numbers for each road.

N SCALE PRODUCT NEWS

October Arrivals Announced by Athearn

New ready-to-run N scale cars coming from **Athearn** (www.athearn.com) in October include a 57’ mechanical reefer with an orange body and large PFE displayed on the right side of the door. The left side has small UP and SP heralds in black plus five options: PFE, SPFE and UPFE in black lettering, and PFE and SPFE

Economy-priced N Scale Covered Hoppers Coming from Trainman

Atlas Trainman® (www.atlasrr.com) anticipates delivery in late April for a series of N scale Thrall 4750 3-bay covered hopper cars. Road names available in this run include Missouri Pacific, Chicago Freight Car Leasing, Chicago West Pullman & Southern, CSX, Great Lakes Carbon, and BGEX-Specialty Minerals. The ready-to-run models will have a list price of $13.95.

3rd Release of BLMA Top Gons in 24 New Numbers

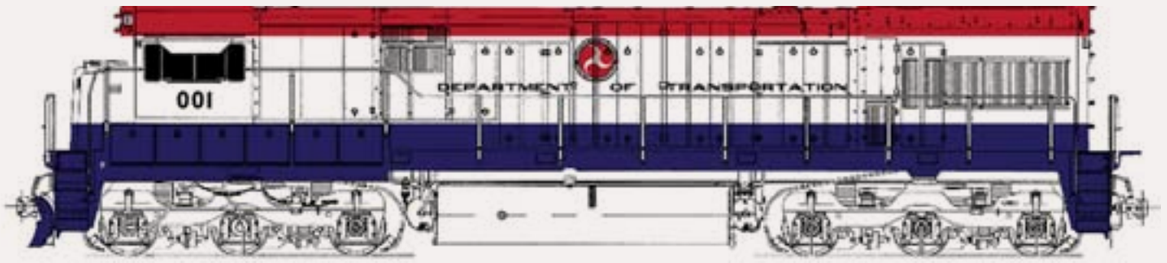
BLMA (www.blmamodels.com) is taking reservations through May 15 for a new release of its Norfolk Southern G-85R and G-86R Top Gun coal cars. The ready-to-run models will be available in 24 new road numbers. Delivery will be later this year. List price of the N scale cars is $19.95.

New Steel Truss Bridge from Central Valley

Central Valley Model Works (www.cvmw.com) has released a molded plastic kit for a well-detailed N scale 150 foot steel thru-truss bridge. Critical dimensions of the finished bridge are 11-1/4" from shoe-to-shoe and 11-15/32" in overall length. The internal vertical clearance is 1-3/4" over the code 55 rail head. The single-track railroad bridge includes a pedestrian walkway with delicate hand-rails. Item #1820 is priced at $32.95.

N Scale NYC Pacemaker Cars Coming from InterMountain

InterMountain (www.intermountain-railway.com) is taking reservations for delivery this winter of New York Central's postwar series of Pacemaker 40' boxcars. The ready-to-run models will feature etched-metal running boards, 4-3 improved Dreadnaught ends, rectangular panel roof, and Micro-Trains® trucks and couplers. The distinctive red-over-gray Pacemaker cars will be available in four lettering schemes including 1945/46 (white lettering, red herald, above left), 1948/49 (black lettering, red herald), 1955 (black lettering, black herald, above right), and 1960-renumbered (white lettering, black herald). All versions will be available with either Youngstown or Superior doors and in six numbers each, for a total of 48 cars without duplication. The N scale models have a retail price of $21.95.



Kato Preparing Upgraded U-boat

Kato USA (www.katousa.com) is reworking the N scale version of its GE U23C/U30C to make it suitable for a drop-in DCC decoder. Kato engineers are also redesigning the underframe to allow the use of body-mounted knuckle-type automatic magnetic couplers. The upgraded model will have directional white LED headlights and illuminated locomotive number boards. The ready-to-run model will be decorated for Santa Fe (warbonnet), Union Pacific (We can handle it), Burlington Northern, BN (Bicentennial), and Department of Transportation as illustrated above. All versions will be U30C except the Santa Fe model which will represent a U23C. Availability is expected this spring with the list price estimated in the $105 to $110 range.

Gunderson 5200 Boxcar Available from ExactRail

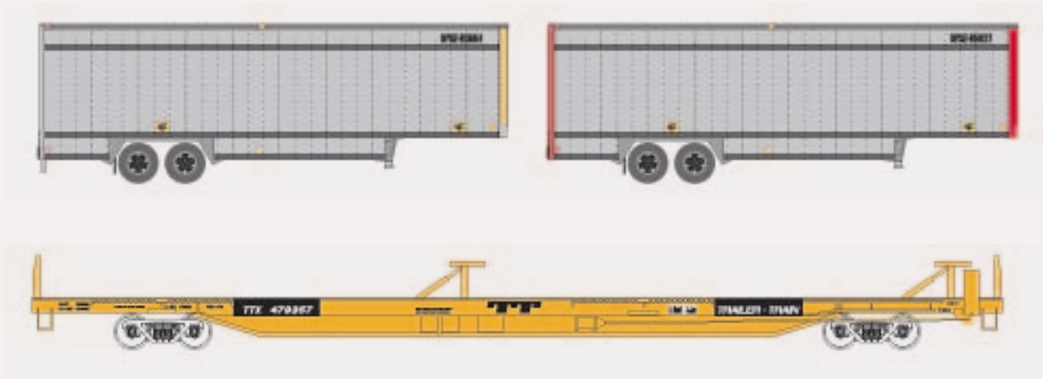
ExactRail (www.exactrail.com) is now selling an N scale model of a Gunderson 5200 boxcar decorated for SLSF (above), SSW-Cotton Belt, Northern Pacific, Missouri Pacific, BNSF and MNS. The ready-to-run car is priced at $21.95.

New Body Type Released by M-T

Micro-Trains Line Co. (www.micro-trains.com) has introduced a PS-2 high-side 3-bay covered hopper decorated for Atchison Topeka & Santa Fe. This is the

initial release of a new M-T body type that represents a 4427 cubic foot prototype built by Pullman-Standard in 1966. The N scale model is available now at $26.20.

Also new from M-T is a Great Northern 50' double-door class XM boxcar built in 1957. The N scale boxcar comes without running boards which were removed from the prototype in 1966. The ready-to-run model is priced at $24.30 and comes with simulated load of stacked bags.



Flats and Parcel Trailers Coming from Trainworx

Trainworx (www.train-worx.com) is accepting pre-orders through the end of April for an N scale Pullman-Standard 85' flat car in both straight sill and fish-belly underframe versions. The ready-to-run cars will have body-mounted Micro-Trains® couplers and Fox Valley metal wheel sets. The initial production run will be a fish-belly type decorated in Trailer Train yellow at $28.95 each in six road numbers. About one month after the flats arrive, companion 40' drop-frame parcel trailers at $15.95 each will be available in four variations of a basic gray body.

NEW DECALS

Pillsbury Airslide Decals Available

Dan Kohlberg is selling HO and N scale decal sets for early (1954-era) and later (1961-era) logo designs for Pillsbury GATC 2600 Airslide covered hoppers. The decals are printed in black, white, blue and red, and include enough material to letter two different gray cars. HO models from Athearn, Walthers, Eastern Car Works or Con Cor can be used to represent the early Airslide body style. The decal sets are $10 each for HO or N scale. Go to home.mindspring.com/~paducah/ for ordering details. ☑

Briefly noted at press time...

. . . Micro-Mark released a new catalog the 1st of April that lists hundreds of items for hobbyists, including power tools, hand tools, paint and finishing supplies, locomotives and rolling stock, structure kits, and books. The new catalog includes both name-brand and unique, hard-to-find products, plus numerous tips and ideas helpful to newcomers as well as experienced modelers. To request a free copy of the new catalog visit www.micromark.com. If you prefer to order by phone call 800-225-1066. International residents may call 908-464-2984.

Utah State Leaders Recognize ExactRail For Award

ExactRail of Provo, Utah, has received the State's coveted 2011 Utah Genius Award. Sponsored by the Utah Governor's Office of Economic Development and several leading media, educational, law, and financial institutions, the annual awards are given to a variety of firms in recognition of their innovative contribution to state's economy. "It is my hope ExactRail will continue to be a pivotal force in the state of Utah and throughout the hobby," said John Pestana, CEO and co-founder of ExactRail. "Taking a model train manufacturer to new heights is the essence of ExactRail and I personally strive to create opportunities benefiting our local, state and national economies." The awards are based on objective statistics from the United States Patent and Trademark Office – not by popular vote.

Reader Feedback (click here)

Selected Events

April 2011

AUSTRALIA, NORTH IPSWICH, April 23-24, 10th Australian Narrow Gauge Convention. Speakers include Grant McAdam, Gavin Hince and Gerry Hopkins. Workshops Rail Museum, North Street. Info at www.theworkshops.qm.qld.gov.au.

CANADA, ALBERTA, CALGARY, April 16-17, SuperTrain 2011, Canada's largest model train show with manufacturer displays, live demos, clinics, photo gallery. Subway Soccer Centre, 7000 48 Street SE, http://www.supertrain.ca.

INDIANA, ELKHART, April 15-16, 2011, Great Lakes Model Railroad Symposium co-sponsored by NMRA Midwest Region Michiana Division and St Joe Model Railroad Club. Speakers include Mark Belmonte, Mike Brestel, Ray Breyer, Mike Burgett, Jim Hediger, Tom Johnson, Tony Koester, Dennis Lippert, Maynard Mitchell, Bill Neale, Dave Schroeble, Jim Six, Terry Stuart, Doug Tagsold, Chris Thompson, and Dennis Whitaker. New York Central Railroad National Museum & Amtrak Depot. See glrmrrs.ning.com for more info.

MAINE, GRAY, April 2, 4th Annual Maine Narrow Gauge Show. Clinicians include George Barrett, Bruce Nickerson, Bob Willard, and Alan Carroll. Gray-New Gloucester High School, 10 Libby Hill Road (off route 26).

MARYLAND, TIMONIUM, April 9-10, Great Scale Model Train Show & Railroad Marketplace, produced by Howard Zane and Ken Young, Maryland State Fairgrounds. See www.gsmts.com for info.

MASSACHUSETTS, SHIRLEY, April 10, Railfair 2011 Model Train Show and Open House. Exhibits, dealer displays, and clinics, sponsored by Nashua Valley Railroad Assn., Show at Shirley Middle School, 1 Hospital Road. Open House at NVRR Association Quarters, Unit E-205, Phoenix Park Complex, 2 Shaker Road. Info at www.nvrra.com.

PENNSYLVANIA, STRASBURG, April 9, Train Swap Meet, Strasburg Fire Company, 203 West Franklin Street.

May 2011

CALIFORNIA, SANTA CLARA, May 13-15, NMRA PCR 67th Convention – Sonora Short Line, Finley Community Center, 2060 W. College Ave. Info at www.pcrnmra.org/conv2011.

CANADA, OTTAWA, May 22-23, Canadian Railway convention (CARM), Bldg A, Algonquin College. Into at trainsandtulips.com.

CANADA, SASKATCHEWAN, MOOSE JAW, NMRA PNR 6th Division Meet, sponsored by Thunder Creek Model Railroad Club. Western Development Museum.

FLORIDA, OCALA, May 19-22, NMRA SSR Brick City Express Convention, sponsored by Western Division and Ocala Model Railroaders Club , Ocala Hilton Hotel. Info at ocalamodelrailroaders.com.

IOWA, DUBUQUE, May 20-22, NMRA Thousand Lakes Region Convention. Speakers include Kevin Copsey, Gerry Miller, Jay Manning, Dave Roeder, Les Breuer, and Alan Scotkamp. Info from Gerry Miller at miller20@gmail.com.

PENNSYLVANIA, KIMBERTON, May 19-22, Annual Mid-Atlantic Narrow Gauge Meet, Kimberton Volunteer Fire Department Building.

OHIO, MARION, May 20-22, Central Ohio Prototype Modelers Meet, Marion Union Station.

WEST VIRGINIA, CASS, May 20-21, Titans of Mountains - 2011 Cass Railfan Weekend. Details at www.msrlha.org/rfw/index.html.

Future

CALIFORNIA, SACRAMENTO, July 3-9, NMRA National and National Association of S Gaugers Combined Conventions, Sheraton Grand Hotel. Info at www.x2011west.org.

CALIFORNIA, SACRAMENTO, July 7-9, National Train Show, Sacramento Convention Center. Info at www.nmra.org/convention/trainshow.html.

CALIFORNIA, SAN DIEGO, June 20 - July 29, Railroad Summer Camp for Kids, includes museum tours, railroad history, railroad workbooks, railroad safety education, diesel/steam engine mechanics, and assembling model railroad freight car. Registration now open for six 5-day sessions in three different age groups. San Diego Model Railroad Museum, 1649 El Prado, Balboa Park. Details from Olga Cortes at 619-696-0199 or visit www.sdmodelrailroadm.com/#/summer-camp/.

COLORADO, LITTLETON (Denver), June 10-13, 5th Annual Rocky Mountain RPM Meet, Littleton Baptist Church, 1400 W. Caley Ave. Info at www.rocky-mountainprototypemodelers.org.

CONNECTICUT, COLLINSVILLE, June 3-4, New England/Northeast Prototype Meet, Canton Community Center, 40 Dyer Ave. Clinicians and vendor tables. For info contact Dave Owens at neprotomeet@gmail.com or visit www.neprototypemeet.com.

Selected Events *Continued ...*

ILLINOIS, LISLE, Oct 20-22, RPM-Conference (formerly Naperville RPM). Produced by Joe D'Elia. Speakers TBA. Hickory Ridge Marriott (630-971-5000).

ILLINOIS, COLLINSVILLE, (St. Louis area), August 5-6, St. Louis RPM Meet, vendor displays, operating FreeMo layout and clinics featuring Rob Adams, Ed Hawkins, John and Dan Kohlberg, Nick Molo, Dave Lehlbach, Clark Propst and Mont Switzer. Gateway Convention Center, One Gateway Drive, Collinsville. For info contact John Golden at golden1014@yahoo.com (812) 929-7181, Dan Kohlberg at paducah@mindspring.com, Lonnie Bathurst at (217) 556-0314, or visit www.gatewaycenter.com.

MARYLAND, TIMONIUM, June 25-26, Great Scale Model Train Show & Railroad Marketplace, produced by Howard Zane and Ken Young, Maryland State Fairgrounds.

MARYLAND, TIMONIUM, October 29-30, Great Scale Model Train Show & Railroad Marketplace, produced by Howard Zane and Ken Young, Maryland State Fairgrounds.

MASSACHUSETTS, MANSFIELD, Nov 2-5, Craftsman Structure Convention, Holiday Inn. Info at www.csc11.net.

MASSACHUSETTS, PEABODY, Oct 13-15, The Fine Scale Model Railroader Expo, Holiday Inn. New event includes extended paid clinics from experts including Lou Sassi, Dave Frary, Bob Hayden, and Bob Mitchell. For clinic fees and additional details visit www.modelrailroadexpo.com.

NORTH CAROLINA, HICKORY, Sep 7-10, 33rd National Narrow Gauge Convention, Hickory Metro Convention Center, featuring layout tours, clinics, vendor displays, prototype events and narrow gauge camaraderie. Speakers are Trains editor Jim Wrinn and David Pfeiffer from National Archives. Headquarters hotel (Crown Plaza) is sold out. Visit web site at www.narrow-gauge2011.com for information on alternative hotel space.

PENNSYLVANIA, HERSHEY, June 22-26, National N Scale Convention. Harrisburg/Hershey Sheraton Hotel, 4650 Lindle Rd., Harrisburg. Info at www.nationalnscaleconvention.com. ■

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.

Send us your product announcements

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Reader Feedback
(click here)

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REVERSE RUNNING: Remembering the 'good old days' of the hobby ...

Stepping outside the box with a contrary view

Reader Feedback
(click here)

— by Joe Fugate

Those on online forums who talk about the "highwater days" of the hobby typically refer to the late 1980s. It was then that mainstream model railroad publications like Railroad Model Craftsman and Model Railroader hit all-time-high circulation levels and page counts, Tortoise turnout switch machines were just being introduced and Athearn blue-box cars were under $5 each.

Ah yes, the good old days. Let's go back 25 years ...

It's 1986 and I'm interested in filling out my railcar fleet. I use Kadee couplers and I prefer metal wheelsets. I'm also open to saving some money by purchasing some used cars.

Can't go to eBay – it doesn't exist. In fact, I can't go online period, because there is no internet. And I certainly can't use Google to do a search.

I'm new to the area, so I'm not sure where the nearest hobby shop is. I can't use Mapquest because it doesn't exist – there's no internet, remember? I can't just text my friends and ask them because cell phones don't exist.

So I check the Yellow Pages for model trains and find out there's a hobby shop about an hour's drive from me. (There's also one across town, but they didn't advertise in the Yellow Pages ...)

Off I go to pick up some magazines and see if there are any swap meets coming up. I get the magazines home and find out the next swap meet is in 3 months. Just great.

I check out the ads and nobody seems to be selling metal wheelsets except Kadee. I find one of the mail order outfits in the magazine and call them long distance to ask about purchasing some Kadee wheelsets – and in a few minutes there's an order on its way to me.

Later I learn there's a hobby shop across town that stocks Kadee wheelsets. Oh well ...

I'm also somewhat interested in checking out HOn3 modeling. I can't go join a Yahoo group because there's no internet, remember? I wonder if there's a club nearby, but there's nothing in the magazines and with the nearest hobby shop over an hour away, I haven't got a clue if there are any local clubs or modular groups.

Three months later I get to that swap meet and find out about the hobby shop across town. Wow, if I'd only known!

It would be nice if I could find some maps of the area I'm interested in modeling to see where the rail lines went. I can't go to Google Map satellite images because there's no internet – remember? So I go to the Yellow Pages to see who I need to contact to order some US Geological Survey maps of my area. After much digging and making phone calls I finally am able to order a map index. Once I get the map index in a couple weeks, I can study it to determine which maps I need to buy, and order them.

By that time, at least a month will have passed. Now, what was it I was wanting to do with those maps?

Would be nice if I could find some photos of my prototype from the time period I'm interested in. I can't just go online to search for digital images because digital cameras don't exist – and there's no internet, remember?

I also need some detail parts for a modeling project. No internet or forums so I scour the magazines and turn up nothing. Oh well, maybe someone will pick up my brain waves and decide to produce the part.

Would be nice if I could somehow make people aware of my interest in such detail parts! Maybe I could write the magazines? Would they print my request?

Well, there is a large convention coming about 500 miles from me in 3 years. Maybe I could talk to vendors at the convention and let them know of my interest.

Yes sir, the good old days. It was so much easier to be a model railroader back then.

Do you still want to go back? ☑

Coming in the May 2011 issue

- Jack Tingstad's Cloud City & Western
- Weathering with Colored Pencils!
- Part 2 of Detailing the Backs of Buildings
- More one evening projects

... and lots more!

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HAVING FUN WITH TRAINS

Derailments (humor), and Dashboard on next page ▶

Derailments

Having fun with trains?

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DASHBOARD

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Got a good bit of train humor? If you're the first to submit it and we use it, it's worth $10!

The Ecological Model Builder

– by Ike N. Fullem

Using natural materials on your lay-out can save money and trips to the hobby shop. I recently discovered a new organic material for roofing.

I built an O scale model of Uncle Jed's brick, two-hole, outhouse, a thing of beauty and family pride – the only brick "privy" in the community. But how could I roof it? Jed's has giant red clay tile roofing, like the ones you see on the Italian villas in a free feed store calendar.

I found my solution when I needed to trim my toenails. The cut-off pieces looked just like those giant clay tiles, except for the color. I mentioned this to granny and she got the family together. My older brother's nails were even longer, thicker and wider than mine, Ella Mae's were prepainted, but the wrong shade of red, and the cousins had many good donations, too. I was a little sad I couldn't use Granny's – they were too thick, yellow and malformed.

It's best to work with the clippings in a vented-to-outdoors paint booth!

Soak the collection of nails in hot water for an hour, then place them on a flat piece of plywood and cover them overnight with another flat board and some bricks. When you take the weights off, most of the clippings should be flat, just like the tiles on Uncle Jed's brick "necessary." However, I discovered that my older brother's clippings had resisted flattening, so they were put in my "spares box" for possible use as G scale brake shoes.

Draw a $^1/_4$" square grid on a piece of index card for the roof's base. Cut it to fit the outhouse with a scale inch or two of overhang. I glued my index card right to the roof but if you have detail in your brick "biffy", like a lift up seat and Sears catalog hanging on the wall, or corn cobs, if you're a tougher breed, then you should make your roof removable.

With the roof on the building, ACC the toenails to the roof using the grid to keep things straight. Overlap the rows of clippings. If a toenail is too wide, just bite a piece off so it will fit.

I used some leftover red metal primer from painting the hog pen to paint my 'tiles'. ☑

Say the author's name three times, real fast, and remember this is the April issue. Thanks to Richard Bale and Terry (Stumpy) Stone for their help with this article – Lew Matt.