

Price:  
Forever Free  
**STANDARD**  
Edition

**June 2011**

## HAVING FUN WITH TRAINS



# Building a flat car Tank Load

by Ken Patterson

Tips for buying trains on eBay - part 2



Kitbash a SP storage shed

A new Byron Henderson trackplan

Guy Cantwell's Willoughby Line

Tips for building a urethane structure kit

and more!





**Front Cover:** Ken Patterson used a pair of hair spray caps to build these unique flat car loads. Ken's name should be familiar if you've been around the hobby for a while. He's been published numerous times in MR, RMC, MM, and more. Ken's project is creative and inexpensive.

ISSN 2152-7423

**Editorial Staff**

Joe D. Fugate, Publisher  
Charlie Comstock, Editor

**Columnists**

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

**Special Correspondents**

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

**Production**

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

**Technical Assistant**

Jeff Shultz

**Advertising Account Manager**

Les Halmos

 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor
 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 <b>NEW SPONSOR!</b>	 click to learn more about this sponsor	 <b>NEW SPONSOR!</b>	 click to learn more about this sponsor
 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor
 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor	 click to learn more about this sponsor

**Modelers!** - Click any of the logos above to visit a sponsor's web site and find products that could help with your model railroading projects. Tell them *"MRH sent me! Thanks for bringing me MRH completely free"*

For even more model railroading products, including hard-to-find items, also see our [Hobby Marketplace](#) on page 24.

Interested in advertising with MRH?  
[Click here](#) to learn how to become a *sponsoring advertiser*.  
A sponsoring ad with MRH is an *investment* in growing your business.



**BLMA**  
MODELS

# Hey Doc!

I'm worried about my husband's hobby...



**COMING** SOON

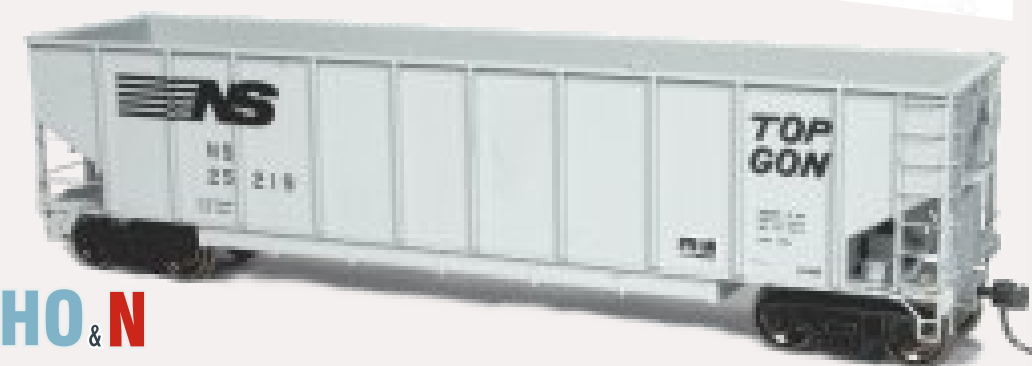


**HO** SCALE

**NEW!** Modern Cantilever **RIGHT** Hand!  
NEW Right Hand Model! Early Fall

#4030 Left Hand Signal Bridge  
#4031 Right Hand Signal Bridge

Assembled, Painted, Lighted!



**HO & N**

**NEW!** Norfolk Southern TopGon Coal Cars  
24 NEW NUMBERS! Late 2011

N #10061-10084 HO #50061-50084

ONLINE AT:



**Blasphemous!** Look at everything BLMA has coming!

**BLMAmodels.com**

562-712-7085 sales@blmamodels.com



Detroit, Toledo & Ironton  
DTI 9676

GD

MTY  
Return To  
**Detroit**



Soo Line  
Soo 62546

HT

MTY  
Return To  
**Sault Ste. Marie**



Procor  
PROX 15136

TA

MTY  
Return To  
**Brantford**

**Advanced**

# Car Card Generator

**for My Railroad!**

Easily create Car Cards online for car card and waybill operations · Easily reprint torn and worn cards ·

Complete instructions · Works with My Rolling Stock · For Dallas Model Works Members only · **Free to use!**



 [Click to Visit](#)

Walthers models 932-40257, 932-7853 and 932-7224 shown





All ExactRail HO Scale rolling stock is factory equipped with Kadee® couplers



# EXACTRAIL®

The Next Generation of Model Railroading

See what's new at [ExactRail.com](http://ExactRail.com)!

P-S 7315 Waffle Box Car

HO SCALE **Platinum** \$32.95 MSRP



Available in 10 paint schemes  
ATSF, BNSF, CSXT, DT&I, L&N, SOU, N&W (2), MILW & NS | [See details](#)

Trinity TRINCool 64' Reefer

HO SCALE **Platinum** \$32.95 MSRP



Available in 2 versions  
Phase I & Phase III | [See details](#)

PC&F 6033 Hy-Cube Box Car

HO SCALE **EVOLUTION** \$26.95 MSRP



Available in 6 paint schemes  
ATSF, WC, SSW, UP, SIRX & BAEX | [See details](#)

Click See details   
for more product  
info and photos

PS-2CD 4427 Covered Hopper

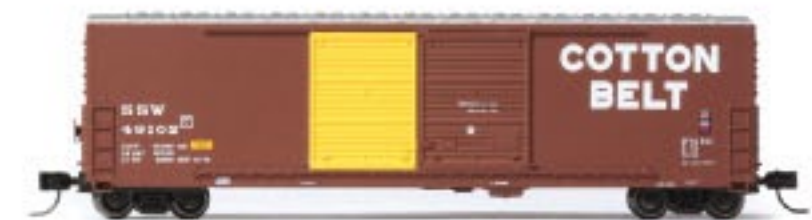
N SCALE **N SCALE** \$24.95 MSRP



Available in 5 paint schemes  
ADM, MILW, CONTINENTAL, BNSF & UP | [See details](#)

Gunderson 5200 Box Car

N SCALE **N SCALE** \$21.95 MSRP



Available in 6 paint schemes  
SSW, SLSF, BNSF, NP, MP & MNS | [See details](#)

Vert-A-Pac Autorack

HO SCALE **EVOLUTION** \$29.95 MSRP



Available in 6 paint schemes  
SP, SLSF, MP, IC, FEC & SCL | [See details](#)

PS-2CD 4427 Covered Hopper

HO SCALE **Platinum** \$36.95 MSRP



Available in more than 15 paint schemes  
TLDX, SBGX, EL, ATSF, BKTY, B&M, CGW and more | [See details](#)

Thrall 3564 Gondola

HO SCALE **Platinum** \$32.95 MSRP



Available in 8 paint schemes  
TTX, NOKL, BNSF, SP, DJJX, CP, TILX & CSXT | [See details](#)

In stock now! Contact your local dealer or visit [ExactRail.com](http://ExactRail.com) to order!



1-866-945-1701 | [ExactRail.com](http://ExactRail.com)



Visit [ExactRail.com](http://ExactRail.com) to keep pace with our releases, purchase products or locate a dealer.





**Digitrax**<sup>®</sup>  
Complete Train Control

**\$225.00 MSRP**

Introducing

**ZEPHYR** *xtra*

## **XTRA** FEATURES

• 29 Functions • 20 Adresses & Throttles • Recall

## **XTRA** POWER

• 3 Amps • Blast Programming for Sound



**Click here to find out more >**



**AHEM...**

**Did we mention  
it comes with a  
B-Unit?**



*CANADA'S WORLD-FAMOUS TRAIN*

**The Canadian**

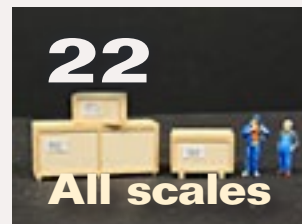




# Main Features

## Table of contents

## Columns



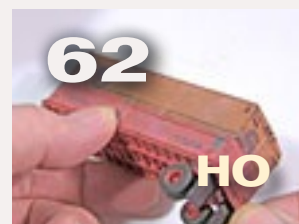
**Crates!**  
Scenery Scene: one evening project!  
*by Charlie Comstock*



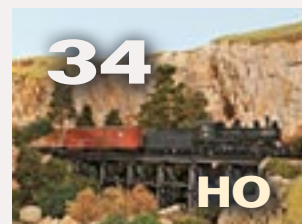
**Buy Model Trains on eBay - part 2**  
Winning strategies for auction bidding  
*by Joe Fugate*



**The Cascade Southern**  
A new N-scale trackplan  
*by Byron Henderson*



**Kitbash a SP Trailer Shed**  
Scenery Scene: one evening project!  
*by Joe Fugate*



**The Willoughby Line**  
Guy Cantwell's HO scale California layout  
*by Jack Burgess*



**Polyurethane Structure Tips**  
Learn a few tips for building these kits  
*by Mike Tylick*



**Build a Tank Load for Flat Cars**  
Creative and inexpensive car loads  
*by Ken Patterson*



**First Looks:**  
Changes - a railroad comes to life  
Fantasonics - scale magic sound  
*by Jeff Shultz*

**76 What Time is it?**  
Up the Creek  
*by Charlie Comstock*

**80 Locomotive Carriers**  
Lite and Narrow  
*by Lew Matt*

**85 Mixed Train Daily**  
Comme-N-tary  
*by John Drye*

**90 June Model Railroading News**  
MRH News and Events  
*by Richard Bale*

**104 Hobby Innovations?**  
Reverse Running  
*by Joe Fugate*

**106 Derailments**  
Humor?

**14 Bonus downloads** this issue!

# Other Features

**10 The Doldrums**  
Editor's Soapbox *by Charlie Comstock*

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

**12 MRH Staff Notes**  
Getting ready for X2011W

**24 Hobby Marketplace**



# TELL US WHAT YOU WANT. WE'LL HELP YOU FIND IT.

SPECIALISTS IN HO, O AND N SCALE HARD-TO-FIND ITEMS

BPL Brassworks' sophisticated Want List system "sends up a flare" when a new collection comes in with just what you're looking for, and we send you a "heads up." You won't miss out on the opportunity to add that sought-after item to your own collection. You know what to look for, and we provide crisp, detailed photos to give you confidence in the quality and value of our offerings.

**FINE DOMESTIC AND IMPORTED BRASS MODELS FOR  
DISCRIMINATING COLLECTORS AND OPERATORS.**

- All major importers and domestic manufacturers
- Newest manufacturer offerings
- Want List system for special requests and hard-to-find items
- One-to-one personal service
- More than 15 years of railroading study and experience
- A boss who's as passionate about brass and trains as you are
- Order confirmations, layaway and prepayment options available

*Make our web site your first stop for the newest offerings.*



2 6 2 - 3 7 5 - 1 1 0 7

CLICK FOR MORE INFO





## 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: The Doldrums

Getting nothing much done hobby-wise ...



Summer is widely regarded as a time for yard work, car washing, trips to the beach, family vacations to visit Aunt Martha, working on the house, or relaxing on the front porch with something ice cold to drink.

What's not included seems to be time to work on the layout, hang out at the local hobby shop, or run trains.

Sure there's less time for the basement (or garage or bedroom or wherever your layout is located), but let's not get a you-can't-have-anything-to-do-with-trains-in-the-summer tradition started, a bad precedent!

### Riding Along

Summer is a great time for field trips. When was the last time you rode behind a steam engine? Take it from me, railroading high in the Rockies on 3' narrow gauge is a lot more pleasant in the summer than in the winter (plus those super-scenic narrow gauge lines don't run in the winter)! Take your pick of the [Cumbres & Toltec](#) or [Durango & Silverton](#) (Google "colorado tourist railroads" for more options). Be careful, though. A friend of mine was driving over a pass in Colorado and darned

near got stuck in the snow when a blizzard hit – in May!

The [East Broad Top](#) is a great venue for riding in south central Pennsylvania.

I hear the scenery along the [White Pass & Yukon](#) in Alaska is incredible, and no doubt more hospitable in the summertime.

Narrow gauge doesn't stoke your boiler? There are a number of standard gauge venues around, too.

Don't like tourist railroads? Instead of flying to visit Aunt Martha, go there on [Amtrak](#). You'll see more of the country from the windows of a Superdome than you would from a 737 at 35,000'.

### Foreign Matter

If you have some extra dinero set aside have you ever considered a railfan trip in Europe? Or perhaps China or India?

The German railway system is amazing. Trains arrive or depart from Munich in a nearly continuous stream at times and they're not sluggish when it comes to getting someplace – 180 kph and up.

Or take a trip through the [Chunnel](#) or whoosh through the Alps on the [TGV](#).

Perhaps you'd care to ride the famous [Orient Express](#) – hopefully not when there's a murder (unless your name happens to be Hercule Poirot, hero of Agatha Christie's "Murder on the Orient

Express"). I'll confess, you'll need more than a few dinero for this trip...

### Conventions

Or hit a convention or two. There's still time to register for the [X-2011 West National Convention in Sacramento](#) coming up in early July. Meet old friends or make new ones, visit layouts in person you've seen in the press or on the internet, and attend your pick of the plethora of clinics provided.

A national convention is too intense for you? How about one of the many regional conventions or other meets that are constantly going on? Model Railroading is a social hobby (at least it is for me), and I consider time spent rubbing elbows with other train loonies as time well spent.

### Last Resort

As a last resort find an extra hour or two to head over to a train buddy's house, a local hobby shop, or even to the train room. If your trains are in the basement like mine, it's probably cooler down there anyway. Plus an hour here and an hour there and you might be surprised at what you can accomplish, even during the summer doldrums.



# Questions?

- What prototype should I model?
- What's the best track plan?
- How do I build roadbed?
- How do I lay flex track?
- Whats an affordable turnout control?
- How do I wire for DCC?
- How do power districts work?
- How do I deal with shorts in DCC?
- How do I speed match locos?
- How do I install DCC loco lights?
- How do I install a DCC sound decoder?
- How do I build a trestle or other bridge?
- What's the best way to install a bridge?
- How do I hand paint a backdrop?
- How do I make realistic scenery terrain?
- How do I make streams and rivers?
- How do I make roads?
- How do I make a static grass applicator?
- How do I apply static grass realistically?
- How do I carve my own rockwork?
- How do I make bushes?
- How do I make hardwood and conifer trees?
- How do I make my own tunnel portals?

# Videos with answers!

"By seeing the right way and the right materials to use I have saved a small fortune in not buying the wrong stuff and saved valuable time by not going about things the wrong way. Money well spent!"

– Andrew Emmerson (I'm not the easiest person to satisfy)



**\$24.95 (each)**

**Get all these answers for \$99!  
(save 42%)**



Click to  
learn more ...



**Do more. Spend less.**

**model-trains-video.com**



## Notes from the

# MRH STAFF

### E-mails, authors, May ratings, getting ready for Sacramento, and more ...



Well, this is the sixth issue of MRH since we became a monthly publication. I'm pleased to say that we're not dead yet (though it is a bit of a

rush getting everything done). It's rather mind boggling how many magazines we've produced lately. We're looking forward to bringing you another six monthly issues in the second half of 2011.

### Calling All Authors ...

It's gratifying the number of authors who are submitting to MRH these days. But if you have a locomotive building/modification project you're thinking about writing up, or a structure building article, let us know! We're especially interested in hearing from you! Of course this doesn't mean we're not looking for submissions in other areas, too.

### Last issue's ratings

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

- 4.6 Detailing the backs of buildings - part 2
- 4.6 Modular Adventure: roundhouse building
- 4.5 Weathering with colored pencils
- 4.5 Building a logging truck
- 4.5 Cloud City & Western
- 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)!

### E-mail Notifications

Growing pains! Remember those from when you were a kid? Well, MRH has 'em too. In this case it's the way we send out notification e-mail to you, our subscribers, when a new issue is ready for reading.

The problem is that we use some software called Drupal as the underpinnings of the MRH website. Well,

### Advertisement

Watch our website for our monthly specials!



## ACCU-LITES, inc

Your DCC Center!

CLICK TO LEARN MORE:

<http://www.acculites.com>





to make a long story short it turns out that spammers are starting to use Drupal to do their dirty work. Since January the problem has become serious enough that an increasing number of e-mail service providers, including AOL are simply refusing to accept any Drupal-generated e-mail!

If you've not been getting the notification messages you signed up for, this may be the problem.

Since we certainly don't want to look like spammers, MRH has contracted with a specialized e-mail delivery service to deliver our notification messages. It works great! However, we've gotten a lot of e-mail bounced notices since we changed.

If you've changed your e-mail address since you subscribed, please take the time to update your settings with your new e-mail address – especially if you'd like to start receiving e-mail notifications again. It's easy to do, just [click here](#).

Another potential problem is your spam filter. To avoid having MRH messages flagged as spam please add mrhmag.com to your spam filter white list.

### **Please mention MRH**

We hope that you, our loyal MRH readers, look to our advertisers when you go shopping for model railroad paraphernalia. When you make a purchase

from one of our advertiser's please mention that you saw their ad in *Model Railroad Hobbyist* and that you appreciate their support of your favorite model train e-zine. That little extra bit of effort on your part is like money in the bank to us.

Amazingly, a number of our advertisers tell us they never hear anyone mention MRH when placing an order! Please help us overcome this problem and let 'em know their ad \$\$ are at work!

And if you're shopping with non-advertisers, would you consider mentioning to them that you're a MRH reader? Especially if you're not a regular reader of certain other model train publications.

### **We Need Help**

We don't mean psychiatric help (well maybe we could use that too!), Instead, we need someone who lives in the Hickory, North Carolina area to be our *local man on the ground*.

What all does that mean? It's really simple. When MRH travels to a show, we like to have someone local who can

- Accept UPS delivered boxes of show materials such as CDs, DVDs, and fliers, and store them until we arrive for the show.
- Help us set up, man, and breakdown the MRH booth at the show.
- Go to the appropriate stores in the area to buy whatever items we forgot to bring with us. Someone who

Have you seen the **NEW** Bar Mills web site?



And don't miss our new VIDEO CLINICS section!



Click here to CHECK IT OUT!



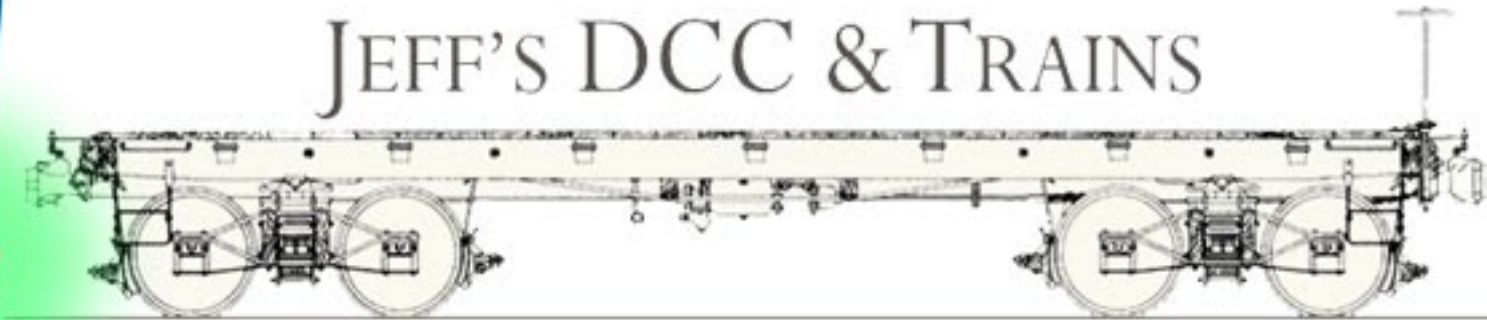
ADVERTISEMENT





Ordering supplies should NOT be rocket science...

JEFF'S DCC & TRAINS



Click here for more details ...

[www.jeffstrains.com](http://www.jeffstrains.com)



Advertisement

knows where the stores are saves us lots of time.

- Meet and drop off MRH staff at the airport.

In exchange, we'll pay for your admission into the convention and give you a really snazzy, official, MRH golf shirt! You'll also get to hob-nob with the super cool MRH staff.

How about it, all you Hickory, North Carolina readers? Click [here](#) if you want to help us out at the Narrow Gauge Show?

### Gettin' Ready for X-2011W

\On top of that, both Joe and Charlie are giving clinics at the convention this year. Sheesh, as if the staff didn't

already have enough to do in June getting the July issue ready to ship and trying to get a head start on August! Some people's kids...

### Shows we're attending

We're planning on attending the following train shows, in force in 2011:

- [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 2011](#)  
(formerly Naperville meet) (Lisle, IL) - Oct 20-22, 2011

## June 2011 Premium Extras!

Free for the first 20 days after issue release  
(After June 26, 2011, these extras will no longer be available)

- DVD-quality versions of this issue's videos
- Hi-res wood grain image (from the "Crates" one evening project)



Click here to access



■ **Craftsman Structure Convention**

(Mansfield, MA) - Nov 2-6, 2011

■ **Trainfest**

(Milwaukee, WI) - Nov 11-14, 2011

Come on by and say hello! We promise not to bite or get Floquil Grimy Black all over your hands.

**Gratifying**


It's really gratifying to see the article submissions coming our way these days. For heavens sake though, please don't stop. It's amazing how many articles are needed to produce a monthly magazine.

If you've submitted a proposal and haven't heard back, please be patient – or send us another e-mail to remind us we've not gotten back to you.

We're interested in most types of articles, but especially ones dealing with locomotive or structure construction or modification. Articles aimed at minority scales are also likely to meet with favor as are those with particularly nice photography.

Do you do technical drawings? Have plans for a piece of rolling stock or interesting structure? We're interested!

Remember, name and complete contact information (phone #, e-mail, address) should accompany all submissions.

Many thanks to all of you who have submitted stuff to us. 

 **Reader Feedback**  
(click here) 

**Want to help support the leading e-zine devoted to Model Trains and the people that have fun with them?**

**Want to help keep MRH forever free?**

**Shop our advertisers and tell them,**

**"I saw it in MRH!"**



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

**YOU HAVE BEEN WAITING 40 YEARS FOR THIS!  
HO POINTE ST. CHARLES CABOOSE PROJECT**

**Contact us to Reserve Now**

**CMT Exclusive Project, produced by Rapido Trains**



**First release is CN**

- As delivered paint scheme
- 12 different road #'s
- Plus un-numbered
- Due 2011
- Early reserve price \$59.99 expires soon
- MSRP \$74.99

First time ever produced in plastic, as a ready-to-run factory painted model, with interior lighting, full interior, prototypically accurate, metal wheels, couplers, etc. all included. These are 3-D drawings, not finalized, more changes are required.



Customer, Distributors and Manufacturers say we have the best communication system in the industry.

See why. Don't miss out ~ It's free!  
REGISTER at [www.modeltrains.com](http://www.modeltrains.com)

**[www.modeltrains.com](http://www.modeltrains.com)**  
[sales@modeltrains.com](mailto:sales@modeltrains.com) 1.866.862.7277





# MRH

## Questions, Answers and Tips



### QUESTIONS AND ANSWERS

**Q: I model in N scale and have found some drawings for structures in old model magazines but the scale is wrong. Can you give me some guidance on a simple way to convert old drawings to N scale?**

**A:** Copy machines at most office supply stores let you key in a percentage for resizing images.

You can use the table in Figure 1 as a starting point, but since various brands of copy machines are not precisely the same, you should first run a test sample and check the results with a scale rule, then adjust the percentage accordingly.

The table here covers the four most popular scales. — *Richard Bale*

**Q: I snagged a couple of Kato SD40s off eBay. The shells are ok, but the mechanisms need work. 1) What should I use to strip out the old lube and gunk? 2) What kind of lubrication should I use? 3) The wheels show a lot of wear, where can I find new wheelsets for these locos?**

**A:** Yes, I first clean out all the old lubricant and gunk.

I disassemble the loco and gear towers, check for burrs and slop around the worm and clean all the parts in 91% isopropyl alcohol. I then reassemble the mechanism and lube it according to the guide below.

If the worm has back and forth slop, it's good to add some thrust washers

Original Drawing Scale	Desired Scale	Copier Percentage
N	Z	73
N	HO	184
N	S	250
N	O	333
HO	Z	40
HO	N	54
HO	S	136
HO	O	181
S	Z	29
S	N	40
S	HO	73
S	O	133
O	Z	22
O	N	30
O	HO	55
O	S	75

Figure 1: Scale conversion percentage chart for drawings.

from Northwest Shortline (see URL <http://www.nwsl.com>) so the loco won't buck going downhill.

Finally, after I've cleaned and lubed the loco, I break it in before I put it into service. I run it 30 minutes each direction up on blocks.

### LUBRICANTS GUIDE

#### MOTOR/AXLE/GEARBOX BEARINGS:

- Labelle 107 or 108
- HOB-E-LUBE, Ultra-Lite, and Lite oils
- HOB-E-LUBE Premium, Ultra Light, Light and Medium oils
- Automatic Transmission Fluid: For example, there's **Royal Purple ATF** from is sold in most auto parts stores. For more, see: <http://model-railroad-hobbyist.com/node/480>

#### GEARS:

- Labelle 102 or 106
- HOB-E-LUBE Gear oil or Grease
- HOB-E-LUBE Premium Gear Oil

#### MOTOR COMMUTATORS:

- Atlas CONDUCTA-LUBE or Labelle 101<sup>1</sup>

#### DRY LUBRICANTS FOR AXLES:

- Kadee Greas-em
- Labelle or HOB-E-LUBE Dry White Lube

Labelle has a nice YouTube video on lubricating, see: <http://www.youtube.com/watch?v=SQkU18WmuWw>

As for your worn wheelsets, Northwest Shortline has a great selection of

<sup>1</sup> Not plastic compatible



replacement wheelsets for a variety of locomotives. — *Joe Fugate*

**Q: What type of paint is best for painting plastic buildings? Does it also work for weathering?**

**A:** I don't know that there is a particular best – I've used paints as varied as those specifically designed for modeling, craft paints (such as Delta Ceramcoat or Apple Barrel) from WalMart, and good old Krylon spray paint.

The easiest paints are the water based acrylics – unlike some solvent-based paints, they will not attack the plastics. But solvent-based paints can be used

too – with some terrific results – as long as the plastic is properly primed first with a plastic-compatible primer.

As for weathering, every time I think something isn't appropriate as a weathering medium – someone comes up with a new way to use it for weathering.

— *Jeff Shultz*

**Q: I have some questions about passing sidings. How long should I make my passing sidings? And how much space do I leave between the turnouts - in other words, how much space is needed between the end of the turnout and the last car of the train?**

**A:** These are both pretty common questions when designing your railroad and

its operations. The basic rule of thumb is that your sidings should be longer than the longest train you reasonably expect to operate.

My personal rule is "longest train times 1.5." If you have space, I recommend having at least one siding that can accommodate two trains of average length. Think of this not so much in how much can the siding hold, but how the combined siding and main tracks can accommodate in terms of getting trains past each other.

In prototype practice the clearance point at a switch is the point where the siding begins to transition from being parallel to the main.

The clearance point is that point where two pieces of equipment can safely pass each other without danger of colliding.

The clearance point may generally be considered to be twice the length of the switch itself, that is, one switch length beyond the switch itself. On longer switches, however, the clearance point may be closer to the switch than twice the length.

Define your specification for track spacing and when the siding encroaches on that minimum spacing factor, you have your clearance point.

— *Jim Duncan*

### Advertisement

# Get Better Sound from your Locomotives

Can't get good sound from your sound decoder? Give our speakers a test drive with your ears.

We offer high quality speakers to enhance your model railroad experience

Dealer inquiries welcomed



**RAILMASTER HOBBIES**  
**LAKEWOOD, CA 90713**  
**562-461-8825**



**WWW.RAILMASTERHOBBIES.COM**

Bass Reflex Speakers



High Bass Speakers



Our newest speaker only 14 x 36 x 10 mm  
Self-contained ported speaker





**Q: I would like to know how fast my trains are running. Is there a simple way to figure that out?**

**A:** The simplest method I know of is to look for a pair of adjacent 40' cars , 89' auto-rack, or a 85' passenger car.

60 mph is very close to 88 feet per second. All of the cars above are roughly 88 feet long. I pick a spot next to the tracks and see how long it takes the selected car(s) to pass by.

1 sec	60 smph (scale mph)
2 secs	30 smph
3 secs	20 smph
4 secs	15 smph
5 secs	12 smph
6 secs	10 smph

Alternatively, if it's your railroad, plant telephone poles 88 scale feet apart and time how long it takes for the train to pass between them. One second is 60 smph, etc., same as the first method. For HO scale, 88 scale feet is very close to 1 real foot making it even easier to estimate speed.

Both methods are scale independent and produce results accurate enough for an op session.

— *Charlie Comstock*

**Q: I am having problems with my airbrush. I just finished a passenger car and when I sprayed on the final flat finish, it turned milky white. I sprayed a boxcar and big gobs of paint came out of the airbrush and spattered on my car. When I painted a locomotive,**

**I got an orange peel-like finish. My paint finish has runs and sags. What did I do wrong?**

**A:** The milky white is called "blush" and comes from moisture trapped inside the atomized paint from high humidity or a lack of an inline filter on your airbrush.

The gobs of paint are usually the result of old paint with hardened pieces in it, curdled paint from thinning with an incompatible thinner or incompletely mixed paint.

Always start with fresh paint, use the paint manufacturer's recommended thinner, and mix the paint thoroughly and filter or strain the paint before spraying with it.

An orange peel finish is the result of the paint drying before it hits the surface. At the correct spray distance, the paint will go on wet and dry almost immediately. The easiest fix is to get a little closer. But If you get too close, you will get runs. Move your airbrush back a bit, speed up your pass and put on a lighter coat. Allow that coat to dry before you add a second coat.

Airbrush work is a skill – even using a spray can of paint correctly requires skill. It would behoove anyone who aspires to paint an expensive model to get a basic airbrush book for model builders and *read it*.

All the problems you will encounter with spray painting and their corrective actions are listed in the books.

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



# The Model Railcast Show

Keeping you on the RIGHT TRACK



Click here to learn more ...



(Show host, Ryan Andersen)



You will get a superior result from your efforts if you follow the basic rules: use fresh paint, mix the paint thoroughly, thin with the manufacturer's recommended thinner, filter the paint before spraying, watch the humidity and temperature levels, keep the moving, keep the airbrush a correct distance from the model and apply the paint in a series of thin, wet coats.

When we get a poor finish, it is generally not the paint product that is at fault, but the technique being used to apply the paint.

Follow the paint and manufacturer's recommended process for painting and you will have good success.

— Lew Matt

**Q: What's the best way to fill gaps in a plastic model, as in some form of filler or putty?**

**A:** The preferred method of most modelers I've talked to is Squadron Putty – either green or white. It fills nicely and is sandable and paintable.

One good rule is to use white putty for most applications (easier to paint over) but use the green putty on white plastic models. The green is easier to see on a white model, and it's easier to tell how the patch is coming while sanding.

Thin the putty with nail polish remover.

— Jeff Shultz



## TIPS



**Figure 1: The diesel exhaust effect is clear in this model shot.**

### Add a diesel exhaust effect to your photos

There are different schools of thought about how much editing and effects should be applied to model railway photography. Increasingly, people are adding steam effects, but you do not often see the diesel exhaust effect applied.

On the prototype, the effect is most apparent in photos of diesels taken with a telephoto lens and it can be quite well replicated in Photoshop, GIMP, or other photo editors.

1. Open the photo you want to add the effect to.

2. Make a selection using the lasso tool. The selection should be the shape you would expect the exhaust "ripple" to fill.
3. Make a copy of the selection (Ctrl+C and then Ctrl+V) so that you can work only on the copied portion.

4. You need to apply some filters to the selected area. The first one is a blur: Filter-Blur-Gaussian Blur and choose the blurriness that you think is right.

5. Then you need to apply a ripple effect to the blurred area. Use Filter-Distort-Ripple and set the chosen strength.

You should now have a diesel exhaust "ripple" effect in your photo. It can often help to consult prototype photos to see what the effect looks like in real photos. — Thomas Blampied

### Replacement parts from bread clips

If you ever need to duplicate a small part try using a plastic bread bag clip. I learned this trick from Jim Furhmann, a venerable elder of the Orange County Model Railroaders.

Rather than cut a tiny part from a large sheet of styrene or assemble strips to match a part, just take a spare bread clip and cut it to shape.

I needed two more eave brackets to complete a structure. First I picked a few medium sized bread clips from my collection jar that matched the thickness of the brackets.

If the part you need to replicate is thicker than a bread clip, simply glue two or more bread clips together using any liquid plastic cement such as CA or super glue before cutting out the part.





Figure 1: This bread clip is just the right size to make a duplicate eave bracket.



Figure 2: With the bracket traced on the bread clip and the excess plastic trimmed away, all that's left is to finish with a hobby knife and files.

Figure 3: Once painted and installed, nobody will know the difference. ▼



## GET \$25 PER TIP

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

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

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

I traced the bracket design onto the bread clip then nibbled away the plastic until I was near the outline. I did the final finishing with a hobby knife and needle files.

Once painted, these bread clip parts are indistinguishable from the originals. Bread clips also make great interior bracing for structure models.

If you don't have a bread clip jar, start one today!

— Galen Gallimore



Oregon Coast Scenic Railroad

Enjoy a steam train ride along the spectacular Oregon coast  
by Pictures & Words Productions

\$18  
+s/h

By Jeff Johnston, producer of "The Steam Loco Weathering Clinic"

[www.trainvideosandparts.com](http://www.trainvideosandparts.com)

## Geared Steam!

Classic restored Heisler action at the Oregon Coast Scenic RR, and the first restored Willamette at the Mt. Rainier Scenic RR! Both DVDs include behind-the-scenes shop visits plus exciting and detailed views of lineside operation.



Rayonier #2 - A Willamette lives again  
At the Mt. Rainier Scenic Railroad  
A Pictures & Words Production by Jeff Johnston © 2009

\$22  
+s/h

# Model Railroad Hobbyist magazine™

HAVING FUN WITH TRAINS



The La Mesa model RR club

Start your fun now!





# NCE Cab06

**Discover the  
FUN!**

**Now Shipping!**

## Cab 06 Features:

Select = Select Loco	^Select = Select Accessory
Dir = Direction	^Direction = Recall
0-9 = F0-F9	^0-9 = F10-F19
Horn = Horn	^Horn = Radio Off
^^Select = Macro	^^^Direction = Set Recall
^^Direction = Recall	^^^Horn = 28/128
^^0-9 = F20-F28	

### Setup - Hold Select while Plugging In:

Addn - Set Cab Address (1-63)  
 Nor = 0=Normal 1=Yard  
 Bal = Ballistic Tracking (1-7)  
 SH-n = Max Shift Level (0-3)

**^ = Shift**

Actual Label from the back of the Cab06



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

**NCE**  
*The Power of DCC*

Call or Email  
 for FREE Brochure  
[support@ncecorporation.com](mailto:support@ncecorporation.com)

585.265.0230  
 9am-4pm EST.  
[www.ncedcc.com](http://www.ncedcc.com)







# The Scenery Scene

## Crates Gift-wrapped boxes?

– by Charlie Comstock

 **Reader Feedback**   
(click here)

If your model railroad is anything like mine, it has an insatiable appetite for packing crates. There are many sources for these and they are available commercially in wood and plastic. Being an ornery cuss I decided to make my own.

I started by ripping some scrap lumber into various plausible sizes for HO crates (Figure 2). These make good forms to build crates around. It only took 15 minutes to make these with my table saw and chop saw. My 5" disk sander got rid of burrs and smoothed the edges.

Originally I planned to cut out pieces of basswood siding and glue them to the forms. Bad idea. The wood tended to split when I trimmed it, and it took forever, not to mention consuming lots of siding. Time for plan B.

Plan B was to put a piece of basswood siding on my computer scanner and 'make a picture' of it. I

imported the result into Photoshop and messed with the color balance, brightness, and contrast a bit. I printed the result on my ink jet printer. Not quite right. A few image tweaks and reprints later the results looked a lot like the original basswood (Figures 3a and 3b). I printed these using matte photo paper as crates are not generally shiny. My scanned wood grain image is available as one of the [June bonus extras](#).

The next step is wrapping the crate forms with the wood-paper. I found the best way was to cut the paper into strips using a crate-form to size them (Figure 4). Then I cut pieces from the strip long enough for two crate faces



Figure 3a

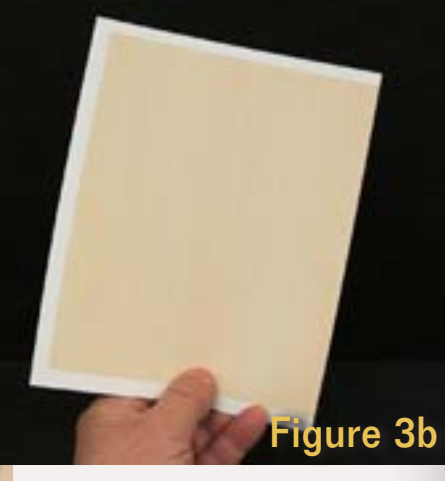
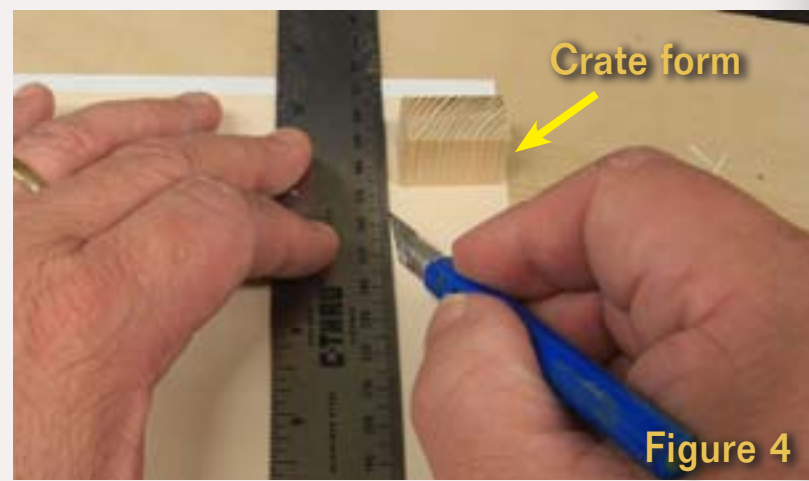
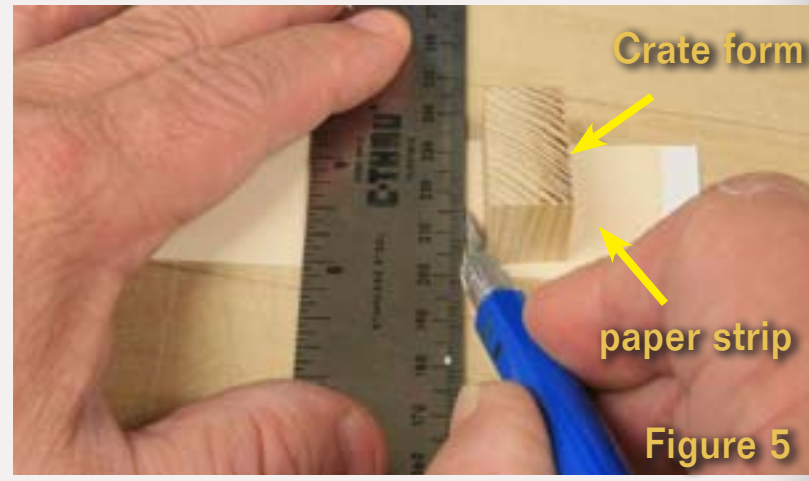


Figure 3b



Crate form

Figure 4



Crate form

paper strip

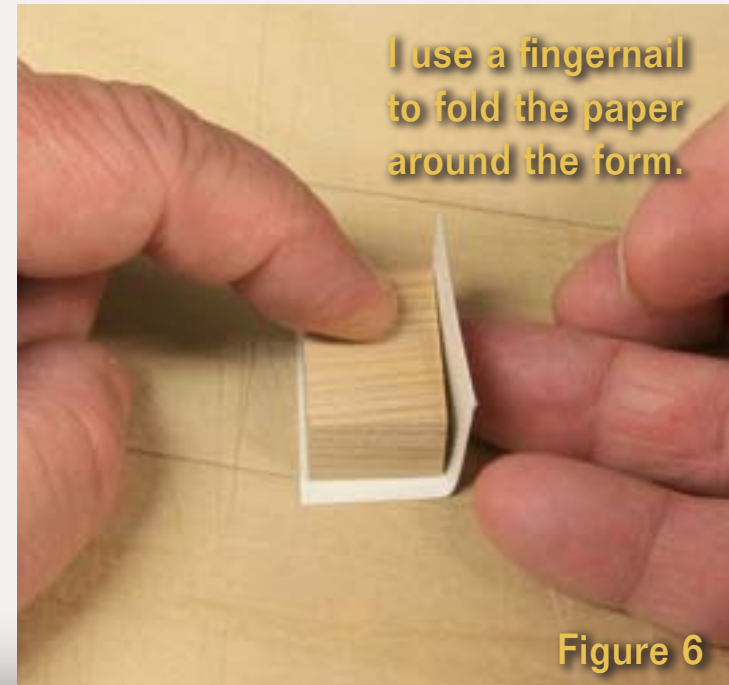
Figure 5



Figure 1



Figure 2



I use a fingernail to fold the paper around the form.

Figure 6



Figure 7





Figure 8



Figure 9



Figure 10



Figure 11

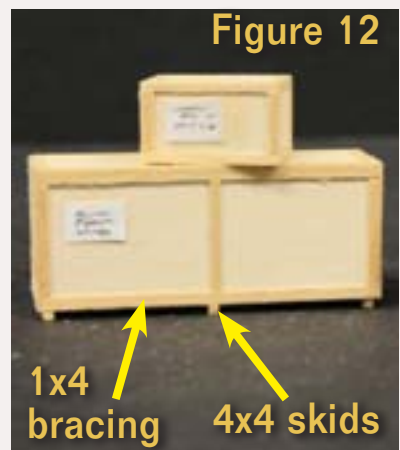


Figure 12



Oops! I got too close to this surface when I was trimming – the form is showing ...

Figure 13

(Figure 5) and folded it (Figures 6 and 7) to do two sides of the new crate at a time. White glue didn't work well to glue the photo paper in place – it wasn't tacky enough. Walther's Hob-E-Tac to the rescue.

Using the built-in brush, I carefully covered the two surfaces to be covered with Hob-E-Tac (Figure 8), then bedded the paper in the glue (Figure 9).

Figure 10 shows crates at different stages of construction. From left to right: basic forms, 2 surfaces covered, 4 surfaces covered, all surfaces covered.

When the glue dries, I use a *sharp* hobby knife to trim away the excess paper (Figure 11). Then I cut and glue the next piece of paper in place.

When all sides have dried, I yellow-glue pieces of scale 1x4 on all edges of the crates. Be careful not to use too much glue. I use a toothpick as an applicator. On some crates I added 4x4 or 6x6 skids so forklifts can get underneath (Figure 12).

I added simple labels made of small rectangles of white paper with pencil marks approximating shipping label data. I used 50/50 white glue and water to attach the labels to the crates, applying the glue with a small brush.

With a little practice, you should be able to churn out piles of crates!

Watch out when you trim the excess paper! Figure 13 shows where I got a bit too close! That surface will be the bottom of the crate which no one sees.

# Litchfield STATION



## Give Dad the DCC Gifts He Really Wants for Father's Day!

[www.Mr-DCC.com](http://www.Mr-DCC.com)  
623-298-7355

ADVERTISEMENT



# Model Railroad Hobbyist - HOBBY MARKETPLACE

## Backdrop Junction

Your stop for  
Model Railroad Backdrops



[backdropjunction.com](http://backdropjunction.com)

N, HO, O Scales • Custom Orders

Not just for backgrounds  
any more.  
The ONLY craftsman card model



[www.clevermodels.net](http://www.clevermodels.net)

Most kits  
under \$10

**CLAVAR**  
models LLC

Available on DVD and Downloads

Tired of old structures  
on your modern layout?  
**We can help!**

Click Here for more details...  
[www.summit-customcuts.com](http://www.summit-customcuts.com)

**PLINE** Manufacturers of fine  
crafted Brass Garden Railroad  
Trains and spares for the  
Homebuilder in GIII, G, Gauge1,  
Fn3, SM45/32, Gn15 & O scales.

We're happy to offer our One-  
off Brass Model manufacturing  
services and our Brass Garden  
Railroad products.

[www.pline.biz](http://www.pline.biz)

## Railpub

The source for back issue rail  
magazines; used, new and out of print  
rail books.

Railroad modeling, prototype, traction,  
logging, industrial subjects.

[www.railpub.com](http://www.railpub.com)

If you are looking for a great way to  
display your N, HO and O trains, try  
grooved

## ShelfTrax

Attaches to the wall  
without brackets! [www.shelftrax.com](http://www.shelftrax.com)

## Need help with DCC?

We tailor DCC to your  
Givens & Druthers

## DCC by Design

offers service to help you  
enjoy your layout

Learn more at  
[www.dccbydesign.com](http://www.dccbydesign.com)

## FINALLY THE RIGHT TOOL FOR THE JOB

Retire that Pounce Wheel get the Monster Nailer

No More Straight Lines &  
Square Holes from a Wheel...

Create Accurate &  
Realistic Nail Holes

Perfect Scale Spacing



[www.monstermodelworks.com](http://www.monstermodelworks.com)



# Model Railroad Hobbyist - HOBBY MARKETPLACE

Unconventional clinics...bus layout tours plus many self-guided layout tours...the Virginia & Truckee Railroad, the bonanza railroad...the Western Pacific Railroad Museum with an opportunity to be the engineer...the annual NASG convention...a Railroad Prototype Meet...Advance Section layout tours in the Bay Area...the California State Railroad Museum...

## ...and the Sierra Railroad and Napa Valley Wine Train...

More information from  
X2011 West, 530 Fig Tree Lane, Martinez, CA 94553  
[www.X2011West.org](http://www.X2011West.org)  
or catch us on Facebook

EXTRA 2011 WEST

# X2011

JULY 3-9, 2011 SACRAMENTO, CA  
2011 NMRA NATIONAL CONVENTION

## The Essential Resource for Model Railroad Hobbyists!



**Micro-Mark** [www.MicroMark.com](http://www.MicroMark.com)  
Berkeley Heights, NJ 07922 1-800-225-1066

Add an Exciting  
New Dimension  
to your layout...  
with  
**Fiber Optics!**

A Special Offer for  
Model Railroad  
Hobbyist Readers

[www.TheFiberOpticStore.com/MRH](http://www.TheFiberOpticStore.com/MRH)

The  
Fiber Optic  
Store.com

The  
**SCOTTY MASON**  
SHOW

*The Original Model Railroad Podcaster*

[www.themodelrailroadpodcast.com](http://www.themodelrailroadpodcast.com)

Get the Latest Model Railroading  
News, Tips, Reviews & Opinions



Featuring...

*Scott Mason*

*Dave Frary*

*Mike Rose*

*Jimmy Simmons*

*Joe Duckworth*

Available on

Apple iTunes

[www.themodelrailroadpodcast.com](http://www.themodelrailroadpodcast.com)



# The Cascade Southern Railroad in N Scale

Developing a realistic setting for a variety of western roads

— by **Byron Henderson**

[www.layoutvision.com](http://www.layoutvision.com)



A Southern Pacific Baldwin S12 works an inbound train at Klamath Falls, Oregon in this dramatic August, 1972 photo by Steve Schmollinger. Similar Baldwin VO-1000s are available in N scale, so the same scene might be reenacted at Newburg on the Cascade Southern.



**Reader  
Feedback**  
*(click here)*





A large layout space is a wonderful luxury, but it's still important to focus on a sound concept to allow the final design to tell a coherent story. Too many towns and too much trackage can result in repetitive cookie-cutter arrangements that don't give viewers and operators a feeling of progressing across a realistic landscape.

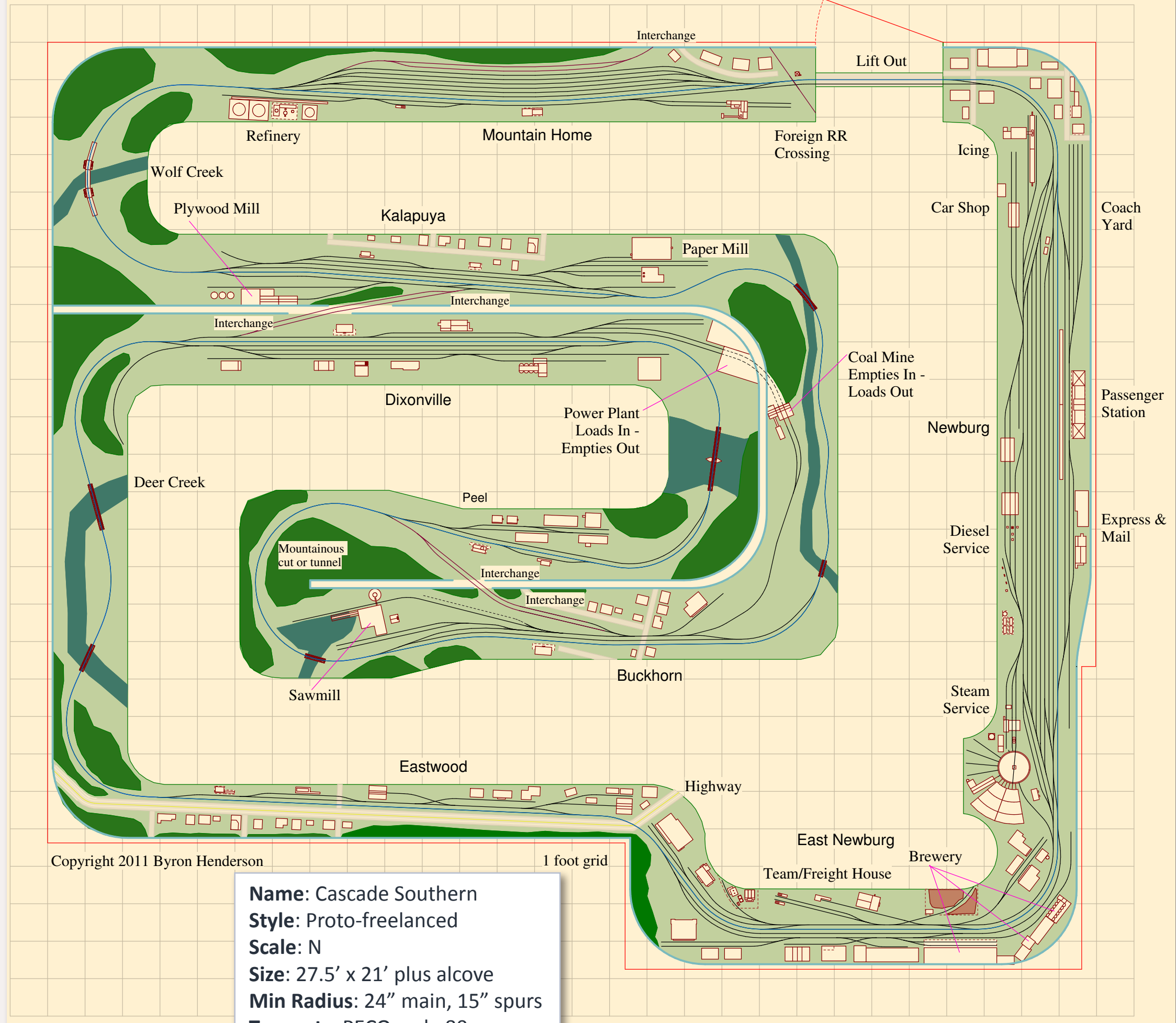
This is doubly true for freelanced designs. Without well-known landmarks to orient the viewer, it's important to keep the topography, traffic sources, and signature industries in a plausible relationship.

## Routing the Cascade Southern

The Cascade Southern is imagined to run from the fairly large freelanced Oregon city of Newburg (located near where Roseburg and Eugene exist in real life) eastward across a variety of terrain to a connection with "Inside Gateway" interchange partners such as the Great Northern and Western Pacific (and by extension, Denver & Rio Grande Western) at Mountain Home, which might be imagined to be in eastern Oregon or Idaho.

In Newburg, traffic is received from the SP and conceivably, from the Great Northern, Northern Pacific or Burlington Northern via the Oregon Electric. This traffic actually comes in across the removable gate from

# The Cascade Southern Railroad in N Scale



**Name:** Cascade Southern  
**Style:** Proto-freelanced  
**Scale:** N  
**Size:** 27.5' x 21' plus alcove  
**Min Radius:** 24" main, 15" spurs  
**Turnouts:** PECO code 80  
**Max Grade:** none

Figure 2





Figure 3

Figure 3: We're looking down the aisle toward the future location of the Wolf Creek Trestle between Kalapuya and Mountain Home. Note the depressed benchwork in this area to allow for modeling of the creek bed, creating a tall trestle scene without track grades – Robert Finch photo.

Byron Henderson is a custom model railroad layout designer from San Jose, CA. Byron is a member of the [Layout Design SIG](#) and [Operations SIG](#), and is the editor of the LDSIG's *Layout Design Journal*.



the visible staging yard in Mountain Home, which serves as both ends of the layout. The era for the layout is broad to allow the Burlington Northern and its original railroads to coexist, along with both steam and diesel locomotives.

My custom layout design client wanted flexibility in era and precise location so that traffic might be imagined from a variety of western railroads, with trackage rights for passenger and other trains very plausible.

From Newburg, the Cascade Southern serves a number of locations to the east. In keeping with our goal of a plausible landscape, these towns are more industrial closest to Newburg, becoming rural and agricultural as the line moves east, and finally mountain communities with natural resources industries further east.

Place names are generally free-lanced, although they often relate to some real-life feature in the general area east of Roseburg. These include actual tiny crossroads hamlets, rivers, and even former Native American tribes. But none of the layout scenes reflect the appearance of any actual locations.

### **Inspiration: On the level**

Besides the geographical and prototype railroad inspirations, a major influence on my client's desires is [Mark Lestico's fine N scale layout](#)

(featured in [Layout Design Journal](#) #39, Fall 2008). Mark's Union Pacific Cascade Division layout is built with all trackage at the same level -- grades are simulated by scenery (and by a sloping garage floor, in Mark's case).

In a similar fashion, my client wanted to design his layout with all tracks level. Benchwork was set high (56") to allow for cutting down some areas for creeks and rivers (and justify some desired bridges). Oh yeah, and the benchwork was built before the layout design project began!

### **Benchwork first? OK, this once ...**

I think it's almost always best to design the layout first, before outlining benchwork. This allows the designer freedom in arranging the tracks first to optimize appearance, operation or scenic interest, and access. Then the benchwork can be designed to fit.

But in this case, the benchwork was already built, including a bump-out where the turntable and roundhouse were to be located. While my client was willing to entertain some minor modifications, the room was already filled with well-built benchwork -- and backdrops!

Two things allowed the benchwork-first approach to work this time: the relatively large space and excellent choices in designing the benchwork



footprint in advance of the track plan. With roughly 600 square feet overall for an N scale design, we weren't so worried about squeezing the last square foot out of the space. And the benchwork had been built in an arrangement well known for its efficiency: around-the-room with a single spiral peninsula.

Because the benchwork edges were generally built straight and square to the room, I angled tracks along them for the most part. But in some areas, the tracks are aligned to the benchwork edge to provide a visual contrast with the curvy "mountain" segments.

The benchwork had also been built with generous track specifications in mind for N scale. Mainline curves can be 24" radius, most with easements. And there was plenty of space for running room between towns while still allowing for comfortable aisles.

Since the engine service area had been somewhat predetermined by the benchwork bump-out, I began there with a design for the layout's main yard at Newburg.

## **Newburg Yard**

The client had developed an initial sketch for a large division-point style yard with space for a large passenger station kit he had on hand. Extensive engine, passenger and service facilities were arranged, along with yard switching leads and caboose tracks

at each end (Figure5). As in many prototype situations, the yard leads extend out to service industrial switching sidings.

Passenger facilities, including a modest coach yard and express and postal facilities, are along the back of the layout. These provide some passenger switching along with the freight work. Many trains will terminate and originate here in either direction, so Newburg can be a busy place.

## **Concentrated industry and the 'burbs**

East Newburg, in the alcove, represents the industrial part of the city, with a number of larger industries. Large kits and kitbashed structures are against the wall, including a significant brewery intended to showcase a collection of beer reefers.

Eastwood is a suburban area where the Cascade Southern tracks run along the highway. Tracks are angled slightly relative to the benchwork to add visual variety. This area is much

**Figure 4: While this might be a scene from the Deer Creek bridges on the Cascade Southern, it's actually Yreka Western #19 in service on the fallen flag Oregon Pacific & Eastern. Drew Jacksich caught the excursion train (note the former SP RDC behind the engine) at Cottage Grove, Oregon in August, 1971.**



**Figure 4**





Figure 5

Figure 5: Tracks are being laid out at the west end of Newburg yard in this photo. The small coach yard is in the rear and the freight yard ladder and adjacent bypass runaround are on the near side of the main line with a lone cabooses on the cabooses track – Robert Finch photo.

The models along the aisle are all agricultural: feed mills, cold storage, farm supply, etc. A large kitbashed power plant is tied to the coal mine on the other side of the backdrop with a loads-in/empties-out connection. These two industries are on opposite sides of a backdrop to help conceal the gimmick.

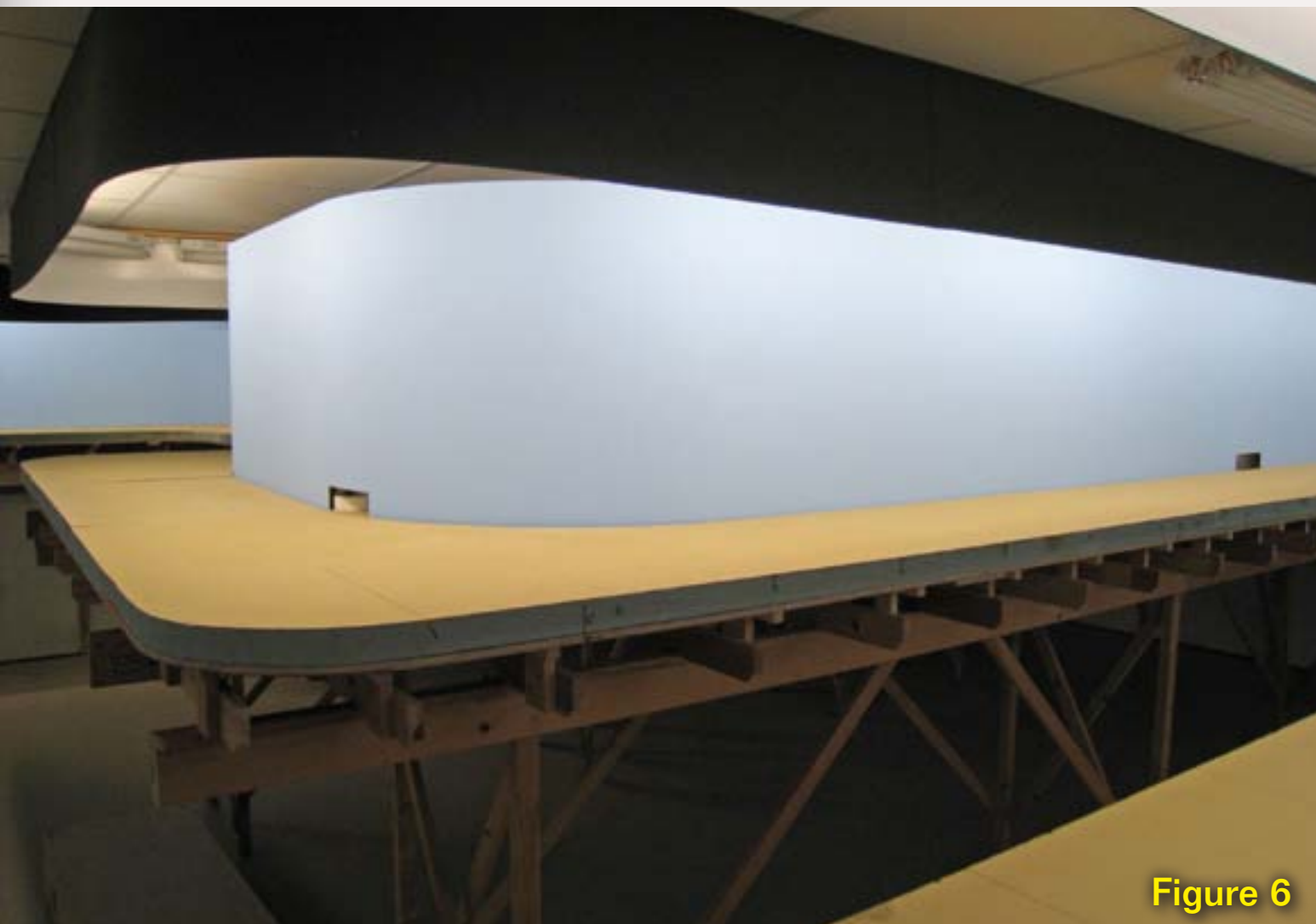


Figure 6

Figure 6: The future site of Buckhorn is to the left here on the spiral peninsula. Cut-outs in the backdrop allow for interchange/reversing tracks and the empties-in/loads-out connection. With the room lights out, note the shadowbox effect created by the fluorescent layout lighting concealed behind a valance – Robert Finch photo.

Dixonville may be the site of an assigned switch engine, working cuts of cars set out by through trains. A short switch lead at the west end of the small yard tracks allows a little room to work, but the client requested that this not be too long to avoid impinging on the Deer Creek scene (even in this much space, there is never quite enough room!)

less dense than East Newburg to better suggest that we are leaving the big city. Industries here are more consumer focused, with a lumber yard and non-rail-served business across the highway. From here the CSRR crosses meandering Deer Creek on a pair of bridges in a very scenic vignette before entering Dixonville.

Here we also encounter the first of multiple locations with simulated interchange tracks with another railroad. These not only provide operating interest on their own, but when emptied of cars also create a reversing connection across the backdrop that might be used for display and fun-running.

### Agricultural center

As we continue east, we imagine moving into a farming area. Dixonville is a good-sized agricultural community. To help contrast with the more “mountainous” terrain to come, it is aligned to the benchwork edge.

After crossing a good-sized lake, we enter Peel, a foothill community with a number of stone fruit, apple, or potato packing houses. (It was only later that I realized the unintentional pun of “Peel” being a produce-packing location.)

Around the end of the peninsula, the tracks will be in a deep forested cut



to create the impression that the railroad is beginning to climb.

## **Into the mountains**

Buckhorn is the junction of the branch to the coal mine and also the site of a large sawmill. Next, tracks curve through some tight mountain areas along a river to reach Kalapuya. The Walthers paper mill and a scratch-built/kitbashed plywood mill are the major industries here, and each can receive a variety of car types. The short stub lead at the east end is for a couple of units to duck out of the way when necessary for through trains. Again, this lead is short to avoid entering the Wolf Creek scene.

Trains vault over Wolf Creek on a tall viaduct before entering Mountain Home. Although the tracks are still on the same level here, cut-away benchwork should provide a spectacular view (Figure 3).

Finally, the large yard in Mountain Home forms the visible staging for the layout, but we imagine it to be part of an “Inside Gateway” connection with other railroads such as the Great Northern, Western Pacific, and Rio Grande. (In real life, this occurred for the GN and WP in Chemult, OR.) The yard is slightly curved to suggest a mountainous location. Interchange traffic can be imagined to appear both in the yard and on the interchange tracks at the back.

This same yard provides visible staging for both ends of the layout, so full trains with motive power will be parked here. This was a worthwhile trade-off for the client to keep maintenance and construction hassles to a minimum. Since this is not really intended to be a working yard, there is no yard lead provided.

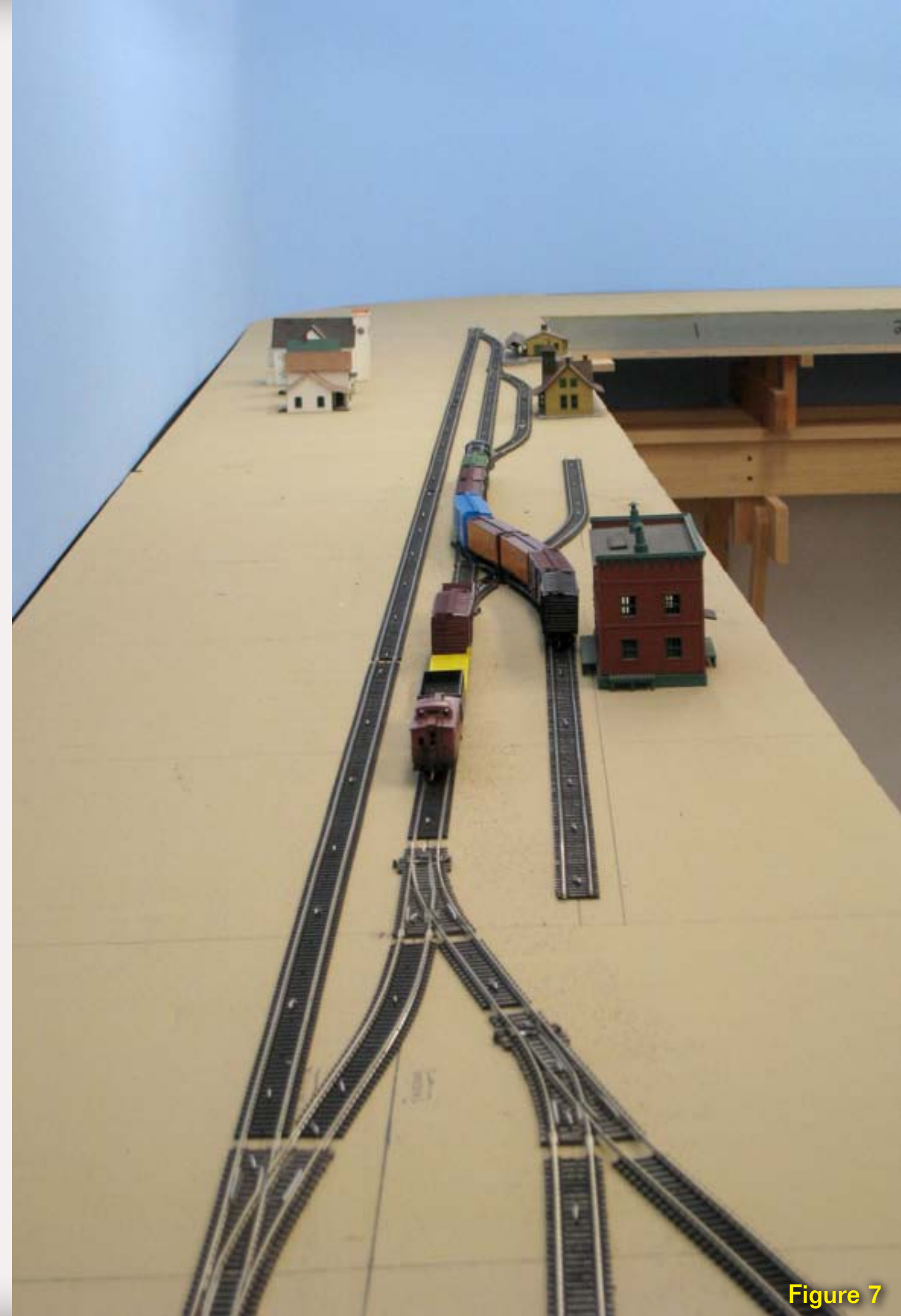
## **Through trains, locals, turns, assigned switchers**

The basic configuration of the layout offers a lot of flexibility for operations. Through trains may run end-to-end from Mountain Home in each direction, or trains may originate and terminate in Newburg.

Other towns could be switched by end-to-end or out-and-back locals. Dixonville and Kalapuya could be switched by dedicated local crews from the local yards in each of these towns. The cars bound for industries in these towns might be delivered by a “long

**Figure 7: The suburb of Eastwood lies at an angle to the edge of the benchwork, adding visual variety to the square and straight benchwork. The crossing serves industry tracks in each direction without resorting to an overused (on model railroads) switchback arrangement.**

**Note the T-pins that are temporarily holding the track in place.**



**Figure 7**





Figure 8

Figure 8: This lineup of “Inside Gateway” power with a train at Klamath Falls, Oregon from May of 1972 shows what Mountain Home might look like on the Cascade Southern. Burlington Northern and predecessor road units are on display, along with the lead Western Pacific loco in this photo by Jim Munding.

distance local” (called a “Sweeper” or “Pick-Up” on some railroads).

There are several passenger stations on the layout, served by one or more passenger trains in each direction, perhaps making a distinction between express trains making limited stops and the local passenger runs that stop everywhere for mail and a few passengers. Most towns have a small or large freight station, an important part of train operations in the steam and early diesel eras.

By using differences in track arrangement (straight versus curvy), structure density, and industry types, the layout creates the feeling of a climb from the valley through the foothills and on to the mountains. Sounds like a great place for some western railroads to go to work!

 **Reader Feedback**  
(click here) 

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

Some of the finest trees in the hobby ...

... available in any scale!

**CANYON CREEK SCENICS**  
canyoncreekscenics.com

click to visit our web site





# Southern Digital

Specializing in DCC Since 1992



## DigiFrame Kit



**20% Discount  
on most Items!**

**WWW.sodigi.com**  
**(770) 929-1888**



*(Photo from our N-Scale layout)*

Advertisement

## I got my **AUX-BOX**, how about you?



click here for more details...

# www.auxboxdcc.com





# Guy Cantwell's Willoughby Line

— by Jack Burgess; photos by the author

No. 23, a Bachmann 4-6-0, leads a freight train across Mountain King trestle. Guy scratchbuilt the trestle based on plans for a Yosemite Valley RR trestle near Briceburg. Guy modified the length of the trestle and the height of the bents but used the plans for material sizes, the design of the bents, and arrangement of the trestle stringers.



EXTRA 2011 WEST  
**X2011**  
SACRAMENTO-NMRA



Guy Cantwell's Willoughby Line will be open on both



a bus tour and a self-guiding tour during the Advance Section preceding the 2011 NMRA Convention in Sacramento in July. Visit [www.x2011west.org](http://www.x2011west.org) for more information.



**Reader Feedback**

*(click here)*



**M**any model railroaders have a hard time picking a single prototype railroad to either model or use for inspiration. Other modelers have a favorite prototype but lack sufficient space to build the scenes and locations they like best. Both problems can result in a decision to proto-freelance a layout. Rather than one or two favorite prototypes, Guy Cantwell's favorites include the Southern Pacific, the Western Pacific, the Sierra Railroad, the Hetch Hetchy Railroad, the Yosemite Valley Railroad, and the narrow-gauge West Side Lumber Company! By mixing compatible scenes from these prototypes, Guy successfully incorporated them into a multi-deck layout which also meets his operational goals.

**Jack:** Guy, when did you get into model railroading?

**Guy:** I got a train set for Christmas when I was probably about 6 years old. It was a Märklin set and I was into that for many years. After leaving the hobby for a while, I got back into it again and built a very large Märklin layout before tearing it down and starting this one.

**Jack:** What got you into Märklin?

**Guy:** My father bought Märklin equipment and track back in the 1960s on the recommendation of a toy store owner in Modesto, California where

we lived. He told my father that Märklin equipment was more robust and more reliable for a 6-year-old to play with than the current HO two-rail DC offerings. Dad ended up befriending a train store owner in Germany through my uncle who was stationed there in the 1960s, so we were getting ship-

**Figure 2: No. 23 rolls past the east end of the siding at Hetch-Hetchy Junction. This photo provides a good view of the great rockwork and scenery on Guy's layout. The grass is 6.5mm static grass applied with a home-made static grass gun.**

ments from Germany at a discount. It was pretty exciting for a kid!

**Jack:** So, it was more important for the equipment to be robust than to have it represent American prototypes?

**Guy:** Evidentially, yes! In all fairness though, the Märklin stuff lasted. I ran



Figure 2





Figure 3

some equipment that was forty years old and it still ran very, very well. So, it was quality stuff.

**Jack:** This is your second layout?

**Guy:** Third. I also had a big Märklin layout when I was a teenager.

**Jack:** When did you start your present layout?

**Guy:** That would have been around 2004. I met Mike Schwab, Jim Vail (an HO<sub>n</sub>3 modeler and columnist for the Narrow Gauge and Short Line Gazette), and others in the Santa Cruz area in 1999. They totally changed my attitude about model railroading!

**Jack:** So you still had your Märklin layout when you met them?

**Guy:** Yes, I had the Märklin layout from around 1994 until 2004.

**Jack:** How far did you get on that layout?

**Guy:** It was pretty much done. It had a 5-foot-deep canyon that was carved plaster and a small switching area. But there wasn't much operation.

**Jack:** So, what made you tear that nearly-complete layout down?

**Guy:** After I met the gang of modelers in the Santa Cruz area, I saw the finescale things they were doing and also started getting into operations. It totally changed what I wanted from my

layout. I started super-detailing scenes and figuring out ways to run Inter-mountain reefer cars behind Märklin locos. But there wasn't much I could do about the limited operational possibilities of the track plan.

**Jack:** They obviously had a great impact on you.

**Guy:** Well, you make the mistake of asking one of the guys one day, "What do you think I should do? Should I redesign this layout or should I start over?" So, of course, they are going to say "Start over!" But that turned out to be the right thing to do, definitely!

**Jack:** How did you arrive at your proto-freelanced approach?

**Figure 3: A 3-truck Bachmann Shay leaves Hetch-Hetchy Junction with a dozen Yosemite Valley RR log cars. The log cars were built from Rio Grande Models kits ([www.rio-grandemodels.com](http://www.rio-grandemodels.com)).**

**Guy:** Not being able to pick! There were too many things I liked. I grew up in the Central Valley of California so I wanted to have the layout based in California. It also seemed convenient that we had the Sierra Railroad running up to connect with the Hetch-Hetchy Railroad (built by the City of San Francisco to transport construction materials for the Hetch-Hetchy dam in Yosemite National Park), and also to connect to the West Side Lumber Company railroad at Tuolumne. And



then we had the Yosemite Valley Railroad in the foothills. So, it made sense to combine them all. The availability of various pieces of equipment such as Beaver Creek Model Company brass locomotive models, Sierra Railroad models from Westside Models, and Eric Bracher's Rio Grande Models kits also influenced me a lot.

**Jack:** Did you design your layout first or did you just start building?

**Guy:** Oh no, I developed a very definite track plan. It is actually a triple-

deck layout if you include the staging. I wanted a lot of extra staging, so I very carefully planned out the staging areas and "infrastructure" to support them. All of the grades were also carefully planned. The single helix has reversing loops at the top and bottom, and there are wyes at both ends so you can come around it on several different levels. In addition, both decks have loops for continuous running during open house events so I had some pretty definite ideas of what I wanted.

Then I went through all of the books—your book ["Trains to Yosemite" by Jack Burgess], the Hetch-Hetchy book, and the Sierra book—and picked scenes from each railroad that I liked and arranged the scenes to fit into the layout. When I started construction, the basic infrastructure parts went off pretty much as planned. But when it came to the visible sections things, got a bit more difficult.

**Jack:** What difficulties did you encounter there?

**Guy:** I found that on paper I had a tendency to fill every scene with lots of track since those lines didn't look that close together on the plan. But, when I started laying track on Homasote, the dreaded "parking lot of track" syndrome appeared. I ended up removing lots of track from various scenes to make things look better.

**Jack:** Your plan is basically a point-to-point or reverse loop to reverse loop configuration?

**Guy:** Point-to-point, the idea is that you build your train in the Willoughby yard on the first level and then run up to the top. If you go all of the way you end up at Groveland, turn on the turntable, and go back down again. So, it is true point-to-point.

**Jack:** How long is the mainline?

**Guy:** The mainline is 180' from the Willoughby yard up to Groveland. About 60 feet of that is in the helix.

**Jack:** But that figure doesn't include staging?

**Guy:** No, there is also 300' of hidden track of which probably 150' or so is staging. There are six sidings underneath the main yard plus 50' of serial staging in the helix and a couple of other hidden sidings.

**Figure 4:** The steer in the foreground doesn't seem too pleased by the work going on behind it. The Cotton Belt flat car is an Ertl product.

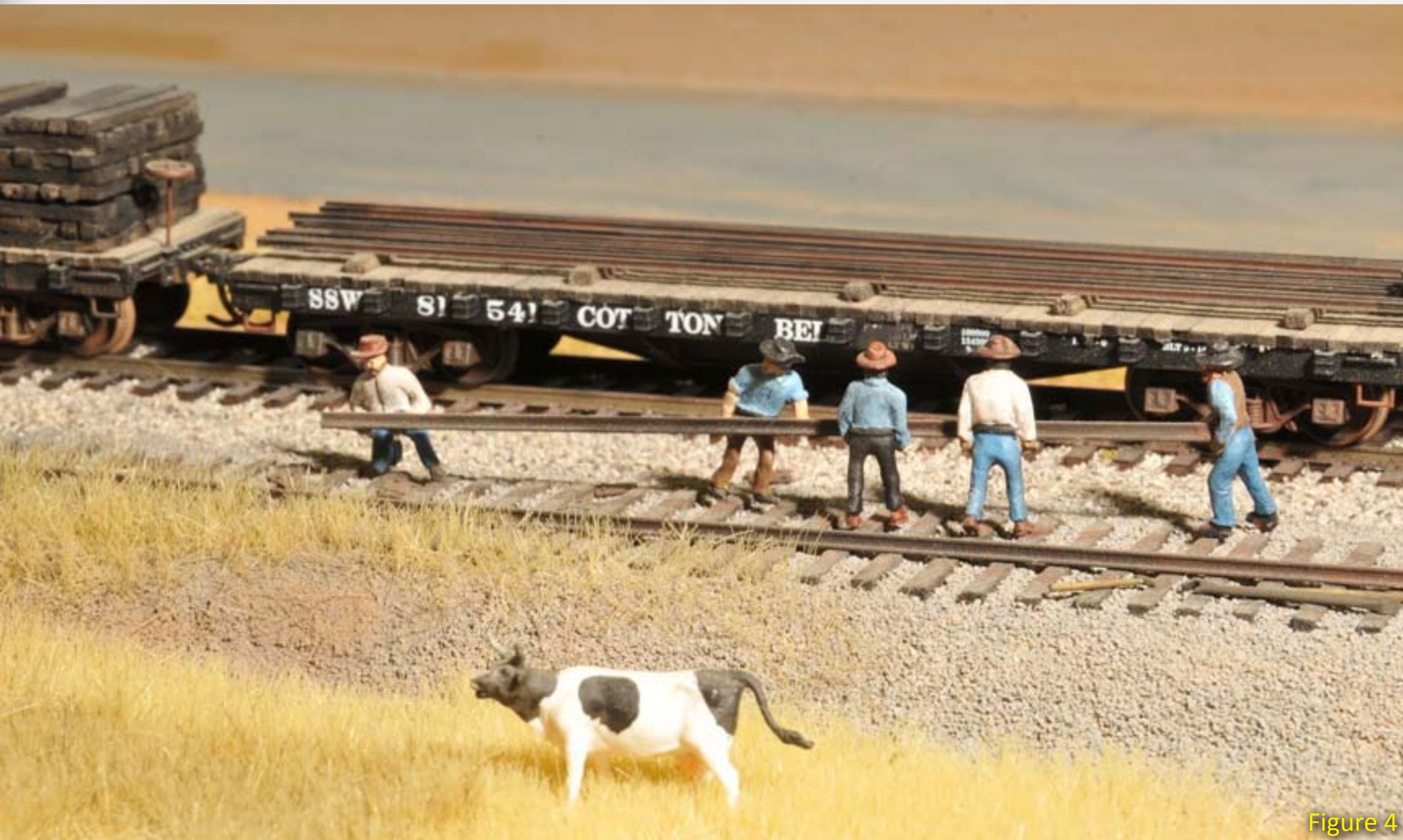


Figure 4





Figure 5

**Jack:** So you have more hidden trackage than visible track?

**Guy:** Certainly in terms of mainline, there is a lot of it, and we are not proud of it!

**Jack:** How large is the layout space?

**Guy:** The room is 13' by 22'.

**Jack:** You have a lot of railroad stuffed in that space!

**Guy:** Yeah, the biggest issue for me was the width. Thirteen feet is about the narrowest you can go around the

walls and still have a peninsula down the middle with decent aisles. That was a big struggle with 30" minimum radius curves. I also use #6 or larger turnouts.

**Jack:** How high are your levels?

**Guy:** Roughly 40" and 60" from the floor with around 63-64" at the highest point.

**Jack:** What brand of track and turnouts are you using?

**Guy:** Micro Engineering mostly, mainly because I like the appearance of it. If I had it to do over again with the switch-

es, I'd probably use Fast Tracks jigs but they came along after I had done most of the switches.

**Jack:** How did you come up with the name Willoughby Line?

**Guy:** The name is from a Rod Serling episode of Twilight Zone. Although the episode is relatively dark at the end, the idea of Willoughby is that it is a place where this guy keeps imagining he goes and where everything is always wonderful, kind of an imaginative, fantasy place where everything is perfect. He escapes his everyday life pressures by

**Figure 5:** The Groveland dispatcher's office on the layout is a model of the West Side Lumber Company dispatcher's office at Tuolumne. Guy started with a Rio Grande Models kit but scratchbuilt the raised platform.

going to Willoughby. At first, I thought that it was a little morbid of me to name the railroad after a creepy Twilight Zone episode, but I got used to the idea. It also fits the freelance/fantasy thing so

*Text continues on page 41*



# Guy Cantwell's Willoughby Line



**G**uy Cantwell has been involved in the local music scene in the San Francisco Bay Area for the last 25 years as an educator, performer, arranger and composer. He also maintains a private teaching studio, providing guitar instruction in a variety of styles from classical to jazz and rock. He and his wife Nancy live in the Santa Cruz area.

## Layout Statistics

**Era:** '40s and '50s

**Locale:** San Joaquin Valley / Sierra foothills

**Style:** Proto-freelance combining elements of the Southern Pacific, Wester Pacific, Sierra, Hetch Hetchy, Yosemite Valley, and West Side railroads.

**Configuration:** 3 decks connected by two helixes

**Scale:** HO

**Trackplan:** Point to point with cut-off loops for continuous running.

**Size:** 22' x 13'

**Minimum radius:** 30" visible, 28" in staging

**Track:** Micro Engineering code 83 deck 1, ME code 70 deck 2, and Atlas code 100 in staging.

**Turnouts:** ME #6, Shinohara, Railway Engineering, and handbuilt. Peco in staging

**Control:** Easy DCC

**Elevations:** 33" (staging), 40" (lower deck), 60" (upper deck), 63" at Groveland.

**Roadbed:** Homasote over plywood

**Lighting:** Compact fluorescents

**Scenery:** Hydrocal over screen

**Trees:** Scenic Express Super Trees and Okey-Dokey Oaks

**Rock work:** Casting plaster in latex molds.

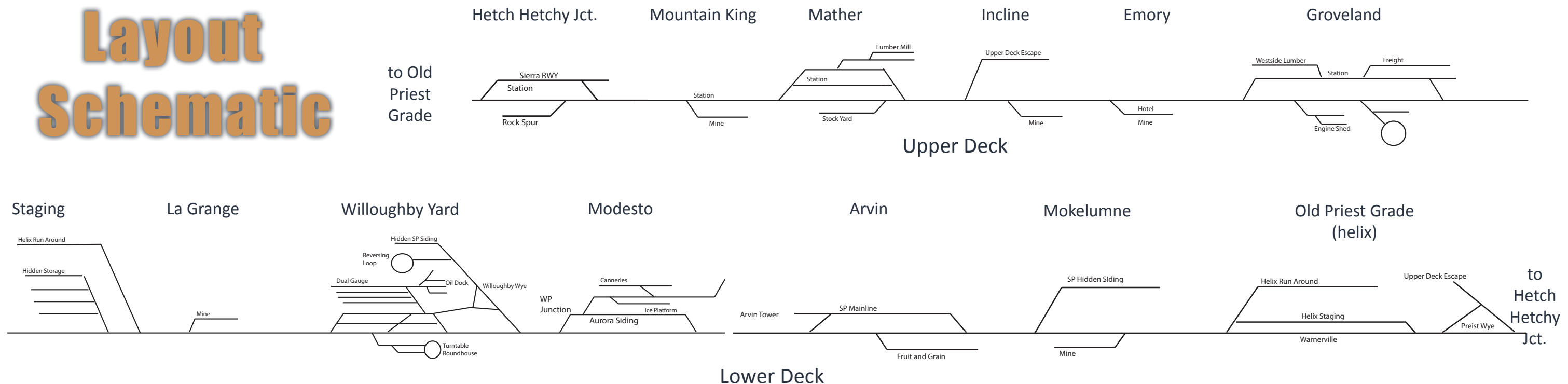
**Max grade:** 2%

**Deck separation:** 20" between lower and upper decks.

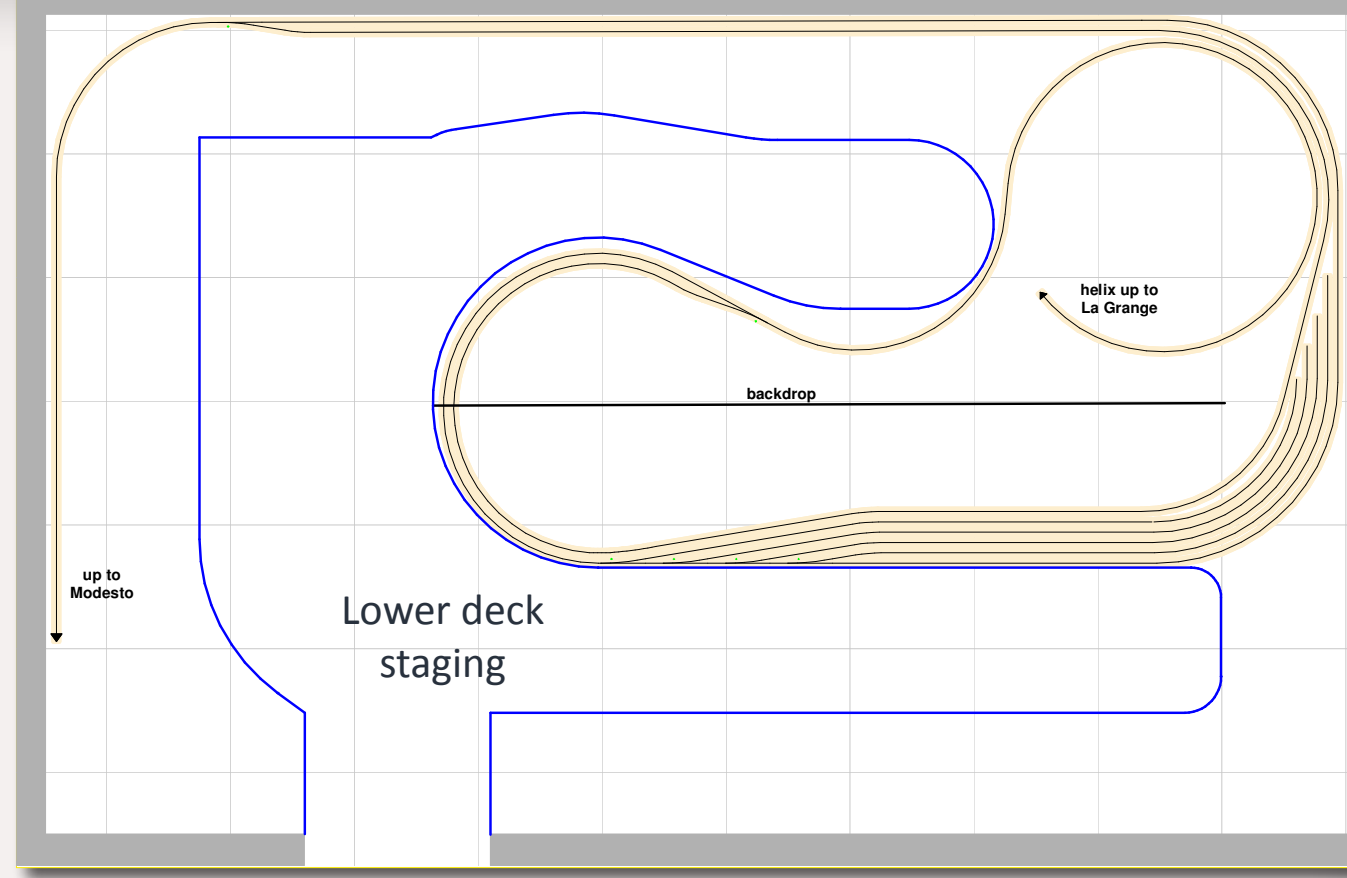
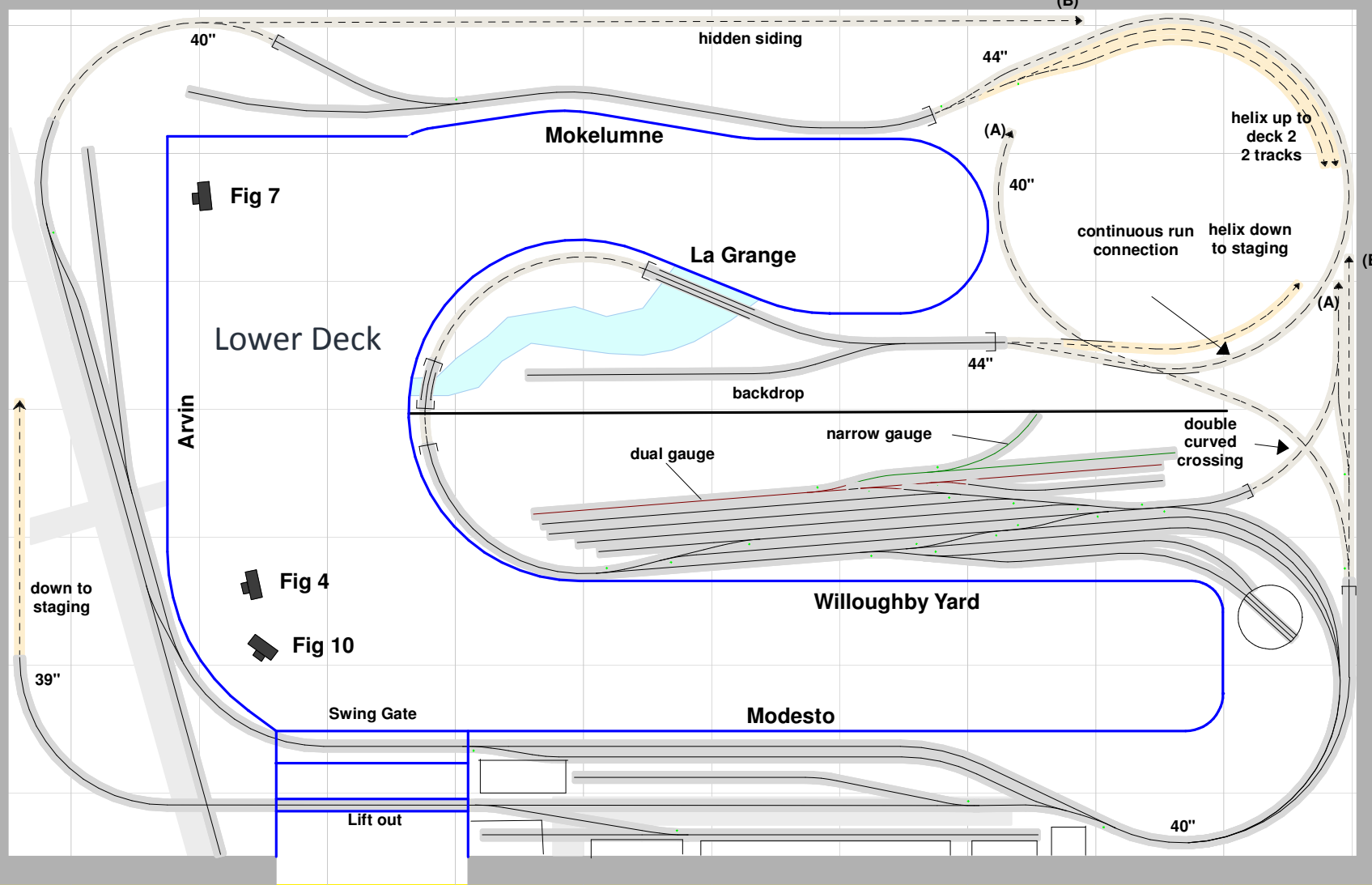
**Mainline length:** 180' Willoughby Yard to Groveland – point to point mode (60' of run in helix)

**Fascia:** Lauan plywood and Masonite

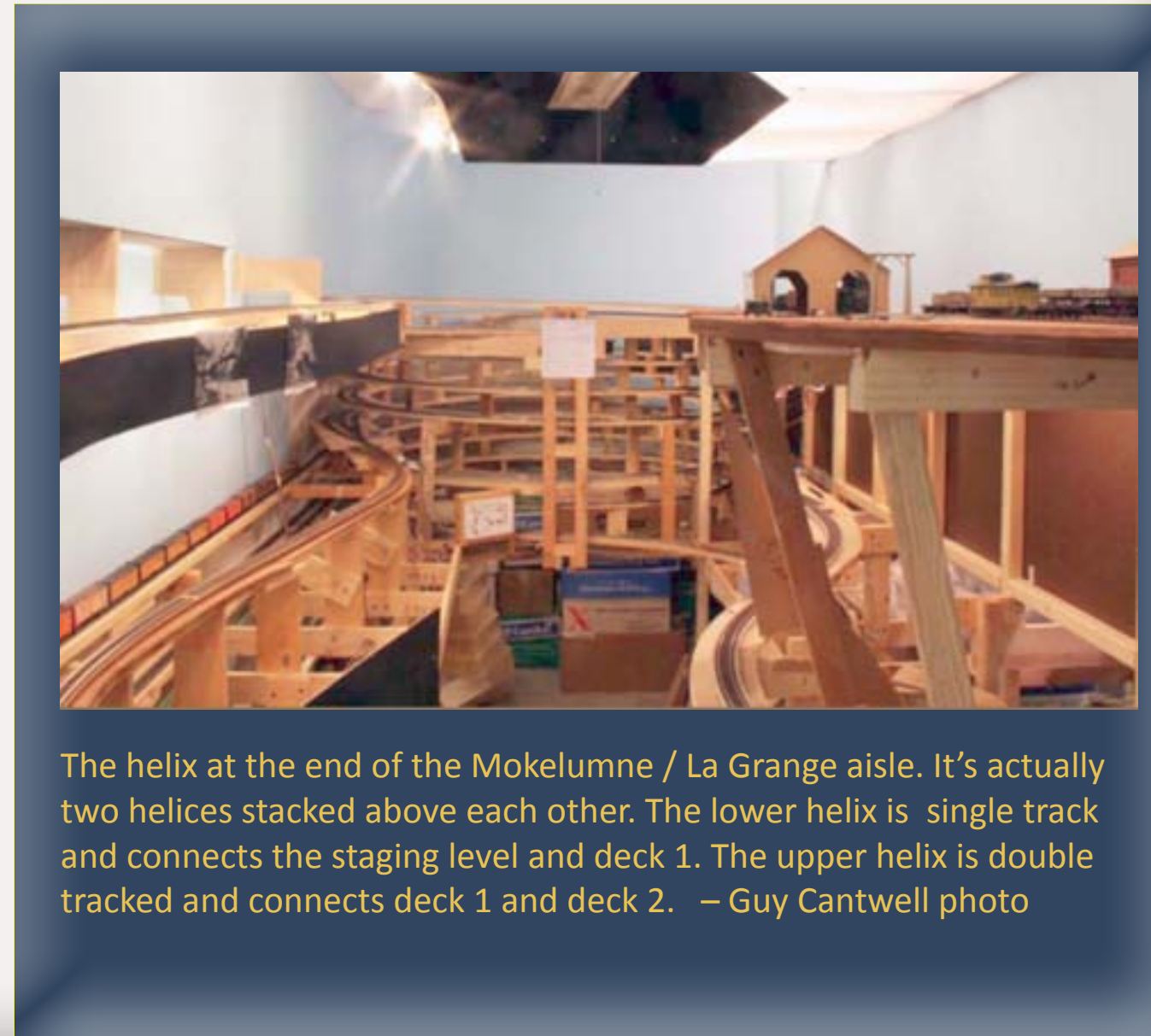
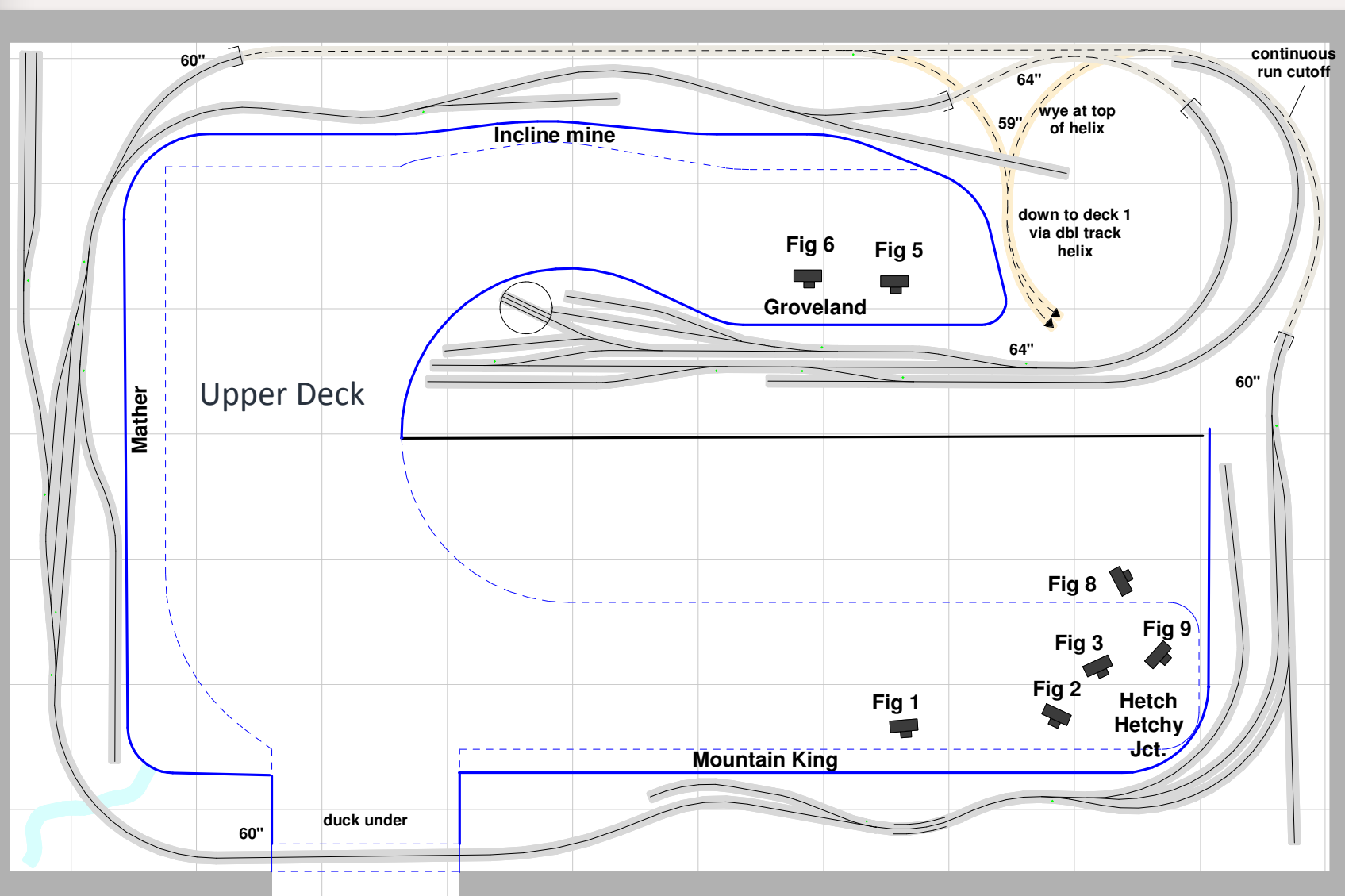
## Layout Schematic







Willoughby Line Track Plans  
24" grid - not to scale



The helix at the end of the Mokelumne / La Grange aisle. It's actually two helices stacked above each other. The lower helix is single track and connects the staging level and deck 1. The upper helix is double tracked and connects deck 1 and deck 2. – Guy Cantwell photo





Figure 6

Figure 6: This Durango Press model of narrow gauge West Side Lumber Company caboose No. 4 is lettered for Westside importer Dick Truesdale's Halfhollow & Huntington RR. Dick gave the caboose to Guy.

[Text continued from page 38](#)

my tagline is “Harkening back to a place that never existed.”

**Jack:** So, have you pinned yourself down to an era?

**Guy:** Ah, that is problematic. As you know, the Hetch-Hetchy was gone by the 1940s, as was the YVRR. I like to run 1950s steam, so I have to say 1935-55. That really isn't an era but it is close enough for me.

**Jack:** What is your favorite phase of the hobby?

**Guy:** I like lots of stuff; I like operating, I like building scenery, and I like scratchbuilding structures. I also like going to see other people's layouts. I think that it is really a lot of fun to meet other modeler railroaders and hang out. Probably the things I like least are wiring and benchwork, which I think are pretty universal dislikes!

**Jack:** Your rock work is really impressive. How did you build it?

**Guy:** Thanks, Jack. On this layout I used casting plaster in latex rock molds. One of my modeling buddies has a quite a collection of molds that

he is generous enough to lend out on occasion. I applied the molds to a hardshell base of plaster-soaked paper towels over window screen. I colored the rocks with watercolors in sprayers and by using a brush. You know, it's funny—I've always enjoyed working in plaster. My last layout featured hand-carved rocks made from Hydrocal. It took two winters of carving to complete the layout. While banging on the plaster with a chisel was very therapeutic, I'm not sure it's very efficient time-wise. So I decided to use rock molds on this layout. In many ways, I kind of went the same way the

old adage in model railroading goes about flex track and handlaid track – modelers start with flex track, move to handlaid track, then end up back at flex track. My dad and I made molds for casting rocks on our layout in the 1970s when I was a teenager, then I went to hand-carving on the last layout, and now I'm back using molds again.

**Jack:** You're using EasyDCC. Did you start out with that system on this layout?

**Guy:** Yes. DCC was pretty far along when I jumped from Märklin. I actually had some digital stuff in the Märklin system so it was easy to step right over to DCC. I never actually went to straight DC although I was pretty familiar with block wiring. I did a lot of it on my 3-rail Märklin layouts, the concepts are very similar to DC blocks. I liked being able to run multiple trains on the same track without throwing the blocks on other DCC layouts, so DCC was an obvious choice for me.

**Jack:** Have you started regular operating sessions?

**Guy:** Not yet. I'm still trying to finish enough scenery and get stuff done. The last year and a half was spent doing hardshell and trying to finish a couple of



**Figure 7: A Red Caboose model of a Florida East Coast box car sits in the bright sunshine on an overgrown siding along a foundry building scratchbuilt by friend Jim Vail.**

scenes to have more to look at. But I do have fast clocks installed and I do have a timetable worked out. We've had a couple of sessions to check that out and it seems to work pretty well.

**Jack:** That is your goal?

**Guy:** That is the goal, definitely! The layout was designed with operations in mind. Four or five operators will probably be the maximum.

**Jack:** What operations do you envision?

**Guy:** Train orders and timetable. Dispatching is a little difficult because I don't really don't have a space for a dispatcher.

**Jack:** Many of the structures on your layout are scratchbuilt. Tell me about your approach.

**Guy:** One of the things which has been a big help are the CDs with photos and drawings of Yosemite Valley Railroad buildings that you sell through your website [www.yosemitevalleyrr.com](http://www.yosemitevalleyrr.com). Although I might not be building exactly the building or structure shown on a particular plan, it is very beneficial to see typical lumber sizes, how things were put together, and what dimensions were typical for the bridges and buildings I need for the layout. Having



Figure 7

plans for a wide variety of structures makes it then easier to look at photos in other books and get a sense of the size of those other structures.

**Jack:** You make an interesting point. The mainstream model railroad magazines, except for the Gazette, don't have many plans in them anymore.

**Guy:** No, they don't. It is getting harder to find that information. It seems that knowledge about many

things, such as how big bridge stringers might be, is disappearing. Even things like crossbucks can be difficult to model correctly. You can buy a kit, but if you want to build your own you need to know how the railroads did it and what size lumber was appropriate. Another thing which is interesting to me about HO scale is just how fine things actually are if you build them to scale. My old approach to the hobby was to weather

everything and make things look old and decrepit. To get that look, you typically end up making things jagged and rough and doing things like using different length boards to build a wooden sidewalk or loading dock. But when you look at the results of that approach, you realize you are talking about 6 or 8 inch differences in the length of the boards, which is not prototype. In HO scale, it really needs to look perfect and then it is



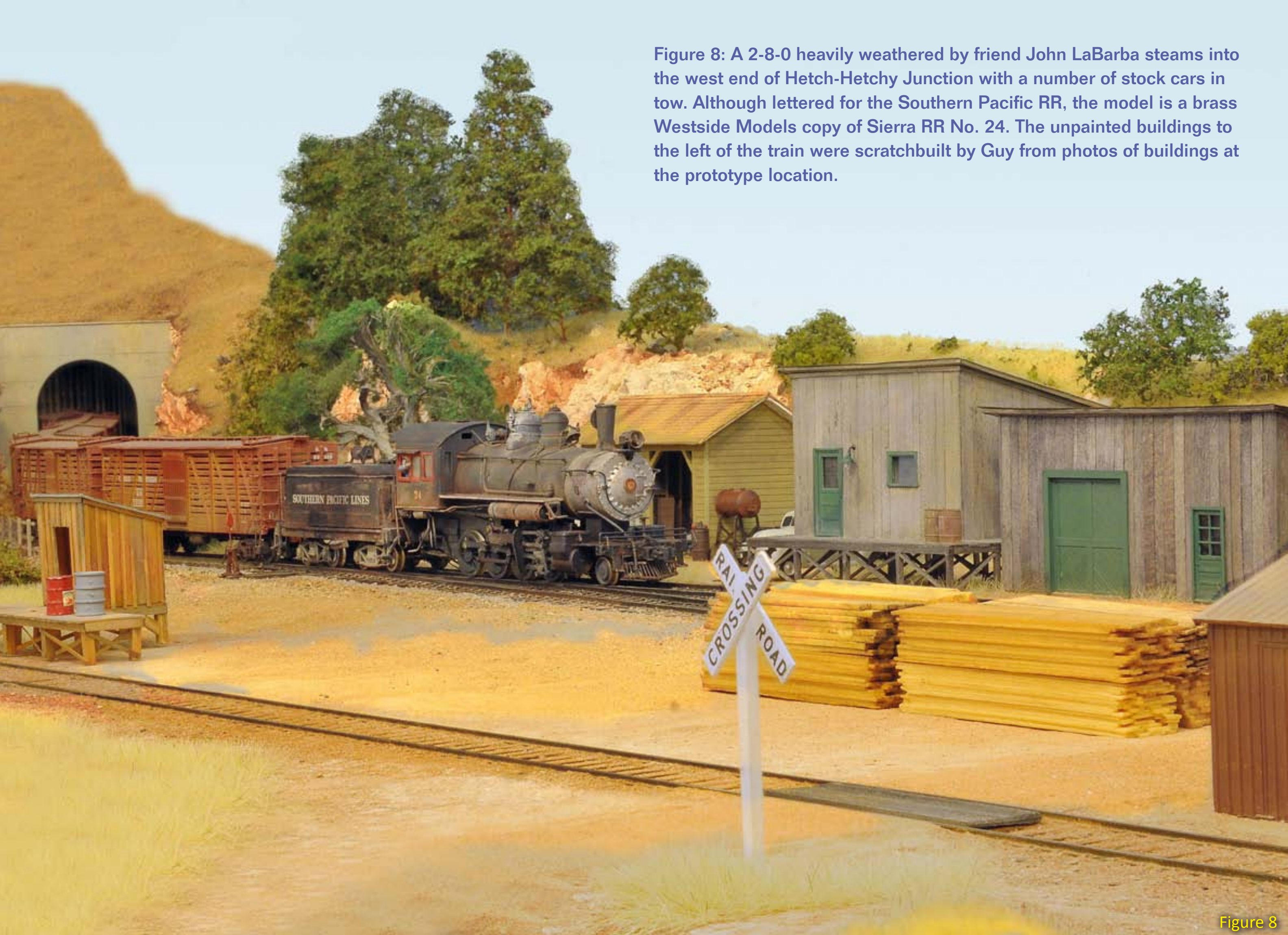


Figure 8: A 2-8-0 heavily weathered by friend John LaBarba steams into the west end of Hetch-Hetchy Junction with a number of stock cars in tow. Although lettered for the Southern Pacific RR, the model is a brass Westside Models copy of Sierra RR No. 24. The unpainted buildings to the left of the train were scratchbuilt by Guy from photos of buildings at the prototype location.

Figure 8



closer to reality. That was a big eye-opener for me. I still like the “decrepit” look, but I don’t do it through sloppy tolerances.

**Jack:** The Santa Cruz area where you live, and the southern San Francisco Bay Area (30 minutes away), have a number of very talented modelers. How has that impacted your modeling?

**Guy:** I feel very fortunate to be here, they’ve been a big influence and a positive one.

**Jack:** There is a certain amount of enthusiasm which comes from being in an area with good modeling and being able to visit these layouts and come home anxious to get back to the workbench.

**Guy:** It is also nice to have other modelers nearby who appreciate what you

are doing and can provide feedback on your latest projects.

**Jack:** Thanks for having me over, Guy.

**Guy:** My pleasure!



*Video won't play?* [Click here](#) to play it on [YouTube](#).

Figure 9: The Sierra RR station at Hetch-Hetchy Junction was scratch-built from photos in Ted Wurm’s book on the railroad, originally entitled “Hetch-Hetchy and It’s Dam Railroad”.



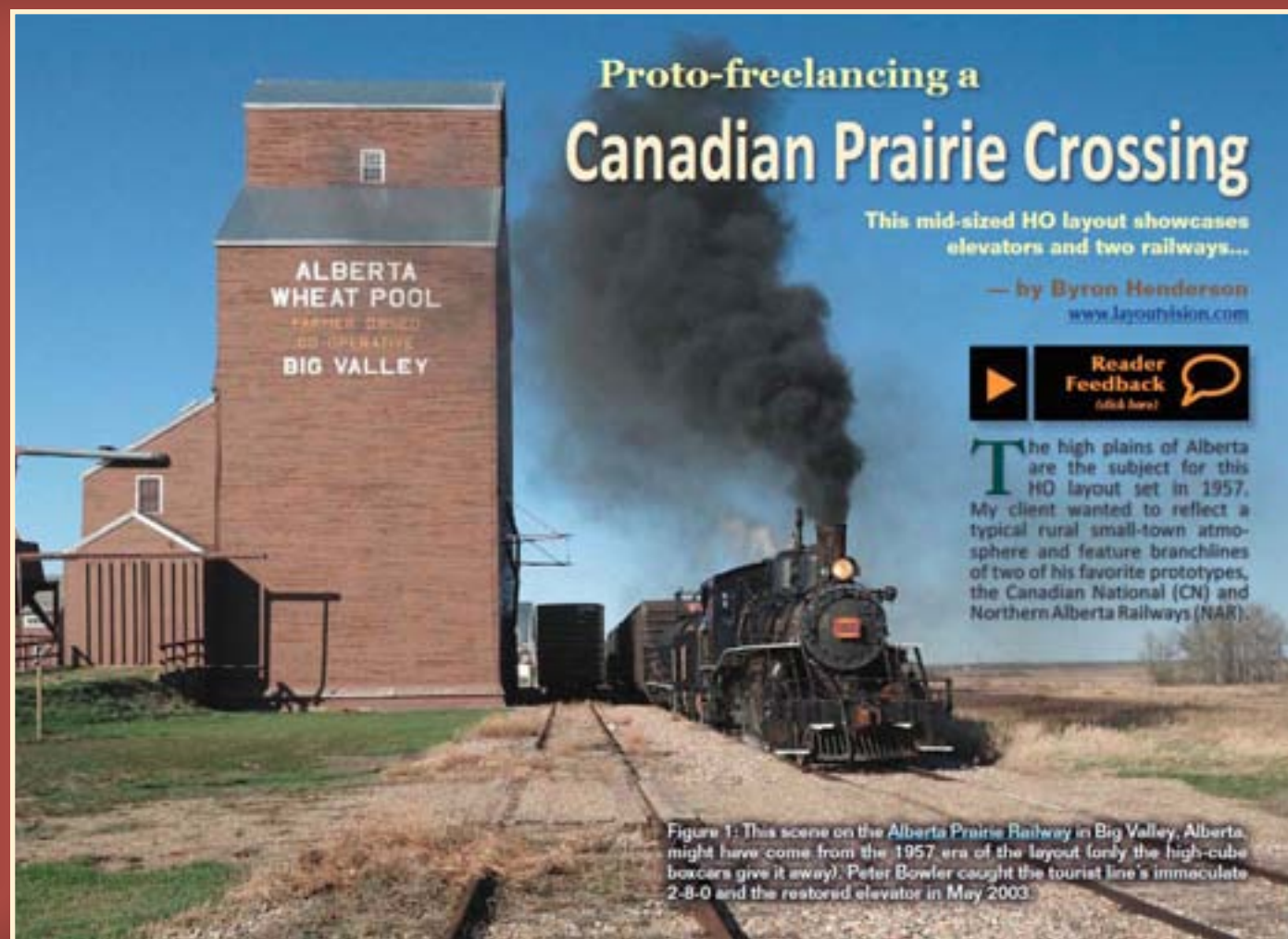
Figure 9



Figure 10: A view of the crossing between the SP and the WP at Arvin shows track workers pulling up an unused section of track. The caboose is a Westside Models YVRR No. 15 brass model lettered for the Halfhollow and Huntington RR. The interlocking tower is a laser kit of an ATSF interlocking tower once located on the YVRR in Merced; the kit is from The Irish Tracklayer ([www.irishtracklayer.com](http://www.irishtracklayer.com)). The Austin Road Grader in the lower left corner is from Rio Grande Models ([www.riogrande-models.com](http://www.riogrande-models.com)).



Figure 10



## Proto-freelancing a Canadian Prairie Crossing

This mid-sized HO layout showcases elevators and two railways...

— by Byron Henderson  
[www.layoutvision.com](http://www.layoutvision.com)



The high plains of Alberta are the subject for this HO layout set in 1957. My client wanted to reflect a typical rural small-town atmosphere and feature branchlines of two of his favorite prototypes, the Canadian National (CN) and Northern Alberta Railways (NAR).

Figure 1: This scene on the Alberta Prairie Railway in Big Valley, Alberta, might have come from the 1957 era of the layout (only the high-cube boxcars give it away). Peter Bowler caught the tourist line's immaculate 2-8-0 and the restored elevator in May 2003.

# Remember when?



## May 2010

## MRH back issues, always available!



# Craftsman Structure

C O N V E N T I O N  
CSC 2011

**November 2nd - 5th, 2011**  
**The Holiday Inn - Mansfield, MA**



**The ONLY Show**  
**Exclusively for**  
**Scale Model Structure Builders**  
**& Collectors**

Sponsored by Model Railroad Hobbyist Magazine

**[www.csc11.net](http://www.csc11.net)**





# Build a Tank Load for a Flat Car

For the past few years I have been interested in how railroads handle large loads. I am always looking for items that would lend themselves to making interesting railroad shipments. This article is about such a discovery that became a perfect freight car load.

– by **Ken Patterson**  
Photos by the author



Figure 1: A railroad inspector checks out things on this double-haul tank load. These tanks I spray-painted these HO scale tanks with Rust-Oleum Redwood color. The depressed center flat cars are from Walthers.



## Making the Tank



Figure 2

Figure 2: I've been working on scenicking my home layout for the past year or so. This meant making hundreds of sagebrush bushes, around 2400 wire-armature bushes, and using up two dozen cans of hair spray. Making this many bushes tends to be mindless labor, which I love because it affords me the time to think about other things while working. One day while I was contemplating freight car loads, I noticed those cans of hair spray. The lids that I had been throwing away for months started looking like a possible starting point for a great load! The length and diameter were right for a believable-looking shipment ...



Figure 3

Figure 3: I took two lids and prepared them to become a tank load. I drilled an  $1\frac{1}{32}$ " diameter hole in one lid to eventually represent a pipe-fitting. It is important to center this hole.

**WARNING: Although it is possible to drill a hole in a plastic cap as shown above, supporting the cap on a solid platform is much safer. Exercise caution!**



## Making the Tank (continued)



Figure 4

Figure 4: I drilled another  $\frac{1}{16}$ " hole to allow for ventilation. Rising temperatures can cause increased pressure within a sealed tank. This hole will relieve pressure build up preventing the tank halves from separating over time. I learned to do this from hard experience.



Figure 5

Figure 5: I glued the two halves together with Walthers Goo. The lids are flexible, and this type of glue will flex with the model without cracking. Plus, it was the only glue that would stick to the slippery plastic that the lid is made from! Without the vent hole, the glue will blow bubbles out the sides simply from the warmth of my hand. I wet-sanded the joint after the glue dried. Any gap had to be filled with red body putty, and wet-sanded again for that perfect finish.



## Making the Tank (continued)



Figure 6

Figure 6: I filled the model tank with expandable foam to help keep the two halves from eventually separating. When the foam cures, it permanently glues the two halves together. Excess expanding foam escapes through the holes in either end without blowing the two pieces apart.

It helped to hold the tank up to a light during this step. This allowed me to see through the plastic tank exactly where the foam had filled. I let the model sit for a few hours until the foam finished expanding.



Figure 7

Figure 7: I cut some  $1\frac{1}{32}$ " brass tubing about  $\frac{1}{2}$ " long, and glued it into the tank end, letting it stick out about  $\frac{1}{16}$ " of an inch. This made the base for a bolt-on lid.



## Making the Tank (continued)

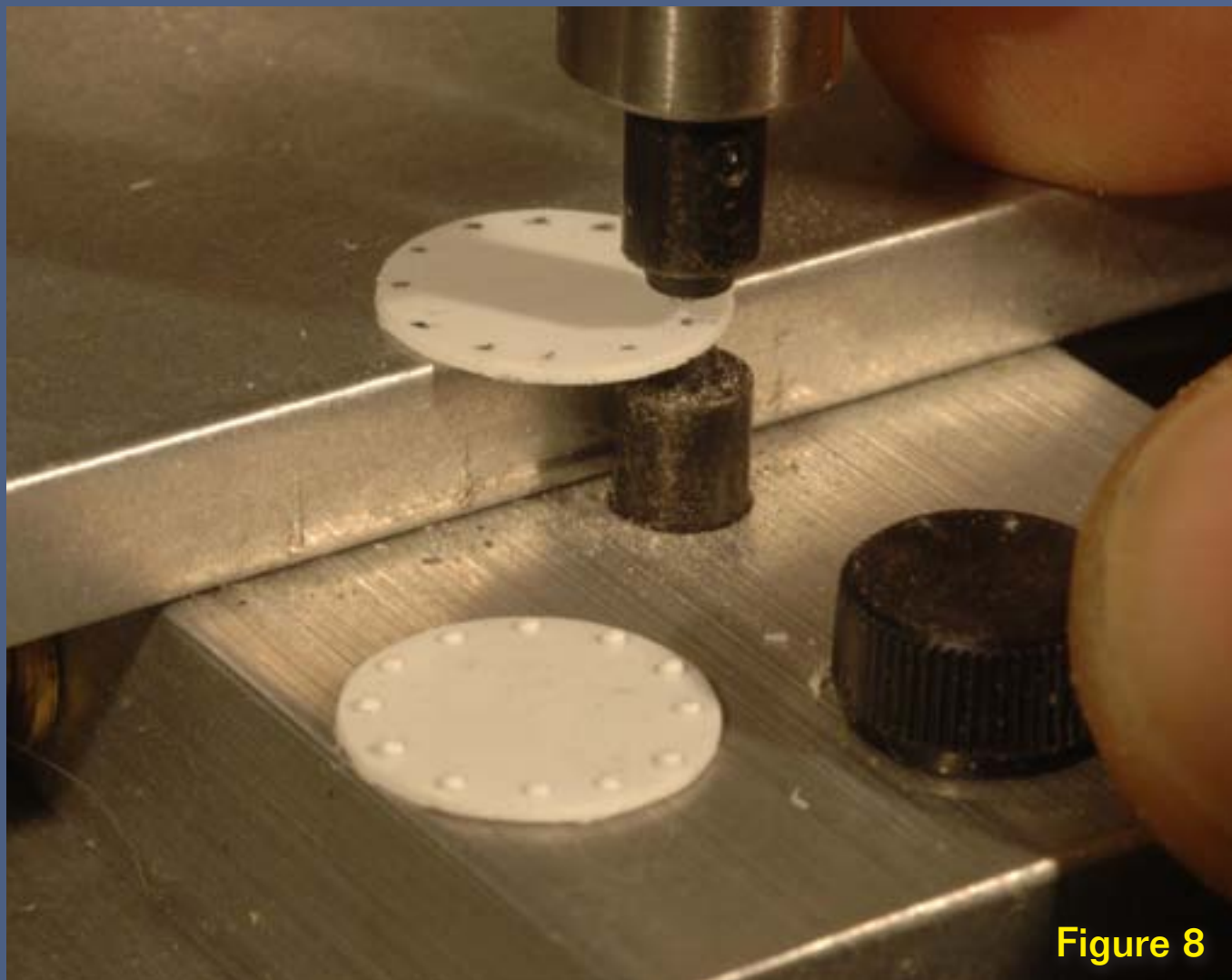


Figure 8

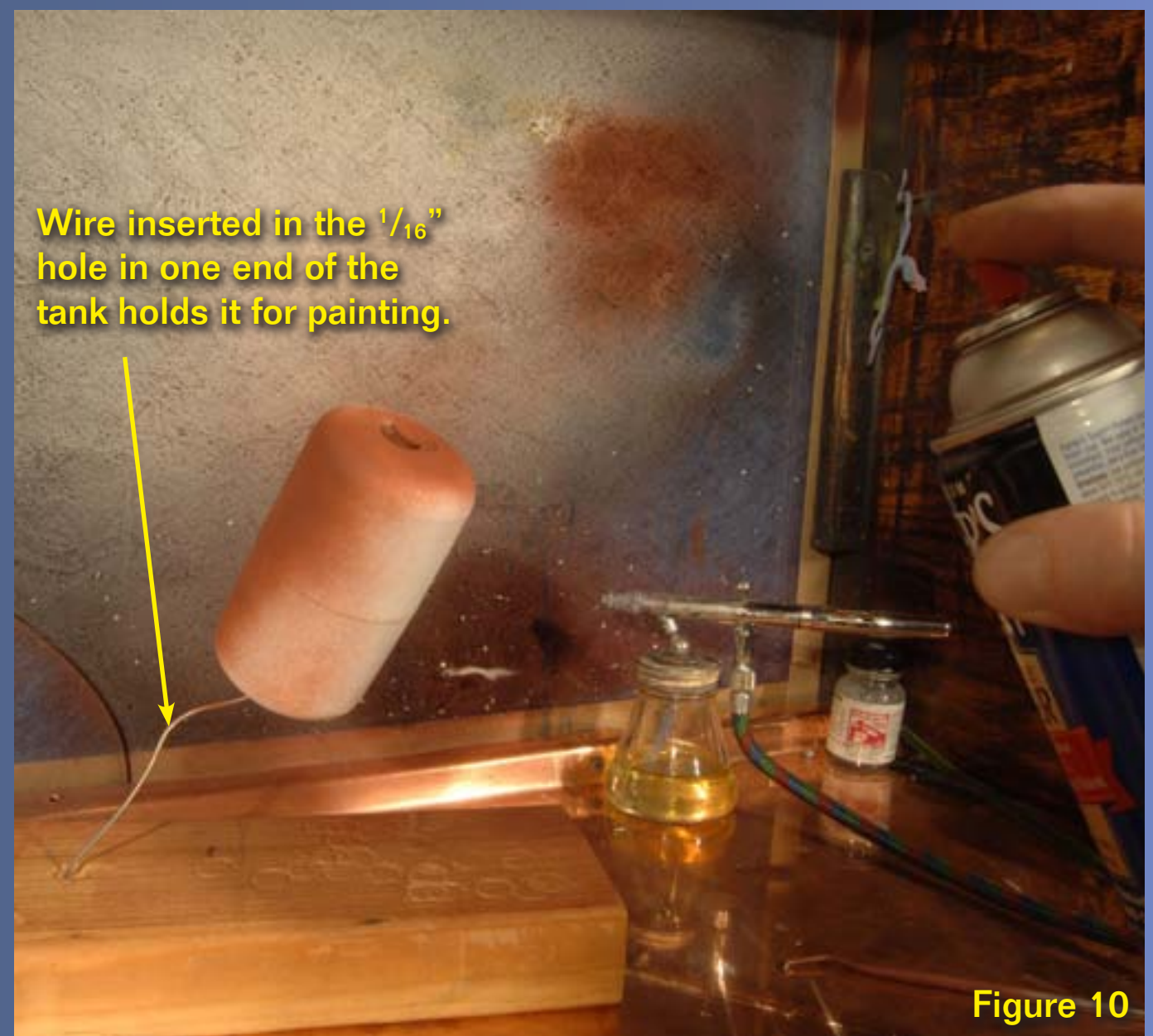
Figure 8: I cut two  $\frac{1}{2}$ " diameter (just a little larger than the brass tube) circles out of .020" thick styrene. I used a NWSL riveter with a #2 punch to make rivets around the edges of the circles. The 12 rivets were spaced evenly and represent round bolt heads.

Figure 9: I glued the two circles together with the rivets lined up on both sides, then glued the lid to the brass tube on the model using Goo.

Figure 10: I used spray paint to color the tanks. The smooth plastic surface accepts paint well, leaving a clean smooth finish. I tried various shades of primer to make that brown-industrial look. I really liked the colors Red Primer and Redwood from Rust-Oleum. I made a wood base with wire to hold the model during painting, sticking the wire through the vent hole for stability.



Figure 9



Wire inserted in the  $\frac{1}{16}$ " hole in one end of the tank holds it for painting.

Figure 10



## Making the Cradles



Figure 11



Figure 12

Figure 11: Figure 12: Using a hair spray lid as a guide, I scribed .020" thick styrene with a knife to form the pieces necessary to make steel cradles to hold the load firmly on the flatcar.

Figures 12 and 12b: This photo shows the cradles in various stages. Each base measures 3 scale-feet wide and spans the flat car's width. The curved pieces were glued to the base. The outside braces are .020"x.060" styrene. I made them long, then used flush cutting nippers to trim them to length after they were installed. On the ends, similar strips form cross-brackets to hold the cables that secure the load to the base (Figure 15). I drilled two small holes in the cross-brackets to accept the strapping wires. The top of each cradle is .020" styrene pressed down to match the curve of the base and glued in place.

I used two-sided Scotch brand tape to attach the bases to the flat cars.

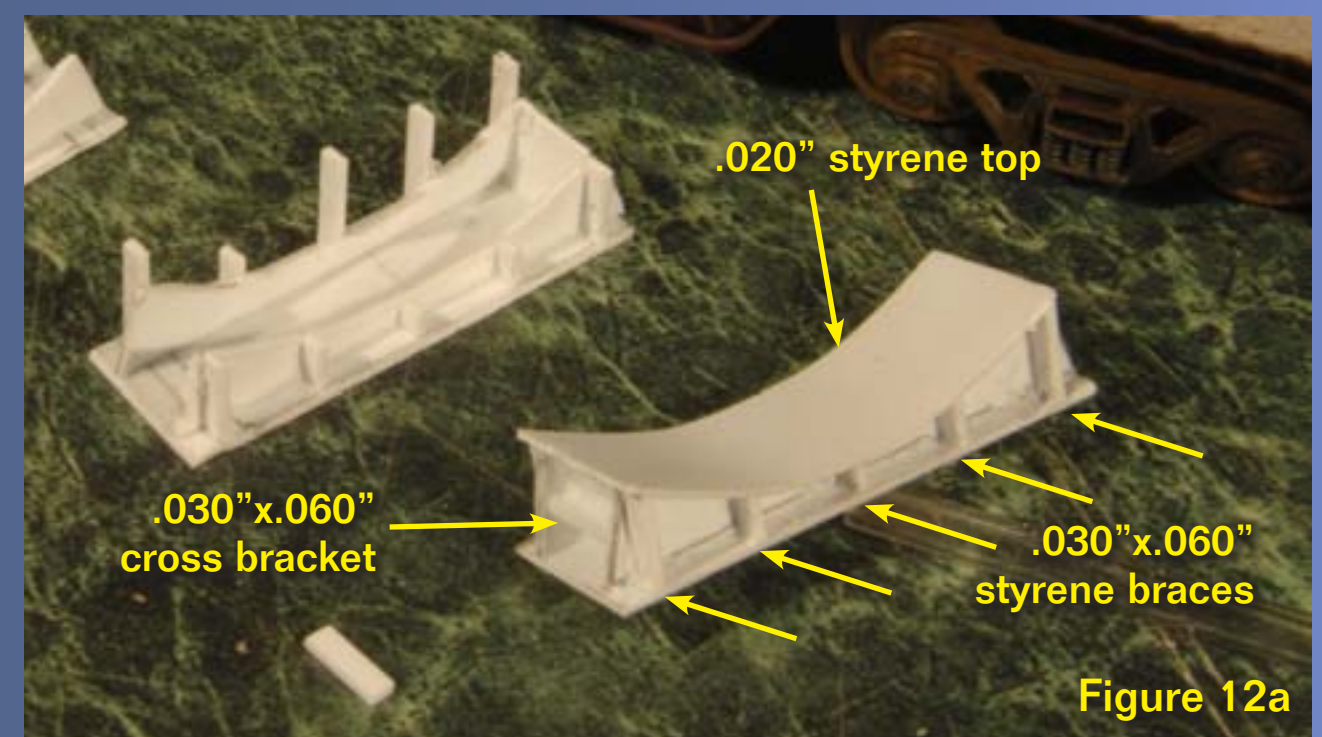


Figure 12a



## Putting it together



Figure 13



Figure 15

Figure 13: I weathered a stock Walthers center-depressed flatcar with oil paints. I also painted the wheel faces with Floquil Roof Brown, using a small paintbrush, before spraying grime on the car sides with an airbrush. I used a rotating base to turn the model, letting me weather both sides of the car. With the car rolling on some track I sprayed the wheels evenly with dust. Spraying while they're rolling avoids paint shadows.

Figure 14: I wound fishing line around a temporary jig made of clamps, allowing me to paint and dry the line without touching it. Fishing line is the best material that I've found for making tie-down wires for model loads. I painted it black, and then followed up with some Roof Brown. This color combination made realistic looking cables.

Figure 15: After gluing the cradles to the load with Walthers Goo, I ran the cables through the holes on one side of the cradles and glued them in place with ACC. Then I wrapped the cables around the tank and secured them with more ACC to the other side of the cradles. I like easily removable loads so I can quickly change them. This load did not require its tie-downs lines to be secured to the flatcar, so it fit the bill.



Figure 14



Done!



Figure 16

Figure 16: Finished bases, a selection of tanks in different paint colors, and a pair of flat cars ready to accept the loads. It's easy to swap these loads on a flatcar since they are held in place by double stick Scotch tape.

Figure 17: BN units hauling the new flatcar loads. The shipment is at the front of the consist, where the crew keep a watchful eye on it.

Ken Patterson is an accomplished model railroad photographer and talented modeler who has been published many times in *Model Railroader*, *Railroad Model Craftsman*, and other model train publications. He lives with Michelle, his wife of 20 years and two children in the St. Louis, Missouri area. His backyard, on a bluff above the Mississippi River provides an ideal backdrop for his photography. Ken poses with a section of his layout that he moved outdoors for the 'glamor' shots.



Ken Patterson is an accomplished model railroad photographer and talented modeler who has been published many times in *Model Railroader*, *Railroad Model Craftsman*, and other model train publications. He lives with Michelle, his wife of 20 years and two children in the St. Louis, Missouri area. His backyard, on a bluff above the Mississippi River provides an ideal backdrop for his photography. Ken poses with a section of his layout that he moved outdoors for the 'glamor' shots.



Figure 17



FREE GIVEAWAYS  
W/ADMISSION!

Find us on  
Facebook

# The Fine Scale Model Railroader Expo 2011



## An All New, Multi Scale Structure & Modeling Show

**October 13-15, 2011** Holiday Inn  
Peabody, MA  
Celebrating the Modeler  
& the Manufacturer...  
See How Kits Get Made! Just 26 Minutes from Boston's Logan Airport

### 2 Day FSM Open House

Visit George Sellios' World Famous  
Franklin & South Manchester!

IT COULDN'T BE EASIER...JUST 10 MINUTES AWAY VIA FREE HOTEL SHUTTLE!

### The Kit Factory

**Only at the Expo!**

LIVE LASER CUTTING! METAL SPIN CASTING! POUR YOUR OWN PLASTER WALLS! TAKE PARTS HOME!

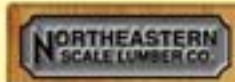
### Dealers

SIERRA WEST-CROW RIVER - RAILROAD KITS - VECTOR CUT - BEST TRAINS  
SEAPORT MODELWORKS-FOS SCALE MODELS-ATLANTIC SCALE MODELS- LASER MODELING 3  
MODEL TECH STUDIOS-PAW OF A BEAR-NEW ENGLAND BROWNSTONE-MOUNT BLUE MODELS  
FULL STEAM AHEAD - BLUE RIBBON MODELS - MINUTEMAN SCALE MODELS & more!

### Clinics & Workshops

DAVE FRARY - BOB HAYDEN  
LOU SASSI - BRETT GALLANT  
BOB MITCHELL - KEN HAMILTON  
BOB VAN GELDER  
RUSS GREENE - DOUG FOSCALE  
HAL REYNOLDS - JON ADDISON  
CHRIS LYON - BRIAN BOLLINGER  
MICHAEL DUGGAN  
RICH JOSSELYN & MORE!

FIND OUT MORE AT [www.modelrailroadexpo.com](http://www.modelrailroadexpo.com)



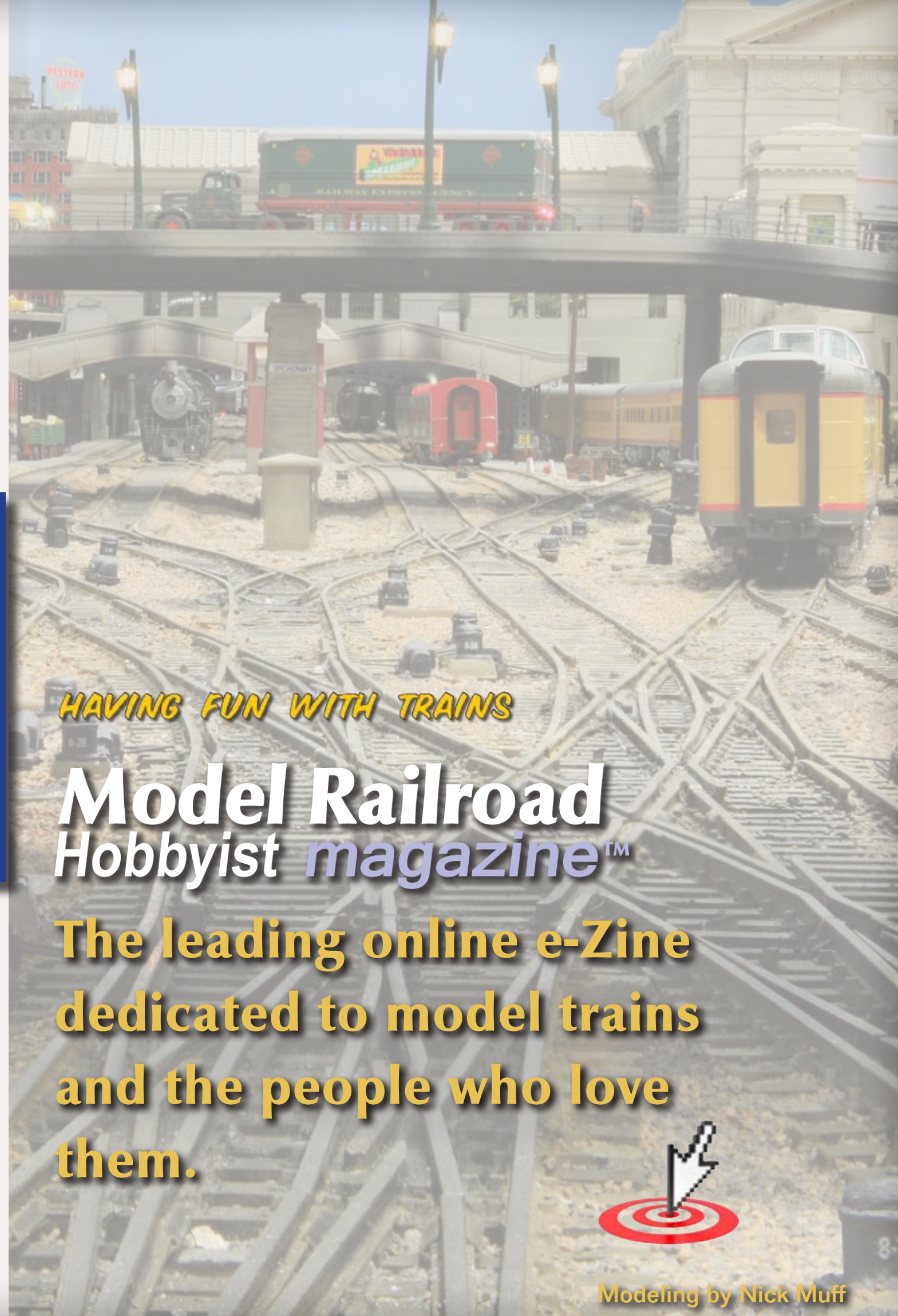
THE EXPO IS SPONSORED BY:



The Expo is Produced by Kit Manufacturers:



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



HAVING FUN WITH TRAINS

# Model Railroad Hobbyist magazine™

The leading online e-Zine  
dedicated to model trains  
and the people who love  
them.



Modeling by Nick Muff





# for Model Railroaders

## Part 2

— by Joe Fugate



In part 1, MRH publisher Joe Fugate demonstrated search techniques and buying in a fixed-price auction. In part 2, Joe shows how to buy model railroading items in a variable-bid auction without getting ripped off!

**B**uying in a variable-bid auction on eBay and still getting a good price takes some finesse and a few less-than-obvious techniques.

Once you learn these simple methods, you will find yourself winning a majority of the auctions you bid on, without getting caught up in a bidding war and paying too much for an item.

### First, do price research

As a first step for any auction items I'm interested in, I add them to my **Watch List** (Figure 1). This makes it easy to do price research later and make sure I'm not paying too much for the item.

For newer items, doing price research is easy – I just Google the item and see what it's going for on other web sites. For used or rare items, the price question comes down to *what it is worth to me*. Only I can answer this question when the item is not new.

Using my Watch List, the first item I'm interested in is a Boley HO beverage truck. I can see the starting bid for this truck is \$8.95, and it has \$3.95 shipping that will be added to the final auction price, so I need to keep that






Watch List (25) <span>Edit</span>						
All (25)   Active (14)   Ended (11)						
Sort by: Time left: ending soonest						
<input type="checkbox"/> Add note <input type="checkbox"/> Delete <input type="checkbox"/> Compare <input type="checkbox"/> Add to list						
		Bids	Price	Shipping	Time left	Actions
<input type="checkbox"/>		<b>ENDING SOON</b> 0	\$8.95 \$9.95 <b>Buy It Now</b>	\$3.95	1h 08m	<a href="#">Bid now</a> <a href="#">More actions</a>
<input type="checkbox"/>		<b>ENDING SOON</b> 0	\$6.99	\$6.00	1h 38m	<a href="#">Bid now</a> <a href="#">More actions</a>
<input type="checkbox"/>		<b>ENDING SOON</b> 0	\$124.95 \$149.95 <b>Buy It Now</b>	\$10.95	3h 12m	<a href="#">Bid now</a> <a href="#">More actions</a>
<input type="checkbox"/>		<b>ENDING SOON</b> 0	\$9.99	\$5.50	17h 51m	<a href="#">Bid now</a> <a href="#">More actions</a>
<input type="checkbox"/>		0	\$24.95	\$15.90	1d 02h	<a href="#">Bid now</a> <a href="#">More actions</a>

Figure 1: I've put a number of variable-bid auction items on my watch list as shown here. Notice the items that are ending in less than one day (24 hours) have an orange ENDING SOON banner on the item. This reminds me that if I'm still interested in these items, I will need to make a bid soon.



in mind, see figure 2. That means the item will cost *at least* \$12.90, and could cost more if others also bid on it.

The item also has a buy-it-now price, which makes it a fixed-price item if I want to just forgo the auction. Given the spread's only a dollar, it's likely any bidding would push the price up by more than a dollar, so I'm tempted to just take the buy-it-now route.

But first, I need to search for the truck in Google and see if the \$9.95 buy-it-now price is a good deal or not (Figure 3). The first few sites I check have the truck listed for 9 to 10 dollars. Talking the auction route on this item doesn't look like a good idea.

Further down the page, I discover that this item's also for sale on, of all places, Amazon.com!

Amazon is selling the beverage truck for \$5.98 plus \$4.99 shipping, for a total price of \$10.97 - which is \$2 less than the starting price for the eBay auction on this item!

It's quite clear the eBay auction is not the best deal around, so I elect to forgo the eBay auction on this item and just buy it from Amazon, see figure 4.

**Boley HO 10 wheel Beverage truck**

Item condition: --  
Time left: **35m 37s** (May 28, 2011 17:20:44 PDT)  
Bid history: 0 bids

Starting bid: **US \$8.95**  
Your max bid: US \$  **Place bid**  
(Enter US \$8.95 or more) or

Price: **US \$9.95** **Buy It Now**

**BillMeLater** \$10 back + extra time to pay  
Subject to credit approval. [See terms](#)

Shipping: **\$3.95** Economy Shipping | [See all details](#)  
Delivery: Estimated between **Fri. Jun. 3 and Sat. Jun. 11** ⓘ  
Returns: 7 day money back, buyer pays return shipping | [Read details](#)

**Top-rated seller**  
**willyma** (13266 ⭐)  
99.9% Positive feedback  
✔ Consistently receives highest buyers' ratings  
✔ Ships items quickly  
✔ Has earned a track record of excellent service

Save this seller  
See other items  
Visit store: [BC Enterprise Hobby](#)

**Other item info**  
Item number: 310320975812  
Item location: Gardner, Massachusetts, United States  
Ships to: United States  
Payments: PayPal [See details](#)

**Figure 2: It's important to compute the full price of an item on eBay and to keep in mind with auctions current price isn't what the final price could end up being when you get into a bidding competition with others. This beverage truck's starting bid is \$8.95, and it has \$3.95 shipping that will be added to the final bid price. If I want to forgo an auction entirely, the truck does have a \$9.95 buy-it-now price, so with shipping the total price would be \$13.90 if I wanted to just buy the truck outright instead of taking my chances with an auction. I can also see the seller, willyma, has done over 13,000 transactions on eBay, with 99.9% positive feedback – so the seller's reputation is exceptional (no worries there).**

**Google** Boley HO Beverage truck

About 334,000 results (0.12 seconds)

**Everything**  
Images  
Videos  
News  
Shopping  
More

▶ **BOLEY BLY302522 HO GMC Topkick 2-Axle Beverage Truck (Blue ...** - 1:26pm  
BLY302522 HO GMC Topkick 2-Axle Beverage Truck (Blue). Brand: BOLEY. Category: Train Accessories. Item#: BLY302522. Retail Price: \$10.99. Your Price: \$9.90 ...  
[www.greatmodels.com/~smartcart/cgi/display.cgi?item\\_num...](#) - Cached

**BOLEY HO 1:87 SCALE INTERNATIONAL 2 AXLE BEVERAGE TRUCK | eBay**  
eBay: Find BOLEY HO 1:87 SCALE INTERNATIONAL 2 AXLE BEVERAGE TRUCK in the Toys Hobbies , Model RR, Trains , HO Scale , Other category on eBay.  
[cgi.ebay.com](#) > ... > Model RR, Trains > HO Scale > Other - Cached

**Figure 3: I search for the Boley HO beverage truck in Google so I can research what the item typically goes for. Many results come back (including the eBay listing), and after checking some of the other web sites, I find the truck is typically selling for 9 to 10 dollars. The \$8.95 starting auction price doesn't leave much room for competing bids before the price of the item would get out of hand. This auction does not look very attractive since I can buy it many other places for about the same price.**



## Check the seller rating

While I'm doing the price checking, I'm also keeping an eye on the seller rating. I'm looking to see if the seller has a high reputation on eBay, or if they're new.

With the truck listing in figure 2, I could see the seller has conducted over 13,000 transactions on eBay with a 99.9% rating. This is a superb rating, so I have no worries there.

When you conduct a transaction on eBay, you can rate the transaction. If the seller misrepresents the product in any way, that's your opportunity to ding them and warn others to watch out.

Reputable sellers on eBay want to guard their reputation carefully, so if you ever do have a complaint, most sellers will bend over backward to keep you happy so you give them a glowing rating on the sale.

Also watch the number of transactions. Be very leery of a too-good-to-be-true deal from a new seller. I recommend that you just walk away unless the item is only a few dollars.

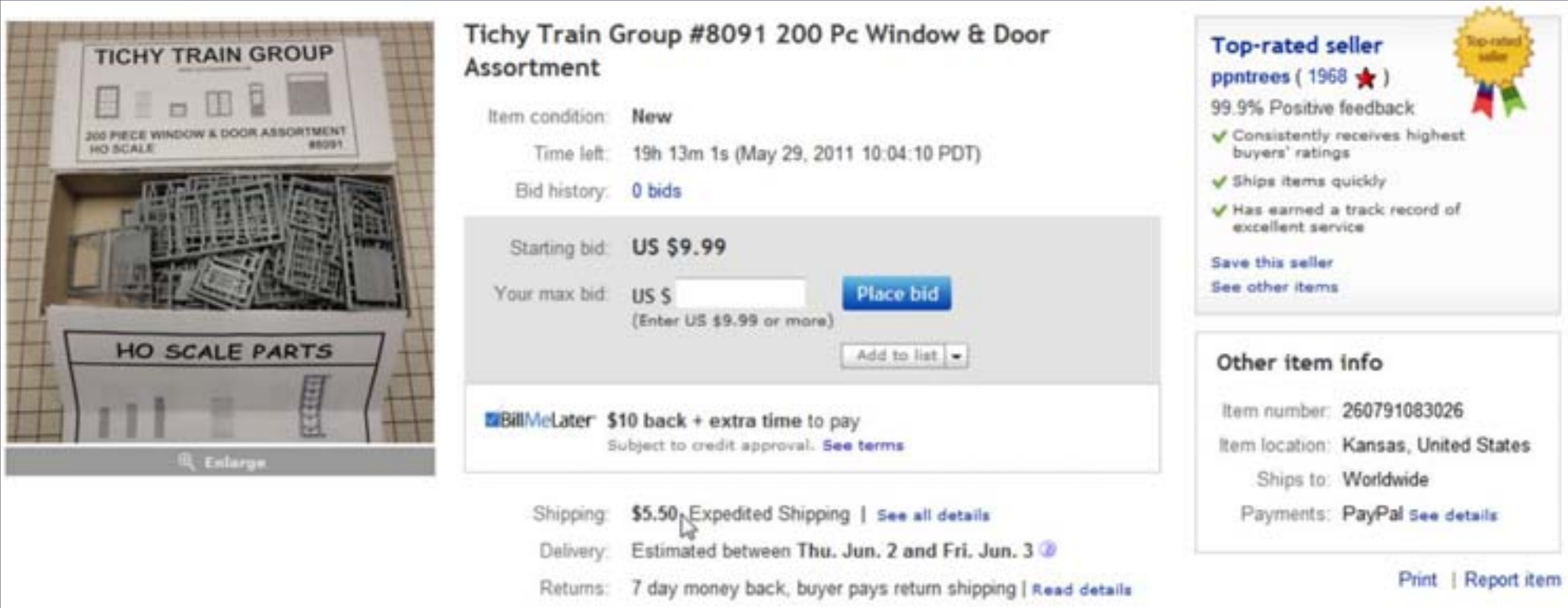
I certainly would not recommend any fantastic deals on brass locos from a new seller without many transactions to their credit, for instance.

Another item in my watch list, a box of 200 assorted Tichy doors and windows looks interesting, so I do some price research on this item.

The screenshot shows the Amazon.com homepage with a search for "boley ho beverage truck". The search results are displayed in a grid. The first result is "HO International 7000 Beverage Truck, Red" with a price of \$5.98 (was \$10.99) and 1 used & new from \$5.98. The second result is "HO International 7000 Beverage Truck, Blue" with a price of \$5.98 (was \$9.99) and 1 used & new from \$5.98. The third result is "HO 2003 GMC Topkick Beverage Truck Red" with a price of \$5.98 and 1 used & new from \$5.98. Below the grid, there is a detailed listing for "Boley INTL 4300 2-Axle Beverage Truck 1/87 HO Scale (White with Red Trim)" by Boley Dept. 187. The price is \$5.98, and it is in stock. The listing includes a "Like" button and a "Be the first to review this item" link. The shipping information indicates it ships from and is sold by shiloh sales. There is a note that only 1 is left in stock and it should be ordered soon. The listing also shows 2 new items from \$5.98. On the right side of the listing, there are buttons for "Add to Cart" and "Buy now with 1-Click", along with a shipping address dropdown menu set to "Joe Fugate" and an "Add to Wish List" button. At the bottom right, there is a "More Buying Choices" button.

**Figure 4: The real clincher on the beverage truck comes from of all places, Amazon.com! They're selling the truck for \$5.98 plus \$4.99 shipping – for a total price of \$10.97. That's almost \$2 less than the starting auction price for the same item on eBay. Since this is an auction item (although it does also have a fixed buy-it-now price of \$9.95), the price could get bid up even more. I elect to forgo this auction entirely and just buy the truck from Amazon.**





**Figure 5: I found this 200-piece assortment of Tichy windows and doors on eBay, so I added it to my watch list. Before bidding on it, I did some research and found it on the Tichy web site with a full list price of \$40. This gives me the info I need to make sure I don't pay too much for this item when bidding.**

From the Tichy Train Group web site I learn this item lists for \$40. Other Google searches reveal the assortment can generally be had in the \$35 range. If I could get the item for around \$20, I would be interested, so that's what I decide is my maximum price range.

### **Bid late, not early**

eBay's bidding system is set up so you can bid as early as you want for an item and then walk away. As long as you bid the maximum you're willing to pay, in theory that should work.

But in practice, you give away your interest in the item early and give irrational bidders a chance to bid up the price of the item.

eBay is rife with irrational bidders who, once they see someone has bid on an item, will keep bidding on it, fishing to see if they can finally out-bid early bidders.

For this reason, the best eBay bidding strategy is to wait until the last possible moment before you bid on an item. Computer simulations of eBay have shown that bidding on an item when less than 30 seconds remain in an auction keeps the price down, yet gives you the best chance of winning.

In fact, bidding with less than 10 seconds left in an auction makes it nearly impossible for someone else to outbid you. This bid technique is called *sniping*.

Some feel snipe bidding is unfair, but I don't agree – and apparently eBay also considers snipe bidding to be okay, because they allow it without restriction.

If you've ever attended a live auction, you know bidding strategy is part of the process. Online auctions like eBay are similar, and snipe bidding can be an effective strategy for getting an item at a good price.

## **eBay's hidden-bidder second-price auction dynamics**

eBay auctions don't work quite like the normal auction we're all used to where the bids are open and high bidder wins, paying the price he/she bids.

eBay is actually a form of Vickrey auction, also known as a sealed-bid second-price auction.

In an eBay auction, the winning bidder pays the second highest bid plus a small increment.

Because of this difference, you generally don't pay what you bid. For instance, you could bid \$100 for something, but if the second highest bid was only \$20, then you will pay 20 dollars, plus the bid increment, which is typically a dollar at this bid level.

Even though you bid \$100 (which does mean you win), you get the item for just \$21, which is the second-highest bid plus a small increment.

What if two bidders bid within a few cents of each other so that the highest bid is not one bid increment larger than the other? In an online auction like eBay, last moment bids within a few cents of each other are entirely possible.

In this case, the highest bidder still wins, and but he pays the second-highest bid price plus an increment, not what he bid.

For example, if bidder A bids \$20, and bidder B bids \$20.01, then bidder B wins and pays \$21 for the item, the second price bid plus the increment.

This is why you should never bid round numbers on eBay. If you bid a round number plus a few cents more, you will generally win because most people bid round numbers out of habit.

The "always bid odd amounts" trick will win you many auctions without costing you much at all, so keep it in mind whenever you bid on eBay! ■



However, who wants to baby-sit an auction in order to do a snipe bid?

It turns out you don't need to do that. There are a number of "auto-snipe" services available that automatically place a last-second bid for you! Just Google "eBay snipe" and you'll get several.

My personal favorite is AuctionSniper. Just go to [auctionsniper.com](http://auctionsniper.com) and use your eBay account information to sign up.

eBay has put very little restriction on auto sniping, again allowing for this modern automated bidding technique to be available if you're willing to pay extra for the service.

AuctionSniper charges 1% of the sale price (minimum of 25 cents) to automatically place a snipe bid for you during the last few seconds of an action. They even let you set the snipe bid timing – I always leave it at the default of 5 seconds before the auction ends.

If you have items in a watch list, setting up AuctionSniper to perform a snipe bid on an item is easy (now you see another reason why putting an item in a watch list is so important).

In AuctionSniper, I select **My Watches > Import from eBay** and after a few moments I get a list of all my eBay watched items with a check box next to each one.

In this case, I want to import the Tichy windows and doors assortment, so

mark the checkbox on this item and click the **Import Items** button.

Once I've imported the Tichy assortment, then to do a snipe bid, I click the **Snipe It Now** button on that item.

AuctionSniper asks for my maximum bid – earlier I said I would be willing to pay around \$20 for this item that lists on the Tichy web site for \$40.

However, there's an important bidding tip here: never bid a round dollar amount if you want to improve your chances of winning (see the sidebar: *eBay's hidden-bidder second-price auction dynamics*).

Following this strategy, I type a maximum bid of \$20.73 into AuctionSniper, which is an odd amount just over my max price of \$20.



*Video won't play?* Click [here](#) to play it on YouTube.

Item	max	bids	Ends	folder
 260791083026	US \$20.73	0	5/29/2011 6:04:10 AM	My Watches
ppntrees (1968)	Current Price US \$9.99	Shipping US \$5.50	Qty: 1/1	

**Figure 6:** I'm using AuctionSniper to place an automated snipe bid on the Tichy door and window assortment for me. I've set my maximum price at \$20.73 (never bid round dollar amounts – see the text as to why). AuctionSniper will watch the item and automatically place a snipe bid for me 5 seconds before the auction closes. For this service, AuctionSniper charges me 25 cents on a \$20 item.



The auction actually closes around 10 am on a Sunday. Thanks to AuctionSniper, I don't have to do anything else special. I can go to church as normal on a Sunday and AuctionSniper will automatically place my snipe bid on this item for me, 5 seconds before the auction closes!

## The auction outcome

I got an email on my phone that I had won the Tichy windows and doors assortment for \$20.50.

As you can see in the bidding history shown in figure 7, my bidding strategy worked, and I got this item at a great price – almost half the list price! No one else on the Internet is selling this item for this price, so I got a great deal!

Looking at the bidding history, you can see how not bidding a round dollar amount helped me win this auction.

Most people bid round dollar amounts, not realizing that bidding odd amounts *just above* a round dollar amount is actually a much more clever bid strategy. In this case, it's very clear my odd amount bid strategy won this item for me at a great price!

If you look closely, you can also see "bid fishing" at work. User o\*\*\*2 bid \$20 on the item at 7:42 am, which upped the visible item price on eBay to \$10.50, one bid increment higher than t\*\*\*r's max bid of \$10.25.



Tichy Train Group #8091 200 Pc Window & Door Assortment  
 Winning bid: **US \$20.50**  
 Shipping: **US \$5.50 – Expedited Shipping (USPS Priority Mail).**

Bidders: 4 Bids: 7 Time Ended: May-29-11 10:04:10 PDT Duration: 3 days

✔ mod-train-vid, you're the winner!

Only actual bids (not automatic bids generated up to a bidder's maximum) are shown. Automatic bids may be placed days or hours before a listing ends. [Learn more about bidding.](#) [Show automatic bids](#)

Bidder ?	Bid Amount	Bid Time	Action
mod-train-vid ( 46 ★ )	US \$20.50	May-29-11 10:04:04 PDT	Pay now More actions ▾
o***2 ( 593 ☆ )	US \$20.00	May-29-11 07:42:24 PDT	--
n***k ( 2341 ★ )	US \$19.00	May-29-11 07:52:10 PDT	--
n***k ( 2341 ★ )	US \$18.00	May-29-11 07:52:01 PDT	--
n***k ( 2341 ★ )	US \$16.00	May-29-11 07:51:55 PDT	--
n***k ( 2341 ★ )	US \$15.00	May-29-11 07:51:49 PDT	--
t***r ( 261 ☆ )	US \$10.25	May-28-11 17:38:20 PDT	--
Starting Price	US \$9.99	May-26-11 10:04:10 PDT	

**Figure 7: I'm using AuctionSniper to place an automated snipe bid on the Tichy door and window assortment. I've set my maximum price at \$20.73 (never bid round dollar amounts – see the text as to why). AuctionSniper will watch the item and automatically place a snipe bid for me 5 seconds before the auction closes. For this service, AuctionSniper charges me 25 cents on this item.**

Nine minutes later, user n\*\*\*k came in and saw this item at \$10.50, so he bid his max price of \$15 and saw that o\*\*\*2 remained the high bidder.

So n\*\*\*k started bid fishing, upping his max bid price by a dollar or two repeatedly until he reached \$19 and gave up.

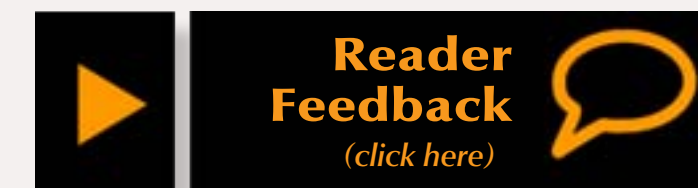
The item then sat at \$19.25 for the remaining 3 hours with o\*\*\*2 still the high bidder.

My last minute snipe bid likely caught user o\*\*\*2 off guard, letting him think he had won the item. Had I manually gone in and bid my \$20.73 a few hours before auction close, I likely would have alerted o\*\*\*2 to my interest in the item and been outbid.

Now you see how to do effective auction bidding on eBay. It's simple, really. Just do your price homework in advance, and then use an automated

snipe bid tool to bid an odd amount just above a major price point!

In part 3 we'll look at the other side of doing hobby transactions on eBay – how to be a savvy eBay seller.



**Reader Feedback**  
(click here)





# The Scenery Scene

## SP Trailer Shed Kitbashing a unique yard storage shed ...



by Joe Fugate

I've been wanting to model an SP truck trailer shed for my Roseburg yard area, and when I saw Classic Metal Works' HO Southern Pacific AeroVan trailers, I knew I'd found just what I needed to make quick work of this project.

Figure 1 shows the prototype trailer in Roseburg yard during the late 1980s.

The CMW trailers are styrene and come two-in-a-package. This gave me a spare in case my first kitbashing attempt didn't work out.

I shortened the trailer from 32' to 25' by removing a 7-foot section cut along the seams (figures 2 and 3). Cutting on a seam simplified disguising the scar.

I trued up the ends by sanding with 220-grit sandpaper taped to a 2x4 (figure 4).

I used some scrap .020" styrene to build an inside flange to hold the two ends in alignment (figure 5) and glued them together with styrene cement.

The prototype trailer doesn't have a rounded roof edge with front scrollwork like the CMW model, so I carefully removed the front scrollwork and



Figure 6



Figure 7



Figure 2



Figure 3



Figure 8



Figure 4



Figure 9



Figure 5



Figure 10

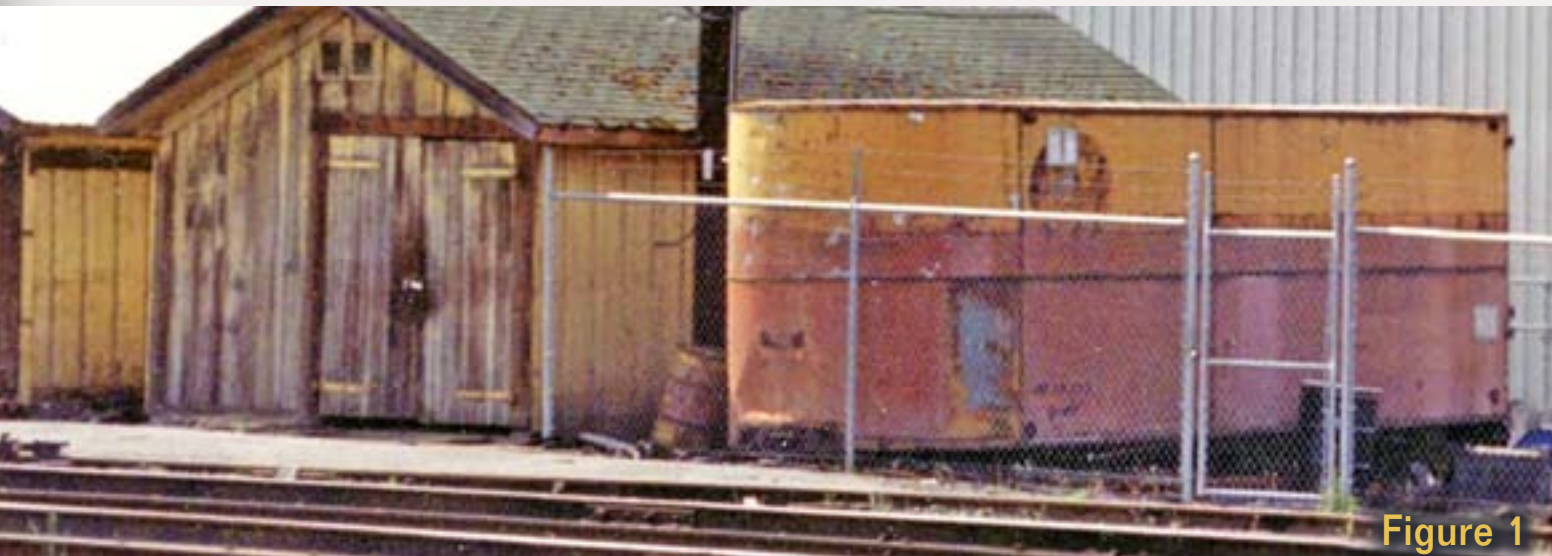


Figure 1





Figure 11

squared off the roof edge with a mill file (figure 6).

I patched the seam using Squadron White Putty and let it dry while I ate a leisurely dinner (figure 7). After dinner, I sanded the putty with a fingernail emery board and some 400 grit wet-dry sandpaper (figures 8 and 9).



Figure 12

Based on some prototype photo references, I added styrene door tracks to one side (figure 10). After that I patched up the trailer paint using SP Daylight Orange and SP Scarlet PollyScale paints and painted the roof with a 50-50 mixture of PollyScale Reefer Gray and Reefer White.



Figure 13

A brown ultra-fine tip Sharpie made it easy to add rusted seams and details, and then I dry brushed the trailer with some SP orange and scarlet lightened with a touch of PollyScale reefer white (figures 11 and 12).

I used some of my gray dirt weathering powder (see the [Nov/Dec 2010 issue of MRH](#)) to dull and dirty-up the trailer (figure 13).

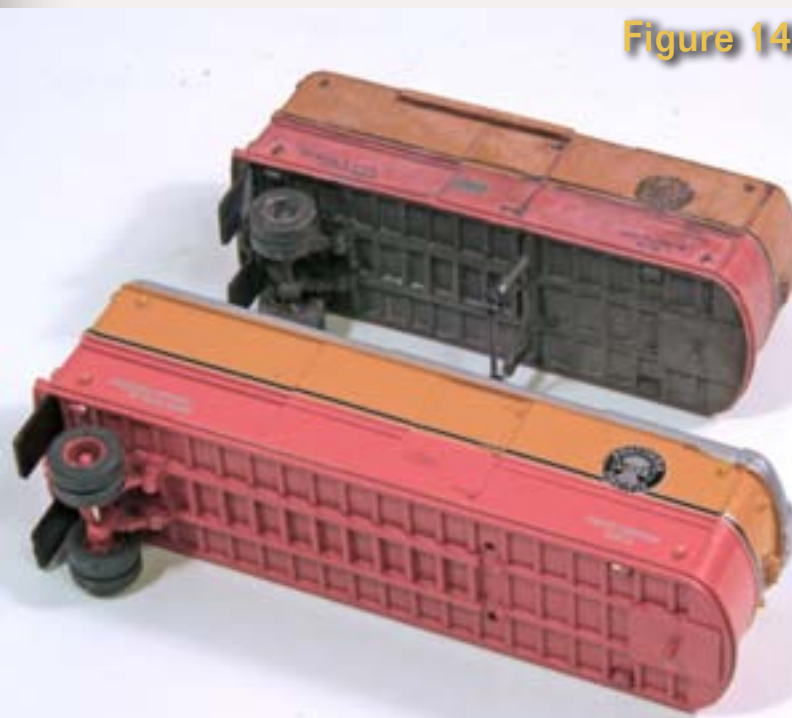


Figure 14

Finally, I painted the undercarriage and wheel hubs using PollyScale Roof Brown, and applied more weathering powder.

Figure 14 shows the final dulled and weathered trailer next to the original unmodified CMW AeroVan trailer. My aim was to kitbash this trailer into a reasonable facsimile of the trailer in Roseburg yard without needing to do the fancy paint job. With some care, this project went fast, with great results!

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

# Innovative Electronics for Model Railroads

Frog Juicers - Automatic Frog Polarity  
Servo Drivers for Turnouts and Semaphores

◆ TAM VALLEY DEPOT ◆  
Great Electronics for Great Model Railroads



**Dual Frog Juicer** - a heavy duty (33A) version of our popular DCC frog juicers. The unit can be used to power two frogs in the larger scales, as an automatic, highspeed auto-reverser in all scales and as a highspeed circuit breaker.

[www.TamValleyDepot.com](http://www.TamValleyDepot.com)

[Click here to contact us by email](#)





# Building a Polyurethane Structure Kit

Construction and painting hints

– by *Mike Tylick*  
Photos by the author



**M**odel railroading has always had a large number of cottage industries. Hobbyists become proficient at some aspect of the hobby and try their hand at the dream of making their interest their livelihood. Only a few succeed at this. A much larger number do find a source of part time or retirement income from their hobby. Model railroaders rightfully boast of the numerous sub interests within their hobby, and perhaps small business entrepreneur is one of them.

**Figure 1:** Computer-created signs decorate the front of the building. I scrounged billboards from Bar Mills “Tylick Tool Co.” kits, but there are many alternatives. The planters are square styrene tubing topped with foliage clusters.



Figure 1



Small businesses necessarily cater to small markets, and small markets demand inexpensive production processes. Only a few large manufacturers can afford the die work and production volumes necessary for injected molded styrene products, but polyurethane models cast in rubber molds are within the financial, technical, and production reach of the average modeler. These manufacturers offer small runs of unique models, greatly increasing the personality and the number of interesting items available to us for our railroads.

I believe polyurethane structure kits have a bad reputation among hobbyists. It's widely believed that the parts are dimensionally unstable, difficult to glue and impossible to paint. I feel that all of this is nonsense! Many people compare working with polyurethane to working with the much-less challenging injected molded styrene, but I feel a much better comparison is with cast plaster structure kits. Although the painting methods and the adhesives may vary some, I find polyurethane to be a flexible and forgiving material that is much less fragile than plaster. Even better, the stigma has helped to create a market of older but nonetheless beautiful and highly individualistic kits often available for a song at hobby show flea markets.

Let me share a few tips I've picked up over the years for building urethane structure kits.

## Step 1. Prep work



Figure 2

Figure 2: Back side of the SS Ltd. Miners Union Hall front wall. Glue the supplied stripwood behind window openings to replicate the center frame. Urethane parts often come warped, but heat will "train" the parts to lie flat. Try fixing a warped plaster casting! There are a number of methods to accomplish this, but the one I use is very simple. I place the parts on a rigid cookie sheet (I now use granite countertop scraps from a recent kitchen remodeling – pizza stones are also excellent) and place them in a cool oven. I set the oven for 250 degrees and allow it to reach baking temperature. By the time the oven has preheated, the parts have usually softened sufficiently to lie flat. If not, allow them to bake a few minutes longer. But pay attention! Baking too long can distort the parts. Remove from the oven and allow the castings to cool directly on the cookie sheet or baking stone. I have never



Figure 3

had trouble with parts prepared this way. I wash the parts in soapy water before priming them for painting. Priming and painting do not seem to cause warping as is the case with wood.

Figure 3: Front of wall. Flash is often found on castings, but this is easily removed with a hobby knife and file. The additional thickness sometimes found on some castings is not noticeable later. I have rarely needed to sand material off the back. If needed, a belt sander would do this work almost too quickly. Plaster castings have the same flash and are much easier to break while handling. Occasional air bubble defects in polyurethane castings are easily filled with Bondo (automotive) scratch putty. Smaller defects can usually be hidden with paint.



## Step 2. Exterior painting



Figure 4

Figure 4: I primed the wall, then painted the window frames and doors. Acrylic paint found in craft stores is inexpensive, dries flat, has excellent leveling qualities (they can be sprayed), and comes in a multitude of colors. They dry quickly and adhere quite well to the surface. Two coats are almost always necessary, but brush painting in this manner is also a first step in weathering since paint is never quite even. I'll paint the walls to cover up mistakes.

Figure 5: I painted the front wall several different colors for interest and to show the fine detail. It adds greatly to the final appearance. This is a good "break" project. Do a little each day and stop when it becomes tedious. Mistakes are inevitable, so let the paint dry, then touch up errors. It goes quickly this way and doesn't take as long as you might think.

Figure 6: The front after painting but before weathering. I installed glazing and window shades. Window shades and curtains add a great deal of quick and easy detailing.



Figure 5



Figure 6



### Step 3. Interior painting

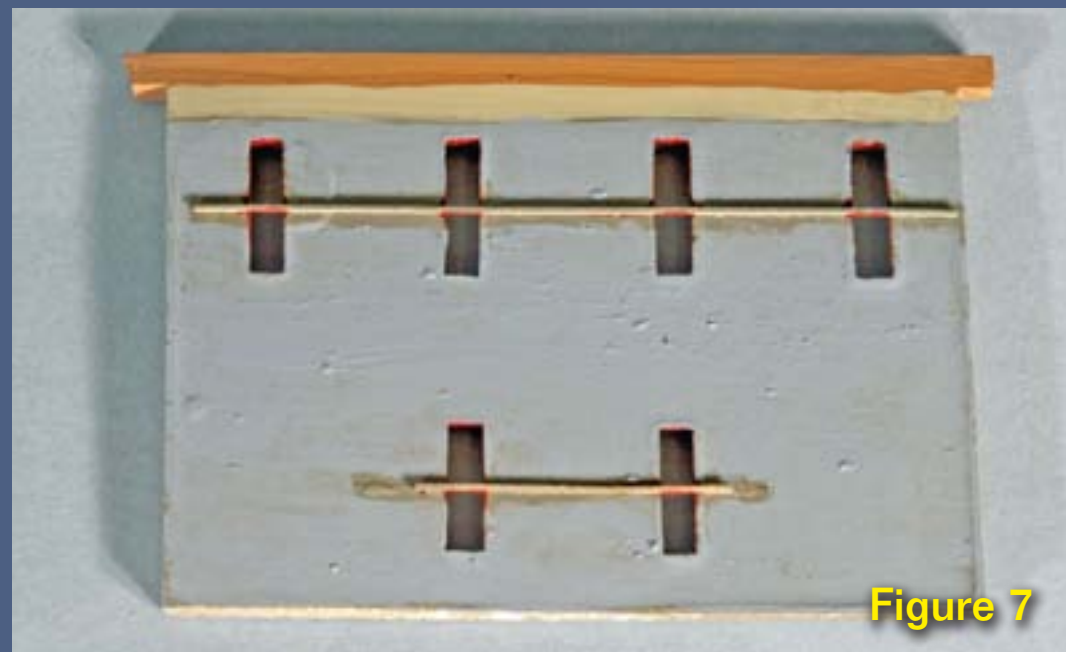


Figure 7

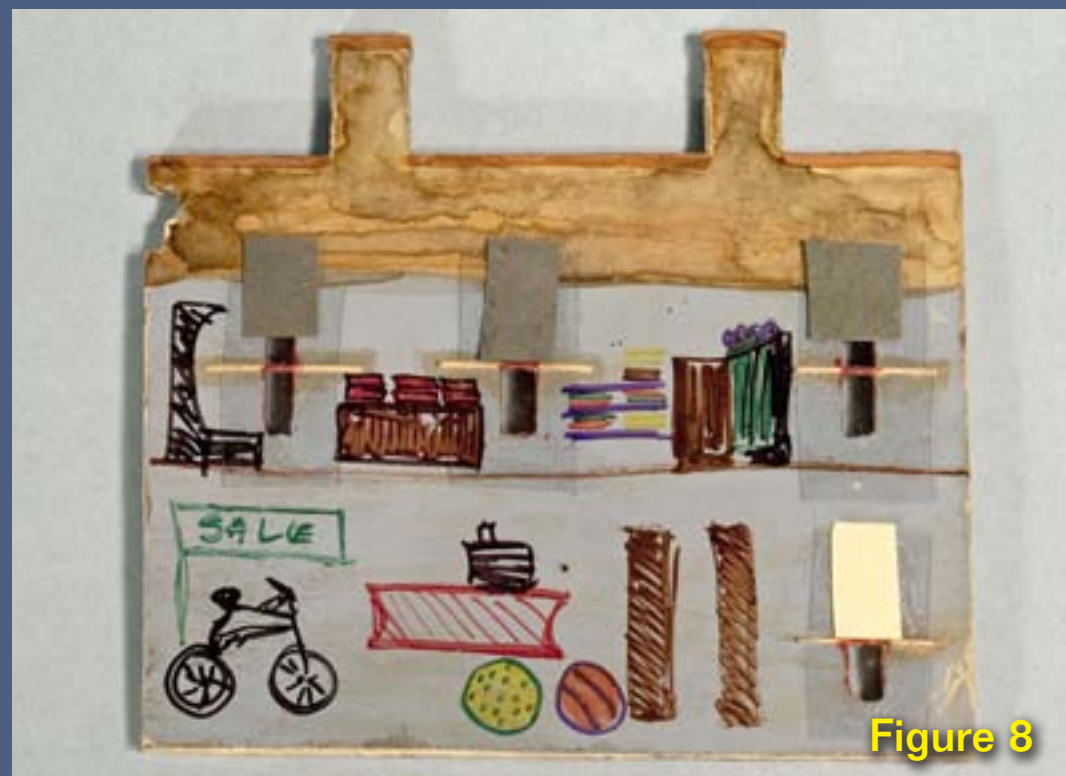


Figure 8

Figure 7: I painted the interior walls a solid color before detailing.

Figure 8: The first floor will be a toy shop, the second a clothier. Appropriate items are drawn on the walls to suggest an interior. Scale and drawing quality are not terribly important – the idea is to create the illusion of an interior since no one will get a good look at them. Contest quality modeling is not necessary here!

### Step 4. Final weathering



Figure 9

Figure 9: 1. I used washes of brown and black watercolor paints to bring out casting details and do some weathering. Flow these paints over the walls and into the recesses of the castings. Water colors are transparent and so they never completely cover up a detail. They are also washable – excess paint can be washed off at any time.

Rough cut stonework could be dry-brushed to emphasize the high relief, but this model has ashlar (smooth) stone. Highlight and shadow could be “faux painted” by stippling with a very dry brush, but the stones are too small to make this really necessary or effective. I find it easiest to work on the walls before assembly as much as possible.



## Step 5. Assembling walls



Figure 10



Figure 11

Figures 10 and 11: After the paint and weathering dry, it's time to assemble the walls. Usually only minimal sanding and trimming are required to permit the walls to mate. Such joints are usually visible but do not have to be perfect (Figure 11a).

There are many schools of thought as to the best adhesive. CA glues are too rigid and dry too fast to work well for me. I need more working time. Two-part epoxies and Walthers Goo are more flexible and work very well, but I find it difficult not to leave unsightly glue smears on the outside. Aleene's Tacky Glue is probably not the strongest product to use, but it will hold the polyurethane together fairly well. White and yellow wood glues will also work. All of these are easy to use, dry clear, and are easy to clean off the front surfaces. Elastics (rubber bands) make excellent clamps while glue is setting.



Figure 11a



## Step 6. Bracing the walls



Figure 12

Figures 12: 1. Polyurethane is a porous material. Wood glues work but don't provide a strong bond. I use two-part epoxy or Goo to brace the corners with pieces of stripwood making the wall assembly significantly stronger. Cardstock gussets in one of the corners help keep the walls square.

## Step 7. Interior details



Figure 13

Figure 13: Adding a computer-printed tile floor along with bits of colored cardstock enhances the illusion of detail in the lower storefront.



## Step 7. Interior details (continued)



Figure 14



Figure 15

Figures 14 and 15: The building interior is shown from above front (figure 14) and rear (figure 15). Contest quality modeling is not required here (unless you'll be entering your building in a contest). Bits of cardstock form walls and floors and suggest shapes.

Note the second story areas (with blue floor) don't fill the entire floor space. The open areas allow light to reach the ground floor.



Michael Tylick has been fooling with electric trains for as long as he can remember. Rather than commit to one large project, he has built a number of smaller layouts of various types and scales over the years. A retired inner city art teacher, Mike has been a long time contributor to *Model Railroader*, *Railroad Model Craftsman*, and other hobby publications. He has presented clinics on many railroad and historical subjects (see his *Along the Boston & Albany* clinic from the 2009 national convention in [MRH Theater](#))

Michael's railroad interests include prototype rail and architectural photography. Much of his hobby time is now spent as a custom builder specializing in railroad structures and rolling stock. He also works with several organizations who build custom model railroads. He's recently remarried and now lives in eastern Massachusetts.



## Step 7. Lighting

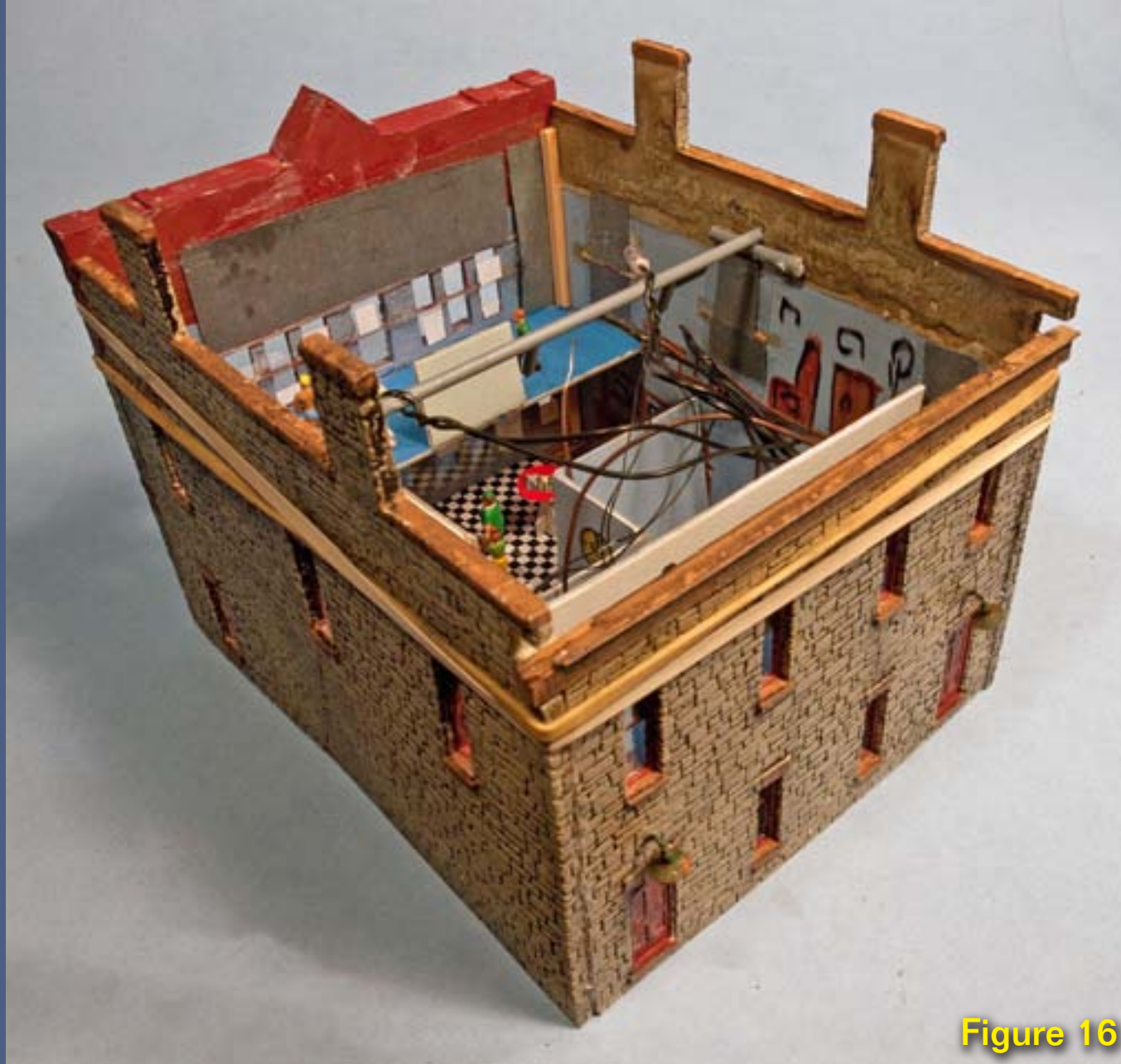


Figure 16



Figure 17

Figures 16 and 17: Interior lighting sometimes looks like a rat's nest and this building is no exception. I glued an old styrene parts sprue from another kit between the two side walls to make a light carrier. Where possible, I try to use at least two lamps to reduce hot spots and provide redundancy in case a lamp burns out since it is quite impractical to replace lamps when they do fail. Even at only 30 milliamps per lamp, the power requirements for building lights add up in a hurry. Lighting a small town can easily require an enormous power supply! I always try to be sparing of lighting.

I prefer to use 12-volt lamps, but I operate them with 6 to 9 volts – the subdued light feels more realistic and the reduced voltage increases the life of the lamp four hundred fold. I have never had one burn out when I use the reduced voltage. LEDs are an alternative but their light isn't as realistic looking.



## Step 8. Rear wall details

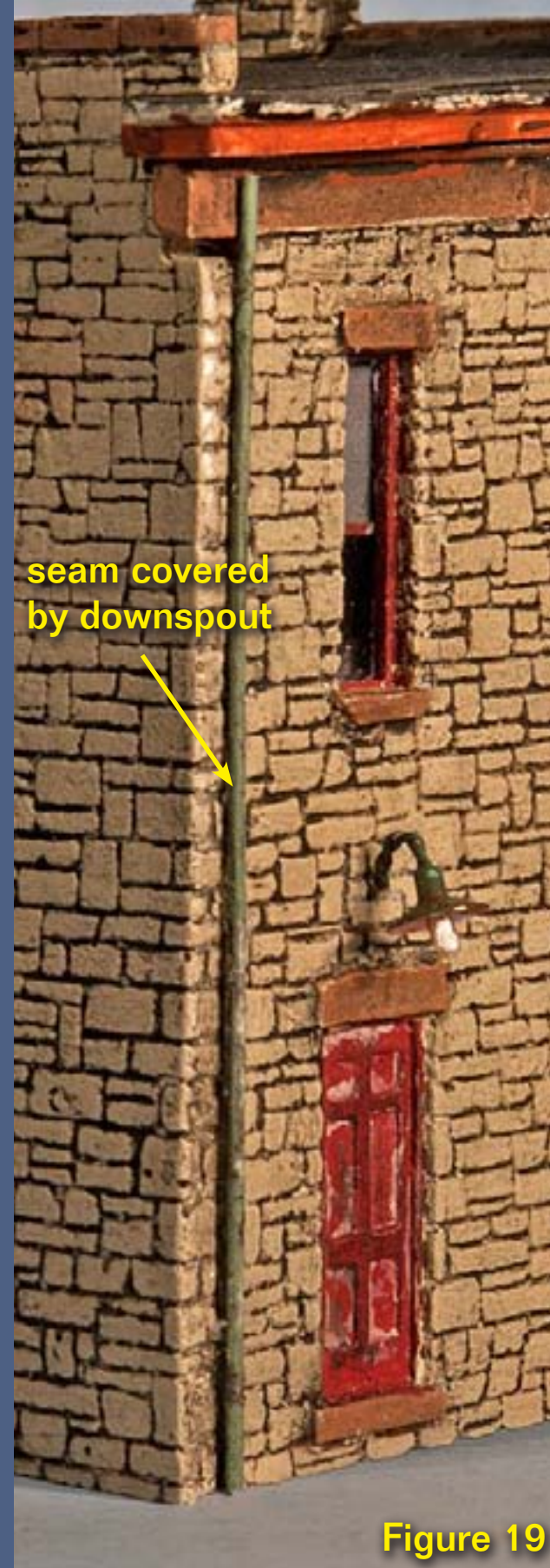
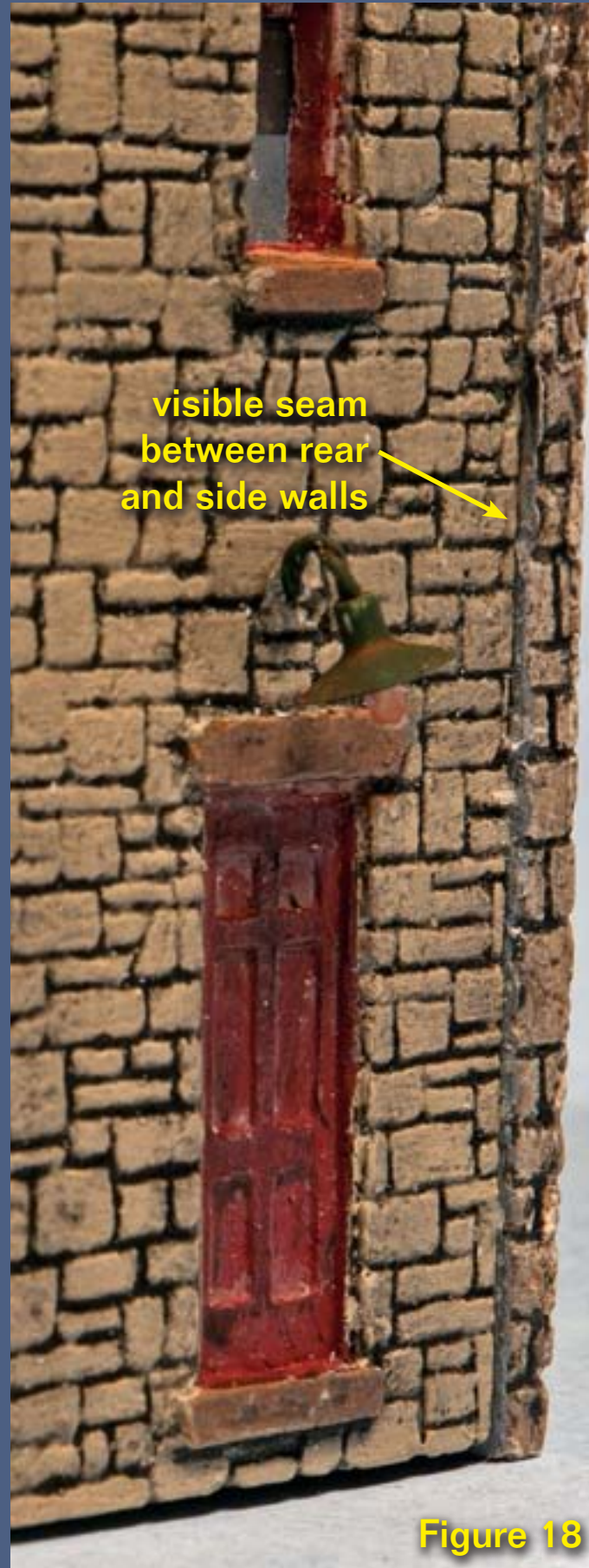


Figure 18: Miniaturics sells nifty grain of wheat lamps with shades. It's much easier to drill a hole and install a few of these than it is to try to hide wires running up a telephone pole. The wall butt joint is quite noticeable in this photo.

Figure 19: Drainpipes made from  $\frac{1}{16}$ " styrene rod are easier to work with and paint than the brass rod supplied with the kit. The downpipes hide the wall joints most effectively.

Figure 20: The rear of the building with details in place.





Figure 21

Figure 21: Urethane kits sometimes need coaxing. I used a little extra clamping to hold the walls together until the glue dried. I picked the large clamp because it opened wide enough, not to apply massive force.

Figure 22: View through the front windows with the lights on.

Figure 23: The finished building from the rear.



Figure 22

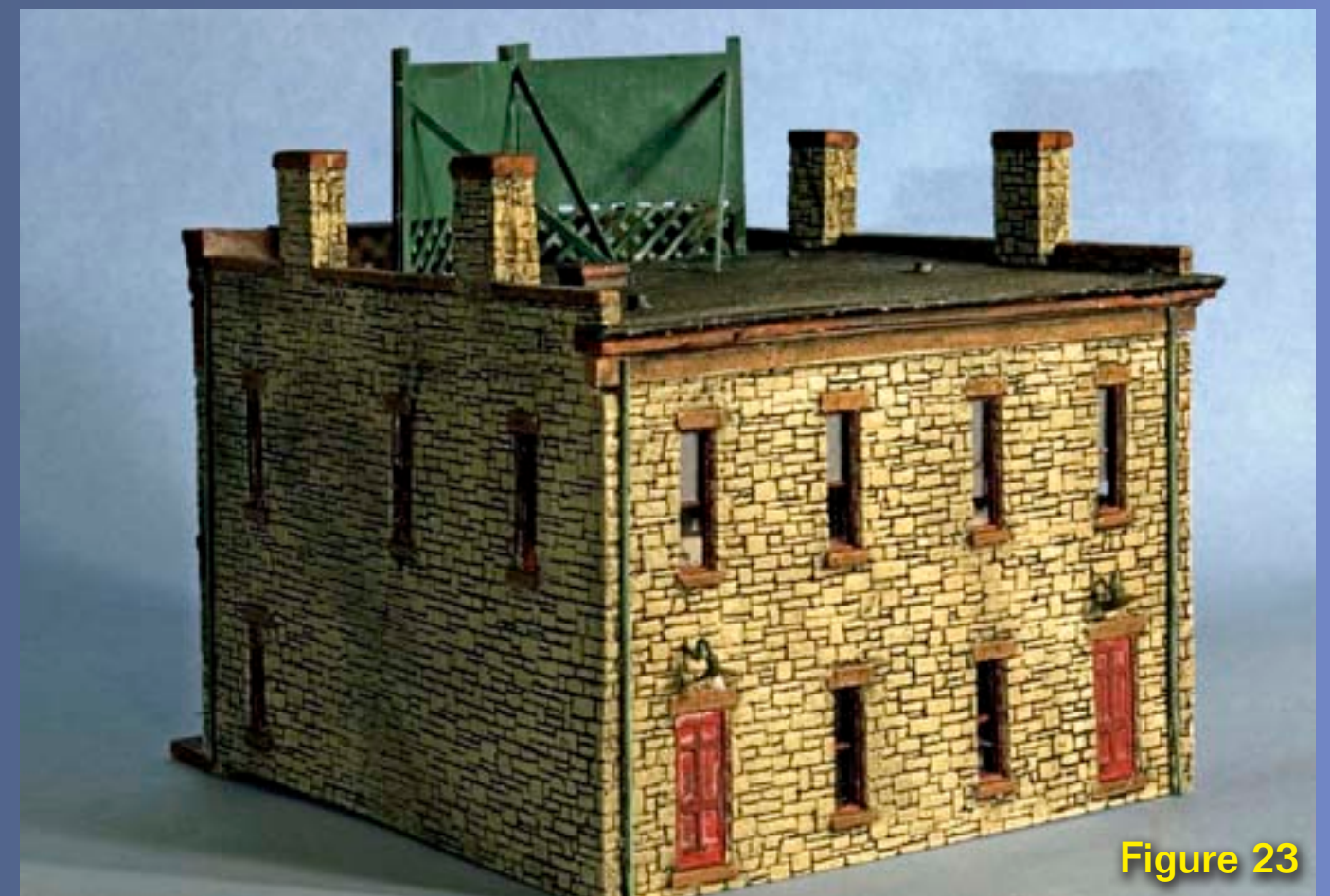


Figure 23

 **Reader Feedback**  
(click here) 



# Changes: A Journey Back in Time



Model Railroader, Railroad Model Craftsman, Scale Rails, and the NMRA calendar, as well as winning multiple contests. Some of the photographs in the book have been retouched to add locomotive smoke and the figure of Uncle Plug.

Changes is available through [www.modelrailroadphotography.com](http://www.modelrailroadphotography.com) for \$29.95+ shipping.



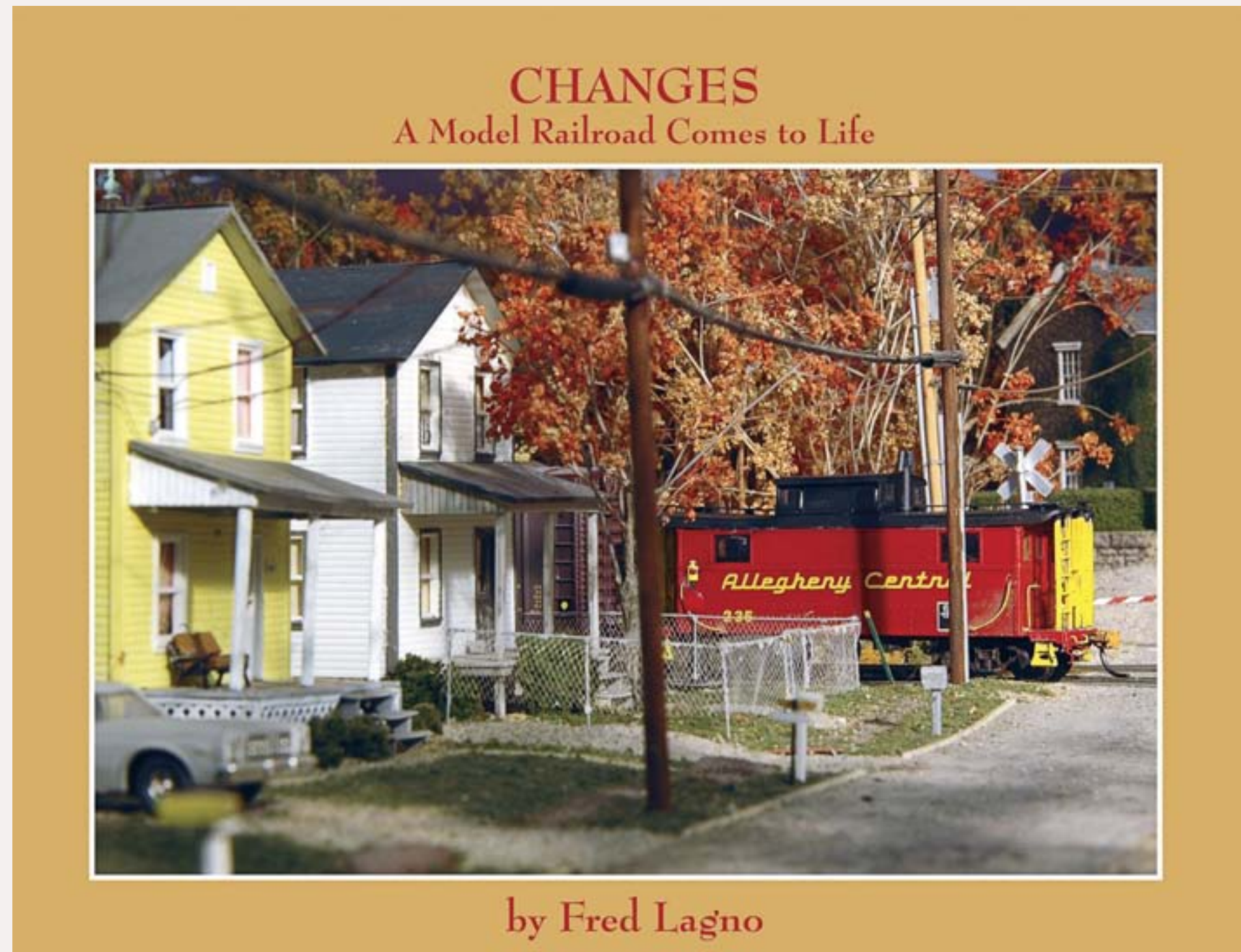
Figure 1: The front cover of the book by Fred Lagno.

– by Jeff Schultz

Sam Rawlings, a vaguely dissatisfied Philadelphia accountant, inherits a large collection of railfan photographs taken by his Uncle “Plug” Fullerton. From there we’re plunged into simultaneous trips of nostalgia and railfanning through the heart of the Allegheny Mountains in Maryland, as Sam discovers both himself and the family that he’s always had – and never knew.

Artfully framing over 50 color and black and white photos, Fred Lagno draws us into Sam’s life and memories, creating a believable character with both flaws and feelings. Sam’s Uncle Plug is a bit larger than life, but that’s only appropriate for someone who is described through the memories of his nephew and conversations with a few other relatives.

The model railroad layout featured in the photographs is Fred’s own Allegheny Central, located in Western Maryland. Fred’s photography has been featured in





# Fantasonics Engineering's Scale Magic Sound



– by Jeff Shultz



## Add sound to your layout – not just your locomotives ...

Sound. It's a hot topic on many layouts these days, although it usually involves DCC decoders. With 43 different CDs of Scale Magic Sound "scenery" available, it's a topic that the people at Fantasonics are both interested in and interested in teaching us about.

Each CD contains between 60 and 80 minutes of continuous sound, some of which is sub-divided into specific sound files. For instance the "Railside Stockyards" two-CD set includes files that are animal-specific. The sounds themselves are not simply recorded as a whole, but are assembled from individually recorded and edited sounds into a unique composite.

The whole idea is to help you build an ambiance – an atmosphere – into your layout. The DDs are playable from a cheap "Discman™"-type

CD player through a set of standard computer speakers, so adding Fantasonic's sound effects to your layout can be done inexpensively.

They also have the Scale Magic Dream Player, a solid state sound system that uses an SD Card for storage media. At \$79.95 alone (\$139.95 with a 512mb SD Card and 48 minutes of sound effects from any single scene you choose), it's not as inexpensive as a CD player, but it might be easier to install on the layout – and there is only one button to push. Add a \$29 Dream Switcher audio router and the Dream Player can simultaneously send four different soundtracks to different areas around your layout. You can even make up your own sound files for the Dream Player.

The Scale Magic Sound Owner's Manual is a 36-page guide on the science of sound, how they make up the sound files, and how to install and camouflage speakers on your layout for the best results. I'm admittedly not a big one for reading manuals, but this one was interesting and instructive, written by people who not only know what they are talking about, but want you to get the best results out of their products and to understand how to do it. Each title (some include two CDs) has an MSRP of \$24.95, or \$29.95 with the Fantasonics manual included. Shipping is a flat \$5 (\$9 international) with no additional shipping charges

if you buy more than one product. The manual is also available as a free download from their website at [www.fantasonics.com/manual.pdf](http://www.fantasonics.com/manual.pdf).

Scale Magic Sound products can be purchased at the Fantasonic Engineering website at [fantasonics.com](http://fantasonics.com) which also includes The Model Railroad Magic website aka "The Old Free Website", which explains how your layout can incorporate the fundamentals of a magic show, including Suspension of Disbelief, Illusion, Misdirection, Manipulation, and Magic Tricks. Say "Hi" for me to the Elves when you see them. The illustrations by Dan Sawatzky are both whimsical and entertaining.

Fantasonics will be at Extra 2011 West, the 2011 NMRA Convention,

where they have two layout sound clinics scheduled and will be presenting two "Ongoing Manufacturer's Awards" for layout sound – one of which is a Youth Award.

The video includes short samples of two of Fantasonic's products – Lakes & Ponds and Riley's Feed Mills. The photographs are from the author's collection.



Video won't play? [Click here](#) to play it on [YouTube](#).



## 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: What Time Is It?

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

Running trains on time using a fast clock ...

Running trains on time requires the train crews and dispatcher to know and agree on the time. While some people use the current time of day, I find it awkward to set up a timetable or train lineup customized for whatever time the session starts. Being able to freeze time also helps for when a second trick crew change occurs.



Figure 1: Jerry B. and Chuck C. look over their track warrants during a Bear Creek & South Jackson op session.

Figure 1



Reader Feedback  
(click here)



## Operation on the BC&SJ

I like to run my HO scale Bear Creek & South Jackson as much like a railroad as I can manage. Cargos are picked up and delivered. The yard sorts cars into blocks heading to the same destination and adds them to the appropriate trains. A dispatcher choreographs the train movements. Operations are the reason for the existence of my layout.

I run the 'bare creek' using TWC (Track Warrants). The dispatcher gives a crew authority to move their train on the main line by dictating a track warrant to them over a radio. The crew fills in the lines on the warrant and reads it back, letting the dispatcher have confidence that the crew knows the extent of their authority.

How does the dispatcher know when to run each train? Too many trains active on the railroad at once results in a plugged-up main line. On some railroads the dispatcher just decides when to launch another train. Others use an event-based system – when train 123 ties up, it's OK to send train 231 on its way. The Bear Creek & South Jackson uses a train lineup form that specifies both crew call and departure times for each train. Adhering to these times prevents the dispatcher from sending too many trains into an op session at once.

## What Time Is It?

Did you note the key to this in the train lineup? It's knowing the 'railroad' time. If the dispatcher and crews agree

on the current time the dispatcher can dictate warrants that include

[ ] Not in effect until \_\_ am/pm.

I like using 'railroad' time for this purpose. Railroads that run under Time Table and Train Orders are even more dependent on all railroad personnel knowing the correct time.

By 'railroad' time I mean a dedicated clock system independent of time-of-day.

## Fast Time

Have you noticed that our model railroads tend to be a tad smaller than a real railroad?

In HO scale, 1 mile is represented by 60 real feet. Not many HO railroads have multiple scale miles between stations. Avoiding a schedule where train 200 leaves station A at 3:43 p.m., station B at 3:43 p.m., station C at 3:44 p.m. and station D at 3:44 p.m. some layouts operate using fast clocks.

A fast clock runs at some multiple of real time. I chose a 4x fast ratio for the BC&SJ. It's fast enough to make the times in a schedule seem more reasonable, but not so fast that life feels frenzied. Other model railroads use ratios of 1x (real time) to 12x (a fast minute is 5 real seconds).

## Installing a Fast Clock

Before I could use fast time I needed timepieces to display 'railroad' time. My first attempt was a fast clock program I wrote that showed the time



Figure 2



Figure 3

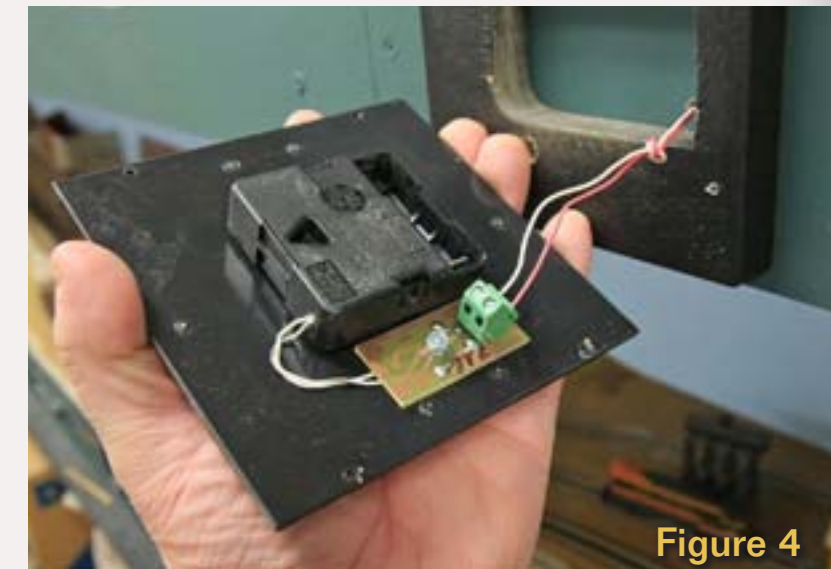


Figure 4

**Figure 2: A clock mounted on the fascia of the BC&SJ. I made the mounting bracket from a piece of 3/4" plywood.**

**Figures 3 and 4: Four screws hold the clock to the mounting bracket – with them removed it is easily removed showing the bracket's mounting cavity, the wiring, and the back of the clock.**

**Figure 5: These clocks use only 2 wires to connect to the controller.**

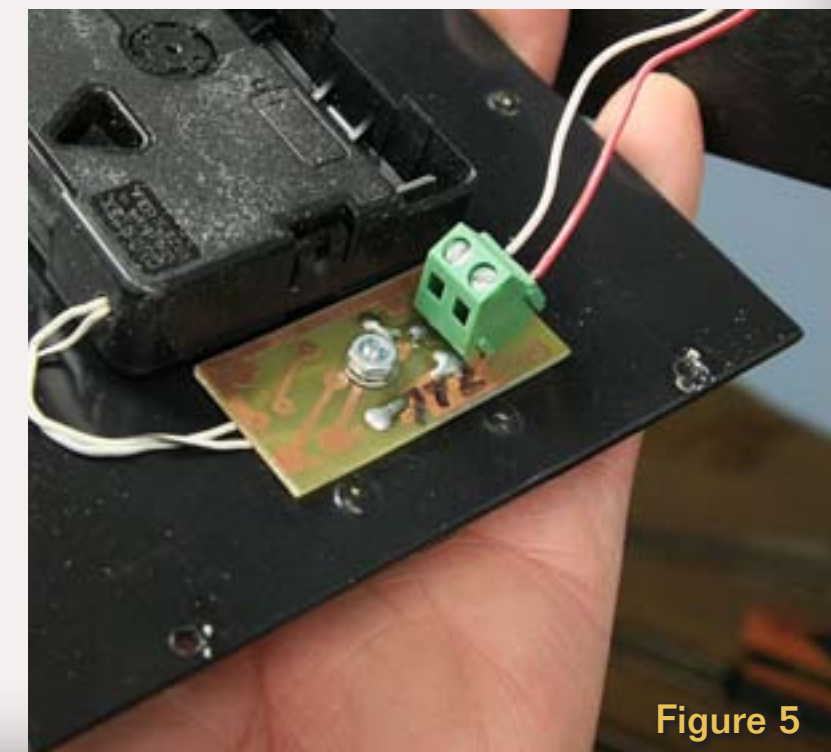


Figure 5





Figure 6

on two networked computer screens. It worked, sort of, but was awkward because I only had two computer displays available.

I ended up Googling 'fast clock' and found the GML Enterprises website [www.thegmlenterprises.com](http://www.thegmlenterprises.com). They offered a reasonably priced clock controller and various analog clocks (analog clocks have hands rather than numeric displays). I ordered a controller and five (two larger and three smaller) clocks.

I hung the larger clocks in the sky (Figure 1 and 6) and mounted the others in the fascia (Figures 2 to 5) and on the dispatcher's desk (Figures 7 and 8).

The small clocks needed a mounting bracket to hold them in place. The bracket had to provide room for the mechanism protruding behind the clock (Figures 3 to 5). I made mine by

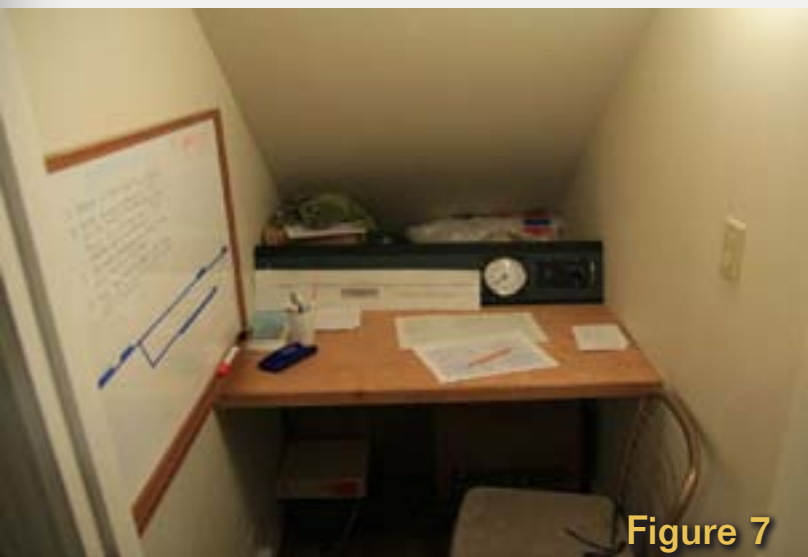


Figure 7



Figure 8

**Figure 6:** These clocks are a bit larger. I hung one on the wall in the train room and another in the crew lounge.

**Figure 7:** The dispatcher's desk.

**Figure 8:** The dispatcher's clock and the clock controller.

**Figure 9:** The clock controller is pretty simple. There's a rotary switch to select the desired time ratio, a LED to let you know that time is running, and a switch to turn the clock on or off.

**Figure 10:** The fast clock wiring is very simple.



Figure 9

cutting out square pieces of  $\frac{3}{4}$ " birch plywood. A saber saw made quick work of cutting the opening in the middle of the bracket. I spray painted them black, then sanded them flat. After repeating this operation three times the surface of the bracket was perfectly smooth – looked like it was cut from a piece of metal. Neat!

## A Dispatcher's Desk

Dispatchers often find themselves needing to think. Planning three or four trains ahead is not trivial. Failing to plan ahead can lead to gridlock (or worse!). Parking the dispatcher in the midst of the often noisy crew lounge turned out to be an impediment to effective thought.

Installing the fast clock system was the impetus I needed to move the dispatcher from the crew lounge to a closet next to the layout room's door.

## Wiring

Wiring the GML fast clocks is simple. The clock controller has two drive circuits, each of which can power up to five clocks. Each circuit uses only two wires (GML also offers a real time clock option that needs three wires).

I installed a barrier strip under Deschutes staging (on the other side of the wall from the dispatchers office) to serve as a clock distribution center. Crimp-on spade lugs and 28 gauge wire made it easy to connect clock wiring. I chose white and red for the two wires in each circuit to help identify them (Figure 10).

## Other Clock Options

There are other options for digital and analog fast clocks:

- Mike Dodd sells analog fast clocks and controllers [electronics.mdodd.com](http://electronics.mdodd.com).

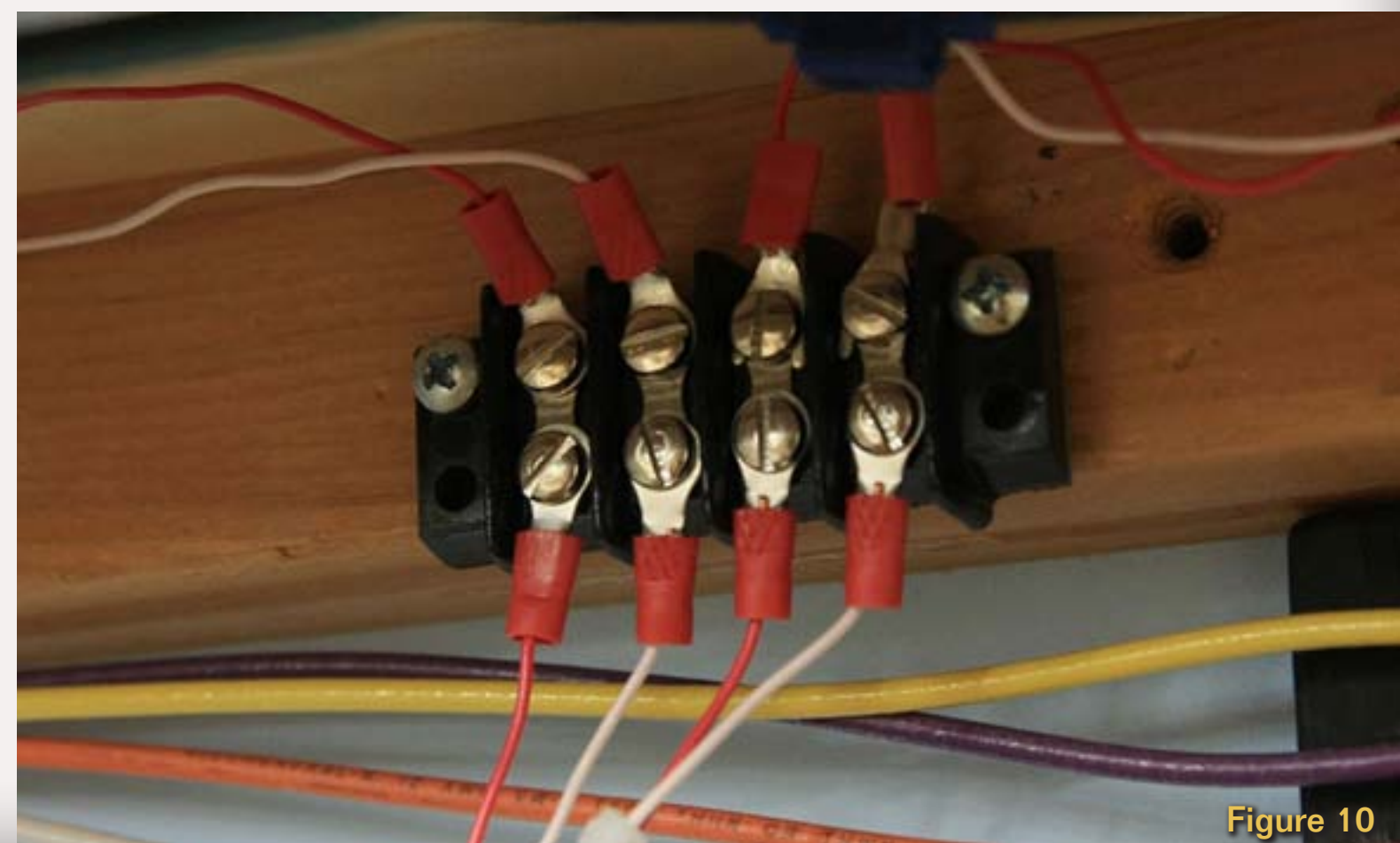


Figure 10



- Logic Rail Technologies makes digital fast clocks for Digitrax and NCE DCC systems [www.logicrailtech.com](http://www.logicrailtech.com).
- Rail-Lynx offers the Time-Lynx digital fast clock system [www.rail-lynx.com](http://www.rail-lynx.com).
- Some DCC vendors include fast time options that display time on certain throttle models.

## Fast Time Issues

There are both advantages and drawbacks to using fast clocks.

Advantages of using a fast clock ...

- Permits railroad time to be independent of time of day. This lets an op session start at whatever time the superintendent desires, making it easier to deal with a timetable.
- Our all-too-short model railroads with closely spaced towns often result in a train being in multiple towns at the same time. A fast clock provides better resolution making the schedule seem more realistic.

There are drawbacks though ...

- Selecting too aggressive a fast time ratio makes crews feel hurried and harried. A 12x fast hour takes only five real minutes!
- Fast time requires crews and dispatchers to perform a bit of mental arithmetic when estimating how long a task will take. Using simple ratios such as 2x, 3x, or 4x makes this easier

## Prototype Time Tables

So... you have an employee timetable for the division of the prototype you're modeling. You're planning to run a 12 hour shift and you want your op sessions to take three hours. Using a 4x fast clock should make everything work perfectly, right?

Well, not necessarily. Model trains cover the distance between model towns very quickly. Fast time is OK here. But it turns out that switching moves on a model railroad take as long as they do on the prototype. With a 4x fast clock, a crew may take four times more (fast) minutes for a switching move than the their full-size brothers would.

That employee timetable probably assumes that yard crews will have enough time to sort freight cars dropped in the morning for the trains in the afternoon. But with a 4x clock they only have  $\frac{1}{4}$  as much time.

Oops, something has to give. Using a prototype timetable on a model railroad has been done, but is difficult at best.

## Conclusion

Fast clocks aren't for everyone, but it sure is nice to know what time it is on the railroad. Even if the ratio is 1 to 1, having independent railroad time is a bonus. And those clocks look good!



A clipping from the

# South Jackson Gazette

## What Time Is It?

The locals of South Jackson and its surrounding areas, long angry about the lack of accurate time-keeping, have received news of a new clock system with enthusiasm.

Said Horace Fithers, most outspoken of the locals, "We been liven here fer just about forever without really knowing the time! Darned awkward it were too. Made it purty hard to know when to go to our kids ballet recitals, show up at our dinner reservations or even when trains should oughta be runnin'."

Many had tried to solve this problem. Sundials didn't work because the position of the sun never seemed to change. Striped candles weren't very accurate and S.T. Behr, the local Fire Marshal, decided so many candles were just too dangerous for a plywood-based universe. Measuring star position to determine the time didn't work either, there aren't any stars – at least not in this universe.

In fact, locals often had to resort to enquiring the time of wrist watch equipped giants that happened to be passing by in the deep valleys next to the tracks.

Mr. Fithers explained the new time keeping solution, "Seems like them Johnnies working for the BC&SJ discovered the electricity in the tracks has some kind of pulsations in it

occurring at a really regular-like rate. Some ivory tower guy figured if they counted them pulsations we could figure out a right accurate time of day!"

Railroad management declined to comment on the circuitry needed to count the pulsations but rumors are circulating that everybody for miles around is planing to acquire one or more of these devices. When asked to comment on this, railroad chief executive officer, Charlie Comstock



One of the newfangled timepieces.

sighed, "Looks like we're going to need to add a lot more power generation stations. In addition to running the trains, we'll be running thousands of clocks in all the houses anywhere near the track".

When the new devices will become available is anyone's guess, but all the people living trackside are eagerly anticipating this event. ✠

\* Enjoy the Gazette? Read more at [bcsjrr.com](http://bcsjrr.com)





About our narrow gauge and branchline columnist

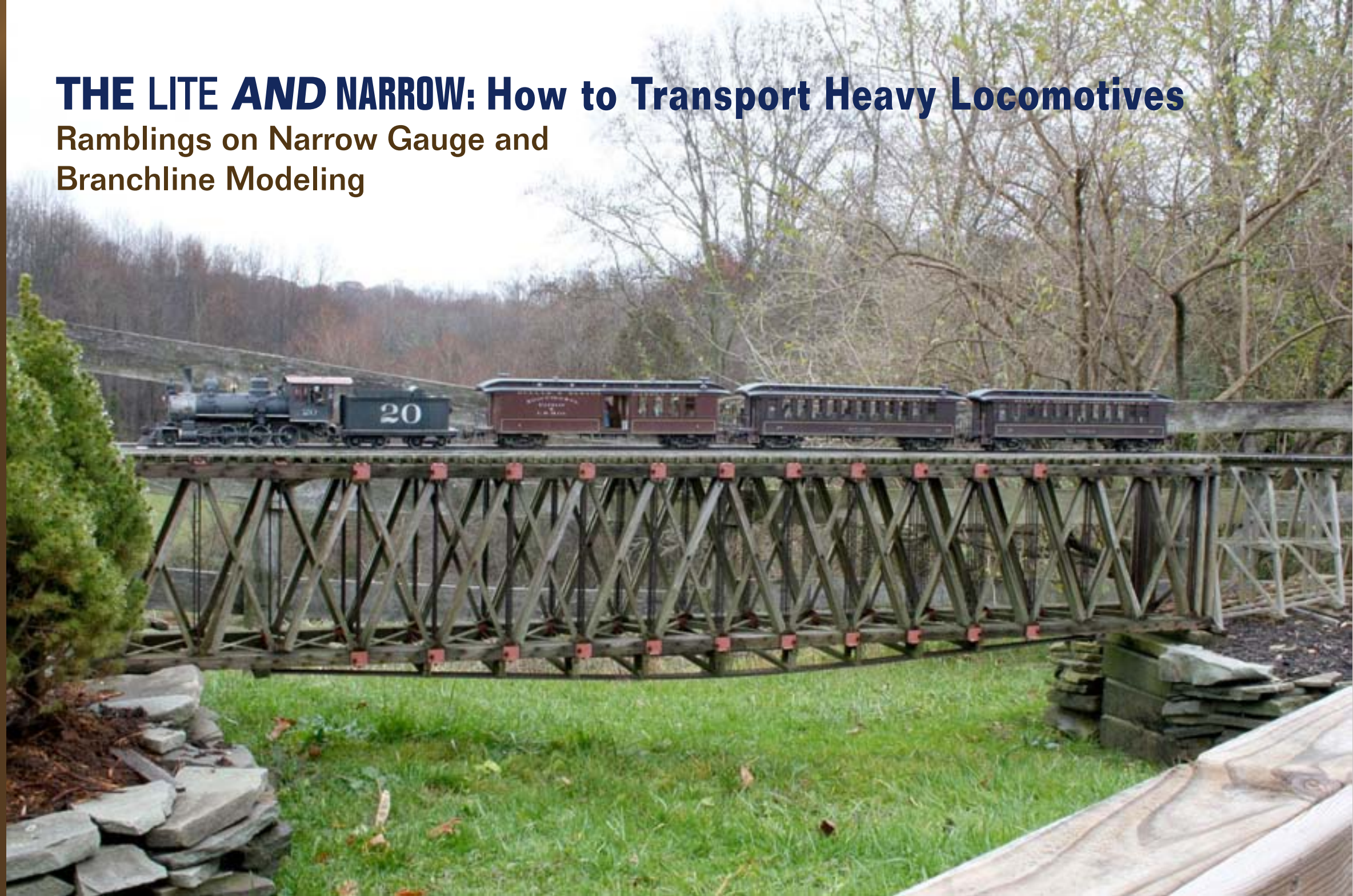


Lew Matt is a published writer, photographer, and illustrator whose work has appeared in many model railroad hobby magazines.

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

# THE LITE AND NARROW: How to Transport Heavy Locomotives

## Ramblings on Narrow Gauge and Branchline Modeling



Carrying a large-scale loco to and from a club or meet is a heavy, difficult job and, if not done right, the loco and/or owner can be damaged. Jack Thompson, an avid Fn3 modeler, scratchbuilder and kit-basher, enjoys running his large scale, radio controlled trains on friends' layouts. RC locomotives with very heavy batteries, large motors, and heavy speakers are a bear to lug around.

Jack solved the transportation problem with an ingenious folding carrying case that makes loading and unloading the loco a breeze. Jack's idea for an inexpensive but sturdy travel case for locomotives will work equally well for any of the larger scales or gauges, and is compatible with DC, DCC, radio control, or other power systems. Come along for the ride and see how it works.

Figure 1: Jack Thompson is an avid Fn3 modeler who enjoys running his radio controlled trains on friends' layouts. Here, No. 20 pulls a short passenger train over a trestle on Roger Cutter's Rio Grande Southern East garden railroad.

 **Reader Feedback**   
(click here)





Figure 2

Figure 2: No. 20 enters a yard after completing a circuit of the railroad. A problem with large scale locos is weight, which may be upward of 40 lbs. Jack has several Fn3 locos and transporting them was a problem for him.

Figure 3: He uses a locomotive carrier to make it easier to handle the locos when they are off the track – radio control locomotives have heavy batteries, large motors, and sound systems with heavy speakers, so they're awkward to pick up and carry. Carriers can be made for Fn3 locos as well as longer and heavier locos. The basic design can be easily modified and works to transport radio controlled or track-powered locomotives. The long handle lets the carrier be held at the center-of-gravity even when it's not at the carrier's center.



Figure 3



Jack Thompson is a friendly and helpful guy in the narrow gauge model railroad community and attends nearly every meet and show in the mid-Atlantic region.

He prefers modeling in Fn3 (20.3:1 scale where G gauge track accurately represents 3' narrow gauge), where he is an active modeler.

Although he has some G scale (32 to 1) equipment, his inclination toward kit-bashing often results in conversion to narrow gauge in the larger Fn3 scale.





Figure 4

Figure 4: Jack places a carrier on straight and level track. When centered, the open bottom of the case mates with the rails. Slide bolt latches at either end of the hinged side panels hold the sides in place.

Figure 5: Note the soft, gray foam glued to the inside surface of the side panels. The foam is cut to length, width, and thickness for each loco and contoured to match any protruding details. Although the front and rear of the carrier are open, the foam grips the loco tightly and keeps the heavy engine from sliding forward or backward.



Figure 5

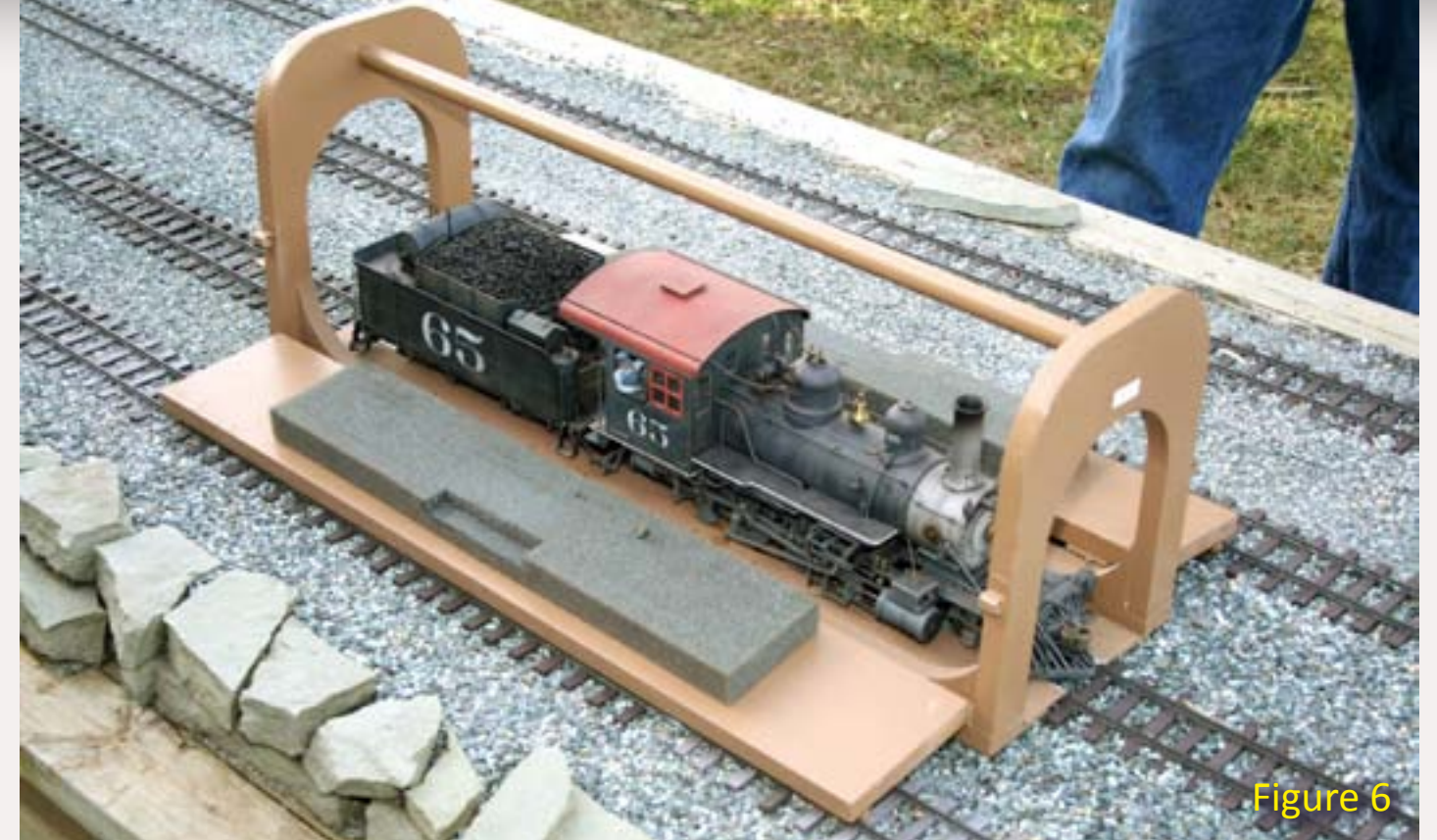
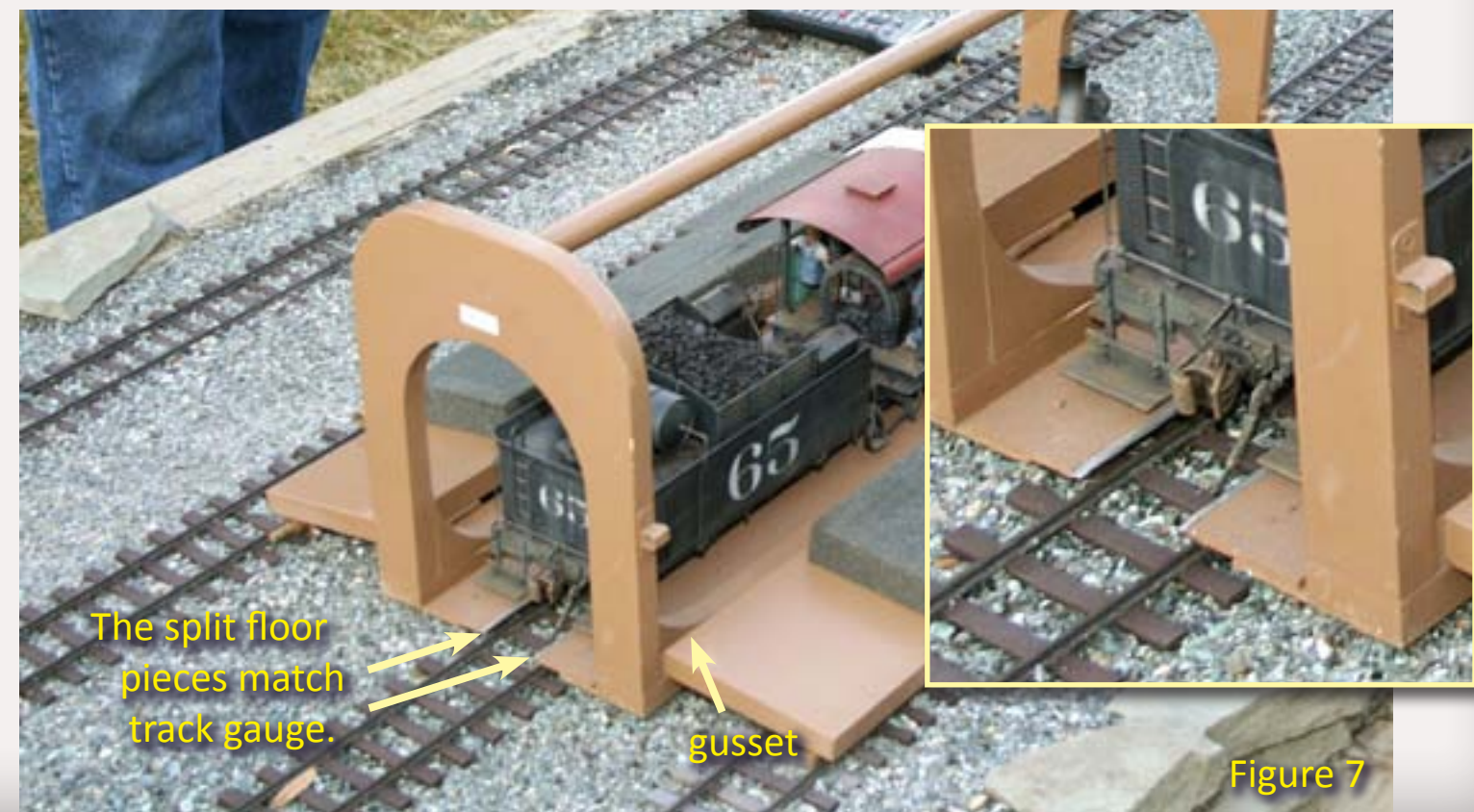


Figure 6

Figure 6: The foam is cut out for the roof of the cab, creating a mechanical interlock with the loco by the foam which further prevents motion inside the carrier when the sides are up. Both sides of the case are open.

Figure 7: Strength is critical for the U-shaped ends that connect the handle to the floor pieces. Quality  $\frac{3}{4}$ " hardwood cabinet-grade plywood is strong enough without adding excessive carrying weight. Note the gussets between the ends and the floor, which add considerably to the strength of the carrying case.



The split floor pieces match track gauge.

gusset

Figure 7



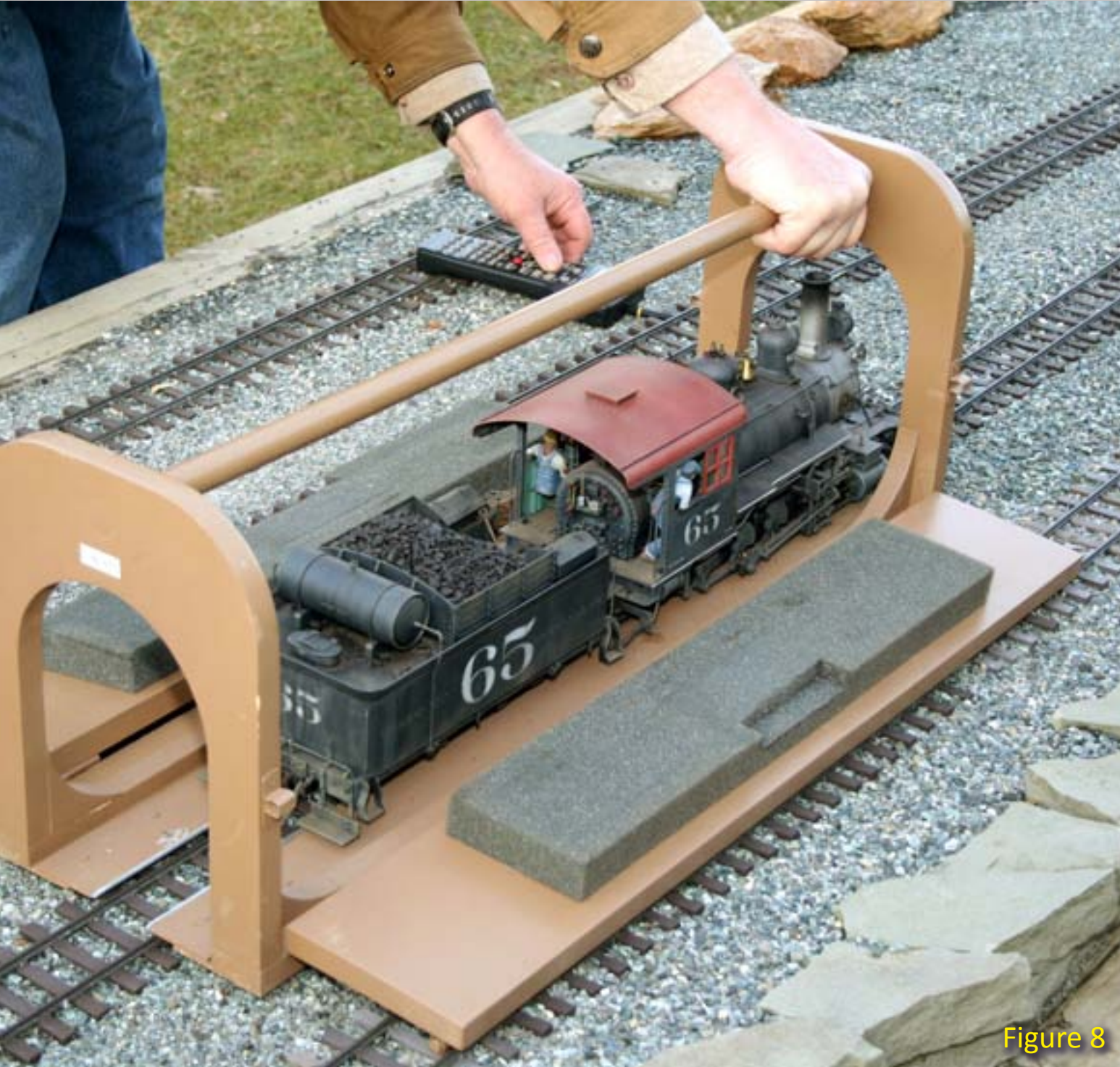


Figure 8

Figure 8: Jack holds the carrier in place on the rails while he slowly runs a locomotive onto the track. There is little chance of a derailment as long as alignment is maintained. Jack uses one hand to hold the carrier in place while the other hand operates the throttle.



Figure 9

Figure 9: If the carrier is properly aligned with the track, the loco should never derail while traveling in or out.

Putting the engine on the track and packing it up later is much simpler when it doesn't need to be handled, and is easier on your back, too.





Figure 10

Figure 10: This closeup view of the end demonstrates the close tolerance between the carrying case and the track. The two floor pieces are completely separate to avoid short-circuiting track that is electrically energized for locomotive power or signals. Note the small bevel on the top of the aluminum floor rail to guide the wheels between the track and the carrier.

Figure 11: Jack made the bottom of his cases from thin aircraft plywood and thin aluminum 'rails' on which the locomotive wheels ride. When riveted together these provide a strong support. The bottom piece is then rabbeted and screwed into the bases for the sides (the sides are hinged off the base). Note that the edges of the rails that fit over the track, have been milled to a rabbet shape to ensure a tight fit on the rail but are quite thin so the wheels of the loco can easily climb up onto them.

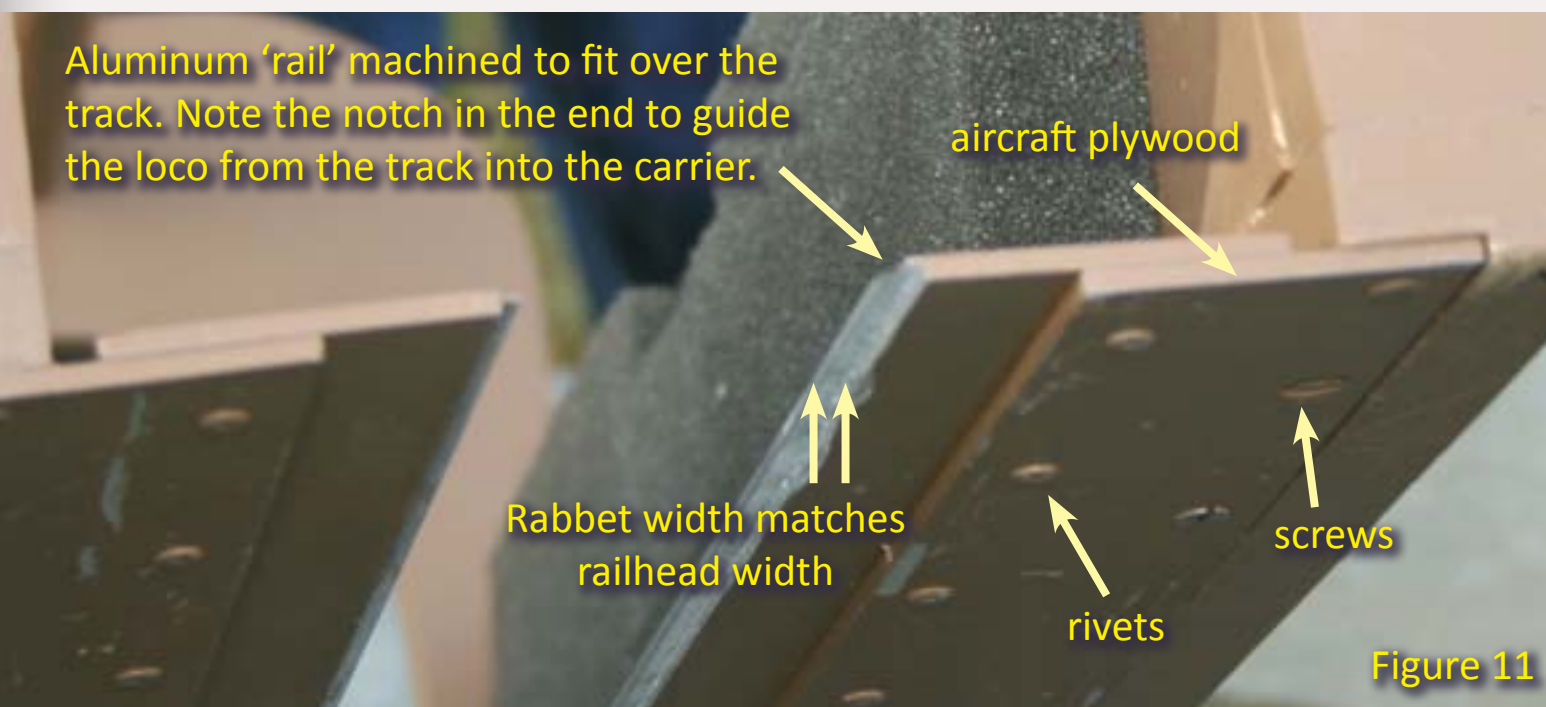


Figure 11



Figure 12

Figure 12: This view shows the rivets for the floor pieces and one plywood end attached to the plywood sides' bases with reinforcing gussets. The aluminum strip used as the rail has the paint removed from its length to permit electrical conductivity. When the aluminum rail sits on the track below, each one is electrically connected to the track power. This design allows non battery-powered locomotives to move in and out of the carrier under track power.

Figure 13: The bottom of the carrier. The aluminum strip is milled to create a rabbet the same width as the rail head. The distance between the left and right rails is the gauge of Fn3 track.

When the carrier is set on the rails, the milled edge fits tightly against the top of the rails. The carrier floor is thin enough to clear spike heads and rail joiners.



Figure 13







## About our N-scale columnist



**John Drye** is our N scale editor and columnist.

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

# COMME-N-TARY: Mixed Train Daily Modeling mid-20th century short line railroading in N scale

## Modeling in the hobby's most eNgaging scale



### What's available in N-scale for a short line?

I'm taking a little side trip from The Pennsy's horseshoe curve to investigate N-scale short line railroading in the mid 1900s.

### Short Line Prototypes

Lucius Beebe wrote a classic railroad book in 1947 that is still well worth reading. "Mixed Train Daily" tells the story of the hundreds of short line railroads that were then in existence.

They varied from pulpwood haulers in the Deep South to mining roads high in the Rockies.

These short lines had a number of things in common in addition to light rail and a relaxed pace of operations. Most relied on a single locomotive, often a hand-me-down from one of the larger railroads, and almost always of antique vintage. They also carried a few passengers in a conveyance often older than the road's locomotive, usually a coach or combine, but occasionally the caboose. The hardy souls who traversed these rails traveled in a wood-stove-heated, open-window-air-conditioned wooden car from a time long past.

In many cases, the mixed train was it; the only train running on the railroad. Some of the larger short lines, however, operated freight-only trains in addition to the mixed. These could be mine runs in coal country, lumber on logging railroads, or mixed freight elsewhere. A few of these roads even operated a passenger-only train, often for mine workers or other laborers.

With the continuing recent release of good-running small locomotives it is easier than ever to model short lines in N scale. A number of other offerings, including wooden passenger cars and early-20th century freight cars certainly help. This article will offer some

**Figure 1:** The Bachmann 2-8-0 is a good example of short line motive power. With new couplers and some custom decals, it will proudly haul a mixed train daily.



**Figure 1**



suggestions for how to create your own mixed train.

## Small N Scale Steam

One of the first “next generation” N scale steam locomotives was Kato’s USRA 2-8-2 Heavy Mikado. This model has been around for a while and still is a great-looking, great-running locomotive. It is right at the upper end of short line prototypes in size, but more than a few lines had one or more of these classic designs on their roster.

Bachmann entered the small N scale steam market with a 2-8-0 Consolidation. It is now available in a DCC decoder-equipped version. Also a great runner, it is the perfect size for a struggling short line and many lines

relied on 2-8-0s right up to the end of steam (Figure 1).

Model Power makes a couple of locomotives that are perfect examples of the vintage power common on such short lines: a 4-4-0 American and a 2-6-0 Mogul. These both also run pretty well, especially considering the limitations of N scale size.

Depending on which version of these locomotives you find, you may need to perform some coupler conversions – since they will do some or all of the switching, they need reliable and compatible couplers on both ends. Micro-Trains makes conversion kits specifically for some of these, the others will need a little craftsmanship, especially on the pilot end.

## Passenger Cars

The key element of a “mixed train daily” is, of course the passenger accommodations. On the short lines so well-documented by Mr. Beebe, these were about as far-removed from the luxurious Pullman accommodations on Class I lines as it is possible to get. Most of the short lines made use of wooden truss-rod cars from the early 20th or even late 19th century. Fortunately, there are a number of options available to add these cars to the roster.

Previously produced by Roundhouse, Athearn now offers a set of 50-foot cars they label as “Overland”. These models are good examples of coaches and combines from this era. The set includes one each sleeper, observation, coach, and combine; the last of which is probably the best choice for your passengers.

The coach is also useful, especially on busy days or to get the miners to work in the morning, and is also available separately. Perhaps the sleeper and business cars can be sold to a museum, which is really where all these cars belong, even in 1947 (Figure 2).

Athearn also offers an older-prototype set labeled “Overton”. These 30-foot cars are actually based on a specific line – the Sierra Railroad, made famous by Hollywood. However, the 30-foot cars were less common than the 50-footers, and although prototypical, look a little toy-like.

Wheels of Time provides a more modern option with their Harriman cars, offered in both coach and full-baggage options. These 60-foot steel cars are from the early 1920s and provide an alternative for a somewhat better-off short line.

**Figure 2: The Athearn Overland coach and combine are good-looking models that will look even better after a little detailing..**



**Figure 2**





Figure 3



Figure 4

**Figure 3 (top):** These 40' boxcars from Atlas and Micro-Trains are good examples of cars that ran on mid-20th century short lines.

**Figure 4 (above):** Two-bay hoppers were commonly used to haul coal on short lines east of the Mississippi, as represented by these cars from Atlas, Bowser, and Micro-Trains.

A less-successful line might include only a caboose for passengers. There are a number of options, beginning with Micro-Train's wood car. However, substituting a caboose for the classic combine reduces the charm on any mixed train. There is still room for a wooden hack on the local.

All these cars are well-detailed, but can use some enhancements such as a smokestack for a coal stove heating system as well as interior detail, including a few (but not too many) passengers. Since the railroad will need only a couple, or perhaps only one car; there

ought to be plenty of time to apply such details.

Both the locomotives and the passenger cars will need to be re-lettered for your railroad. A producer of custom decals can help you decide between a whimsical (Gorre & Daphetid), family (Tom's Creek & Sayreville), or historical (Birmingham, Columbus & St. Andrews) name for your railroad.

## Freight Cars

While the charm of a short line is the mixed train, any profitability comes from delivering freight, not one or two

passengers daily. The proportion of car types will depend on the nature of the short line. Is it an Appalachian coal railroad? A Northwest timber-hauler? Is the primary industry a cotton mill or a turpentine factory? Whatever you choose, N scale offers a variety of early to mid-20th century cars.

Almost all boxcars of this era would be 40-foot designs with a mix of wood and steel construction. The USRA 40' wood double-sheathed boxcar, as offered by Atlas, was first built during World War I to a standardized design and was one of the first steel under-frame cars in wide service. Micro-Trains produces a very similar car. Atlas also offers a single-sheathed design as well as a wooden car rebuilt with steel sides. Such rebuilds would be among the newest cars on the railroad, since

many were modified during and immediately after WWII.

Other options include the Intermountain 1937 AAR 40' steel car, Deluxe Innovations 1944 AAR 40' version, Red Caboose 40' X-29 car as used by the PRR and other roads, and the similar Micro-Trains USRA steel car. Photos from the Beebe book show cars from Class I Railroads that interchange with or are located close to the short line, but also cars from all the way across the country. The mix of wood and steel cars is about 50:50, a ratio that helps represent the immediate post-WWII era (Figure3).

If your short line hauls minerals such as coal, it will need hoppers or gondolas. Judging from the pictures in Beebe's book, hoppers appear to be prevalent east of the Mississippi, and





Figure 5

**Figure 5: Here is a good start on a mixed train using a Bachmann locomotive, Atlas, Bowser and Micro-Trains cars and an Athearn combine.**

gondolas in the west. The hoppers are almost all two-bay cars. Fortunately, there are again a number of options. Bowser makes a PRR-prototype GLa, two-bay hopper which was among the first all-steel designs and used by many short lines. Atlas and Micro-Trains also make a variety of two-bay designs appropriate for the era. For roads located in the west, drop-bottom gondolas were the car of choice in mineral service, and both Trainworx and Micro-Trains make appropriate models. These cars were often on loan from a nearby Class I, so they can remain in the factory-supplied paint scheme (Figure 4).

Lumber is usually transported in some version of a flatcar, often with bulkhead ends. Walthers offers a log car with steel log bunks which would be a very new car for 1947. Walthers also makes a car with bulkhead ends, especially appropriate for pulpwood. Micro-Trains produces a disconnect log car (one which uses the logs themselves to connect the trucks) which would be appropriate for a backwoods lumber road any time in the first half of the 20th century. M-T even

provides the logs, although more realistic loads can be fabricated from straight twigs. Several manufacturers, including Atlas, Red Caboose, Micro-Trains, and Walthers, produce 40' or 50' flatcars that can haul logs with a little help from side-stakes crafted from scale stripwood.

Other cars seen on short lines include stock cars, tank cars, and occasionally reefers, especially to carry produce. Many companies offer a wide variety of these to choose from.

## Structures

One of the appealing features of a struggling short line is the antiquated and ramshackle structures both on and off the railroad. This is not the realm of gigantic brick engine houses and car shops, but rather of the single-stall wooden variety. Building a short line is a great opportunity to explore the world of craftsman and laser-cut kits, and to produce a layout that has a completely different look from a Class I mainline.

For the most part, railroad structures and industries will be of wood

construction, and a short line won't need many. Many manufacturers offer a variety of such kits.

Blair Line offers several small depots and railroad sheds, plus a small general store and wood grade crossings. Bar Mills also makes stations and small sheds, plus a small oil dealer if you like

tank cars. Branchline Trains makes company houses for mining towns, depots, and a selection of small industries. DPM makes resin town buildings: mostly brick that are appropriate for the business district. Grandt Line makes a plastic version of a company house – a great kit when you can find it. JL Innovative Design also makes small industries and

**Figure 6: These kits are just a small sample of the tremendous variety of laser-cut structures that can give a short line layout an out-of-the ordinary appearance.**



Figure 6



a variety of sheds. Micro Scale Models and Northeastern Scale Models both offer larger structures, one of which could serve as the road's key industry. The N scale Architect offers a selection of depots and other industries, including a big lumber mill. Republic Locomotive Works makes a number of small industries, as does Showcase who also offers a depot and a variety of smaller structures. Tichy makes a styrene water tower; you will probably need more than one (Figure 6).

## Track Plans and Operation

A short line trackplan can be as simple as an oval design with interchange on one side and the other end of the railroad on the other. The same approach can be used by placing an L-shaped design in a corner of the room. Both plans can use cassettes to interchange cars.

More elaborate designs can be U or N shaped and can even include a portion of the Class I interchange. Early diesels such as FTs can emphasize the difference between the two railroads. The line's light rail can be represented with Code 55 track on any plan. Code 40 is closer to scale but requires wheelsets with lower profile flanges.

A single operator can easily support a "mixed train daily". Operations are out-and-back, and intermediate stops can be facing-point or trailing-point. The facing-point industries are worked on the way back. Double-ended sidings provide a bit more flexibility. A run-around track is needed at each end of the road, but not

necessarily a turntable or wye. Although not often documented (perhaps because it is an "ugly" picture), locomotives often ran in reverse on the way home. That's another reason to put functional couplers on both ends of the locomotive.

Larger short lines did run more than one train daily, requiring the use of timetables and, most likely, train orders. A mining road might require an early-morning mixed to carry the miners to work, perhaps picking up a few hoppers on the way back. Mid-day could see a mail run and another trip to the mine(s), along with another train to serve other industries. The day ends with a return run from the mine, carrying passengers and coal (Figure 5).

## Summary

"Mixed Train Daily" is full of anecdotes reflecting the relaxed pace of a short line. An imaginative railroad president could make up a set of cards reflecting some of these events; stop for cows on track, wait for car loading to be complete, address grass fire along right of way.

The continuing expansion of available N scale products allows the creation of an interesting alternative to a modern Class I road. Although lacking unit trains and double-stacks, a short line offers a charming alternative to 21st century railroading for a single or small crew of nostalgic model railroaders.



# Remember when?



## October 2009

MRH back issues, always available!





# Model Railroad Hobbyist news™

June 2011



**Reader  
Feedback**  
(click here)



*The Old  
Yardmaster*



**The latest model railroad  
news, products, and events**

**The Hobby Manufacturers Association** estimates wholesale activity for the Model Railroad segment of the industry in 2010 was \$424 million. This represents about 29% of the hobby industry, which totaled \$1.48 billion. Other segments include Plastics and Die Cast at \$305 million, Radio Control at \$362 million and General Hobby at \$377 million. With the average retail markup ranging from 40% to 50% over wholesale, overall hobby revenue at the retail level is estimated at \$2.5 to \$3 billion. The study was conducted by the University of Louisville School of Business....

**Richard Steinheimer**, one of America's most widely recognized railroad photographers, died at his home in Sacramento, California on May 4, 2011. He was 82. Steinheimer was diagnosed with Alzheimer's disease in 2004 and suffered a stroke in 2007. Often called the "Ansel Adams of railroad photography," Steinheimer began his life's journey at the age of 15, shooting – with a Kodak Baby Brownie – equipment on the Southern Pacific mainline near his home in Glendale, California.

Steinheimer embraced an appreciation for the aesthetics of all locomotives – both steam and diesel. His work appeared regularly in railroad periodicals, and in 1963 Kalmbach Publishing produced his *Backwoods Railroads of the West*. His distinctive railroad photographs have appeared in more than 70 books. Between 1948 and 2001 *Trains Magazine* published over 400 of his photographs. Richard Steineimer's work stands as a tribute to both the photographer and his chosen subject. He is survived by his wife Shirley Burman, a published railroad historian and respected photographer in her own right...

**Meet Joe Rutter and his special student Brooklyn Marx.** Joe (left) is head of Special Education at the Owen Sound Collegiate and Vocational Institute in Ontario, Canada. He is also founder of the scale structure manufacturing company known as Full Steam Ahead. Brooklyn, an academically high achieving 11th grade student, was born with Spinal Muscular Atrophy (SMA), a neuromuscular disease that progressively causes weakness in her muscles. She has never walked, but manages to get around in her power wheelchair. Joe says that while Brooklyn has many tools and equipment at her disposal, they have never found a computer or device that she can personally operate – except the iPad. While Brooklyn can use an iPad at school, she does not have a personal one of her own that she can keep at home. Rutter has designated Brooklyn "Model of the Month" and is selling a laser-cut structure kit for \$32 with \$25 from each sale going toward purchasing an iPad for Brooklyn. Details about the kit can be found in the HO scale new products section on [page 94...](#)



**Jeff Adams of Motrak** is currently developing HO scale coal loads for Atlas Bethgons and Blackstone's new drop-bottom gondola. Also in the works are sugar beet loads for several brands of open cars....

**Happy 50th birthday to Bowser** and the English family of Mountorsville, Pennsylvania. On May 1, 1961, Lewis and Shirlee English purchased the original Bowser line of HO scale steam locomotives then based in Redlands, California. Everything was trucked across the country to the family home in Pennsylvania. Sales grew steadily over the years, augmented by the acquisition of several familiar brand names including Penn Line, Cal Scale, Cary Locomotive Works, Selley Finishing Touches, Pennsylvania Scale Models, tooling for selected Pittman



motors, and some model locomotives of the old Varney line. A major acquisition was completed in 2004 with the purchase of Stewart Hobbies. Although Lewis and Shirlee are still active, their son Lee is now the driving force behind the thriving family enterprise...

**Merchants Despatch Transportation**, the giant Chicago-based refrigerator car company owned by the New York Central, is the subject of a forthcoming book by Roger Hinman. No pricing or release date have been announced but we expect to learn more details soon from Signature Press...

**Bob Chaparro** wants to hear from Californians living between Paso Robles and Santa Maria who are willing to host home layout tours during this year's Central Coast Railroad Festival. The event runs from October 6 through 10. If interested please contact Bob at [chiefbobbb@verizon.net](mailto:chiefbobbb@verizon.net)...

**We are pleased to learn that Glenn Guerra** of Mullet River Model Works has returned to good health and is back in his shop developing more new O scale goodies. First up will be a T&NO caboose followed by a Southern Railway caboose...

**George Huckaby**, acknowledged traction guru and founder of Custom Traxx, is currently developing HO decals for the new KND Enterprises cast-resin body shell....

**The 1/2" scale** windows, doors and other architectural components developed by the late Russ Simpson are now being marketed by Grandt Line. Visit [www.grandt-line.com](http://www.grandt-line.com) for details...

**Emmett Brannan, owner of Cache Creek Scale Models**, has given notice that he intends to focus on On30 exclusively. Influenced, no doubt, by the weak economy and rising cost of materials, Emmett says all HO, HOn3 and HOn30 items in his line will be history after January 15, 2012...

**Jason Shron is on a rail tour across Canada**, personally introducing Rapido's new HO scale model of "The Canadian" to hobbyists in more than 20 cities. Between May 30 and June 30, Shron, president of Rapido, will visit hobby stores in Quebec City, Halifax, Moncton, Montreal, Mississauga, Hamilton, Sudbury, London, and Ottawa. Continuing out west, Jason's itinerary includes Winnipeg, Red Deer, Calgary, Edmonton, and Vancouver. Visit [www.rapidotrains.com](http://www.rapidotrains.com) for the hours and hobby stores on Jason's rail tour...

**No dates announced yet but David Rygmyr of Northwest Short Line** says he is making good progress on developing replacement steel bevel gears for Bachmann's HO and On30 Climax locomotives...

**Clover House has been purchased** by Tom and Kathy Dempsey of Spokane Valley, Washington. Word of the change came from founder Russ Clover who said the relocation of the business from California to Washington should be completed by June 1st. The new address is P.O. Box 215, Veradale, WA 99037-0215 or visit [clover-house.com](http://clover-house.com)...

**A Santa Fe 50' class FE-24 auto boxcar** is the next HO scale resin kit coming from Sunshine Models. We should have full details for you next month...

**A free Amtrak poster** is available from Kato USA who commissioned the art piece to commemorate Amtrak's 40th birthday. The poster shows the various phases of the Amtrak fleet through the past four decades. The printable poster can be downloaded free from [www.katousa.com](http://www.katousa.com)...

**Three weeks of intense model railroad activity** are scheduled in Northern California this summer. Things kick off June 25 with an RPM meet in Richmond, followed on July 3-9 by the NMRA's National Convention in Sacramento with several simultaneous events including an RPM meet July 6 and 7, the National S Gaugers Convention, and the National Train Show July 7 through 9. The Bay Area Garden Railway Society has scheduled tours of more than 50 garden layouts from July 10 through 14, and the 2011 National Summer Steamup of small-scale live steam equipment will be conducted at the old McClellan Air Force Base near Sacramento. If you feel the need for a break from miniatures, step into the California State Railroad Museum in Sacramento, one of the finest historical presentations in the nation...

Now let's talk about new products...

---

## NEW PRODUCTS FOR ALL SCALES



**City Classics** ([cityclassics.fwc-host.com](http://cityclassics.fwc-host.com)) is selling these plastic corner braces for reinforcing building corners and to help keep walls square during construction. These handy little braces can also be used to support floors and roofs. A standard package, priced at \$6.98, includes 12 inside and 4 outside braces.

---

## O SCALE PRODUCT NEWS

Here is a preview look at the handcrafted pilot model of an O scale Great Northern 2-8-2 class O-8 Mikado being imported by **3rd Rail division of Sunset**





**Models** ([www.3rdrail.com](http://www.3rdrail.com)). The brass model will be available with a choice of either open or closed-style cabs. Both 2-rail and 3-rail versions will be available at a base price of \$1499.

**Overland Models** ([www.overlandmodels.com](http://www.overlandmodels.com)) is accepting reservations through the end of June for an EMD SD70Ace/SD70M-2 locomotive. The O scale model will be handcrafted by A-Train, a new Korean firm formerly known as Ajin...



**Atlas O** ([www.atlaso.com](http://www.atlaso.com)) is planning another run of its PS-2 3-bay covered hopper cars. Pullman Standard introduced the car as a 2-bay hopper in 1940, however, the design proved to be so popular that the builder increased the car's capacity and added a third discharge bay in 1953. This later version is the car represented by the Atlas-O model. Features include separately-applied ladders, brake wheel and brake line detail, and roller bearing trucks with rotating bearing caps. Road names on this release will include Atlantic Sugar, Burlington, Chicago & North Western, Conrail, Erie, and Santa Fe. An undecorated version will also be offered. The ready-to-run O scale model will be available for 3-rail operation at \$44.95 or 2-rail at \$47.95. Delivery is scheduled for fall of 2011.

**Sidetrack Laser** ([www.sidetracklaser.com](http://www.sidetracklaser.com)) is selling this On30/On3 scale Water Tower that Larry Cantrall says was inspired by a similar structure in eastern Oregon that continues to serve steam locomotives of the Sumpter Valley



Railroad. The craftsman-type kit features laser-cut walls, corrugated metal roofing material, detail parts, and a Grandt Line spout kit. The kit sells for \$62.95 and has a footprint of 4" x 4" when assembled.

## HO SCALE PRODUCT NEWS

**Accurail** ([www accurail.com](http://www accurail.com)) has introduced

new paint schemes on several boxcars including a Delaware & Hudson 50' welded-side car with a single sliding door built in 1969, a Florida East Coast 50' steel combo-door car from the 1964-74 era, and as seen here, a twin pack of Union Pacific 40' steel boxcars that includes a 1947-era single-door and 1959-era double-door car. The twin pack has an MSRP of \$26.98. The D&H and FEC cars are \$13.98 each.



**Alpine Division Models** ([www.alpinemodels.com](http://www.alpinemodels.com))

is selling Orange Vista Packing House, a railside industry structure composed of laser and die-cut mat board. In addition to the basic walls and roof,



other structural components in the HO scale kit include corrugated and paneled doors, a loading dock, plastic curved-truss roof supports, and plastic window glazing material. Finishing details include metal roof ventilators, smoke jacks,



an electrical service box, fire extinguisher, 2-wheel dolly, push-brooms, two billboards, a roller conveyor belt, interior doors, orange crates with labels, and reinforcing stars for aging masonry walls. The finished structure has a footprint of 17" x 4.5" plus a 3" x 2" side building. Orange Vista Packing House has a list price of \$40.95.

**Athearn** ([athearn.com](http://athearn.com)) has scheduled another release of its Genesis series 89' F89-F Long Runner flat car in September. Decorated for TTX/TTEX, the HO scale models represent prototypes built by Bethlehem Steel Company during the 1960s. The cars were subsequently modified and adapted to various types of service and loadings ranging from TOFC to autoracks to structural steel loading. Athearn's ready-to-run model features a heavy die-cast underframe, formed wire brake plumbing and 70-ton ASF Ride-Control trucks with rotating bearing cap. A minimum radius of 22" is recommended for reliable operation. The cars will be available in six road numbers and have an MSRP of \$79.98 each.



Athearn has added Union Pacific and Seaboard Airlines to its list of GP9 road names. They are due to arrive in January and are in addition to the PRR and SP Black Widow units previously announced for delivery in December. Features of the highly-anticipated ready-to-run Genesis models include Celcon handrails, separately-applied wire grab irons, etched radiator intake grilles, etched radiator fan grilles, nub-style walkway tread, window glazing, separate air tanks, and operating microbulb headlights. Athearn says details specific to a particular prototype phase will include such items as grilles, fuel tanks, fans, dynamic brakes, battery doors, sunshades, MU stands, truck side frames, and placement of air horn, bell and headlights. GP9s with factory installed Soundtraxx Tsunami™ and DCC will have an MSRP of \$279.98. Non-sound units will be DCC-ready using Quick Plug™ technology.

Later this month Athearn is scheduled to release a well-detailed 65'6" mill gondola decorated for Rock Island, Pennsy, Erie, B&LE, and Santa Fe. The



HO scale model will have interior detailing, metal grab irons, a separately applied brake wheel, and ends that can be lowered for long loads. The ready-to-run gondola is priced at \$25.98 and will also be available with a pole load at \$35.98.



In July, Athearn will begin delivering a Genesis series SD70M-2 diesel locomotive decorated for Norfolk Southern, Canadian National, and Florida East Coast as shown here. Partially assembled but undecorated units will also be available. Features of the HO scale ready-to-run model include a full-height nose door, rectangular windshields, dynamic brake equipment mounted at the rear of the long hood, and the familiar flared radiators with twin fans. Additional features include dual flywheels, all-wheel drive and electrical pick-up, cab interior including a video camera (non-working), correctly sized operating ditch lights, MU hoses, coupler lift bars, train line air hoses, safety tread walkways, etched see-through grilles, and wire grab irons. Each road name will be offered in four numbers with standard DC at an MSRP of \$198.98, and with both sound and DCC at \$298.98.

Athearn will also have an FMC 5347 boxcar available in December decorated for Atlanta & St. Andrews, PanAm Railways, USAX-US Army, and Railbox in the early scheme as seen here. The HO scale ready-to-run cars will have an MSRP of \$24.98 each.



Additional HO scale items coming from Athearn in December include an SW1500 switcher decorated for Conrail-Q, Indiana Harbor Belt, Illinois Terminal, and Union Railroad; an ex-MDC 2-window caboose upgraded with a new underframe, steps, end rails, and window glazing decorated for C&E, Conrail, Missouri Pacific, and Penn Central; and an SD40 from upgraded RPP tooling decorated for Union Pacific, KCS, Chessie/Western Maryland, and Duluth, Winnipeg & Pacific.

**Bar Mills** reports there is an error in sign panels #11, #12 and #13 of its HO scale Sweaty Betty kit. Anyone who has purchased the kit can request a replacement by



sending an email to Art Fahie at [barmillsmodels@yahoo.com](mailto:barmillsmodels@yahoo.com). Be sure to include your name and postal address.

---



**Blackstone Models** ([www.blackstonemodels.com](http://www.blackstonemodels.com)) has made a second release of its HO scale D&RGW 800 series drop-bottom gondola with new road numbers. Paint schemes include Moffat Tunnel herald, Royal Gorge Route herald, and Flying Grande lettering as seen here. Choices of finishes for the ready-to-run narrow gauge models include freshly-shopped or lightly sun-faded at \$54.95 each, and fully-weathered at \$59.95 each.

---



**ExactRail** ([www.exactrail.com](http://www.exactrail.com)) has released new road names for both early and late renditions of its HO scale 72' deck plate girder bridge. The early version has wooden guard timbers, plank walkways and handrails. It is priced at \$36.95. The late version sells for \$44.95 and has wooden guard timbers, etched metal walkway and cable handrails. This release offers the late edition painted black and decorated for CSX, BNSF, and SP. Early versions painted black are available for B&O, PRR, and Milwaukee Road. Both versions of the bridge are also available without lettering painted either black or silver.

---

Here is a look at an early shot of the HO scale Baltimore & Ohio class M-53 wagon-top boxcar **Fox Valley Models** has scheduled for release later this month. An N scale version is also under development. See page 109 of the March 2011 edition of MRH for additional details or visit [www.foxvalleymodels.com](http://www.foxvalleymodels.com).

---



A limited number of these three HO scale structures from **Full Steam Ahead** will be available in one kit for just \$32 plus \$7 postage. The kit, which will be available by mid-June, is being offered as part of a special program to fund the purchase of an iPad for a young lady named Brooklyn Marx (see story on [page 90](#)). Full Steam Ahead will donate \$25 from each purchase toward funding the iPad and special accessories. Payment can be by money order, check or Paypal. If you have any questions or plan to order the kit, please contact Joe Rutter at [joe@fullsteam-ahead.ca](mailto:joe@fullsteam-ahead.ca).

---

**Funaro & Camerlengo** ([www.fandckits.com](http://www.fandckits.com)) has an HO scale resin body kit for this Jones & Laughlin 20,000 gallon steel coal-tar tank car with AB brakes available





at \$49.99. Also new from F&C is a 50' steel-service mill gondola. The kit is priced at \$33.99 and features tabbed side/end construction. It is available for Union Railroad and McKeesport Connecting Railroad.

---



**InterMountain Railway** ([www.intermountain-railway.com](http://www.intermountain-railway.com)) reports that bringing the SD40-2W diesel to completion has been a frustrating and complicated project. The good news is that production on the newly-tooled model is finally underway with photos of the preproduction samples expected within a few weeks. Delivery of production quantities has been scheduled for July/August. The initial release of the SD40-2W will include four versions of the CN locomotives with unique stairwells, 4-window safety cab, snow shields over the air inlets, wire grab irons, operable ditchlights, and Kadee® couplers. Non-sound models (\$139.95) will have a DCC decoder capable of operating on analog DC or DCC. Sound models (\$219.95) will be fitted with a SoundTraxx® Tsunami® DCC decoder. Liveries will include Canadian National (pictured here), Canadian National – Continent, CN.CA, and Canadian National without dynamic brakes.

---



**International Hobbies** ([www.interhobmodels.com](http://www.interhobmodels.com)) is an American dealer that stocks a large selection of European and Asian models such as this handsomely decorated British Railways class A1 4-6-2 "Toronado." The Bachmann OO/HO scale DCC-ready (8-pin socket) model is listed at \$179.50.

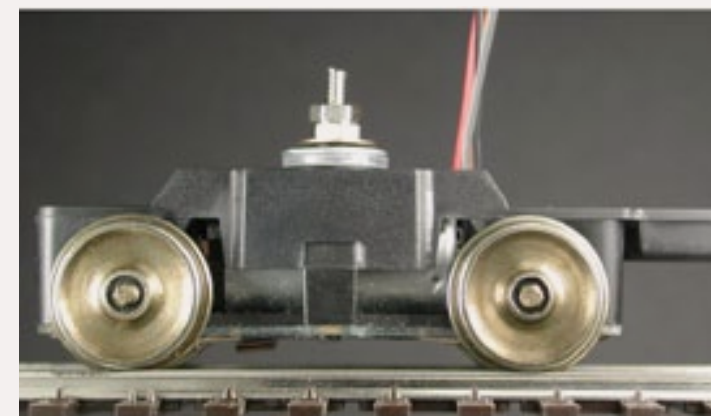
---



**Kadee Quality Products** ([www.kadee.com](http://www.kadee.com)) is now selling injection molded grab irons specifically designed for applications on ends and sides. The end grab irons (left and center – top view) are \$5.95 for four pair. The side grab irons (right) are \$5.95 for a package of 16. Both types are available pre-colored in either red oxide or boxcar red. The end grabs also come in black.

Next month Kadee® will release an HO scale Delaware & Hudson 40' boxcar that follows a prototype built in 1950. The assembled model has a 10' Youngstown door and comes with ASF A-3 Ride Control HGC trucks. It is priced at \$30.95. Scheduled for arrival in August is a 50' BAR boxcar equipped with a 9' Youngstown door and Barber S2-3 HGC trucks. It is priced at \$35.95.

---



**Northwest Short Line** ([www.nwsl.com](http://www.nwsl.com)) has expanded its Stanton series of self-powered trucks with the introduction of model 1210. The new 1210 is the smallest unit in the HO series, and comes in wheelbases of 6'6" or 7'. It uses a 12 x 15 mm motor with rare-earth magnets, and comes with four color-coded wires ready for direct

hookup to a DCC decoder or standard DC input. The 1210 has a self-resetting fuse for protection against overheating, and the four individual bearings are adjustable for fine-tuning the mesh between the worms and the axle gears. Model 1210 is available with 33" or 36" wheels. It can also be ordered with 30" wheels, but the fuse feature is not available on a unit that small. Although designed for HO standard gauge, the model 1210 can be ordered with wheelsets for S, On30, and On3 scales. A three-axle version will be available soon.

---

**Mike Pannell** is selling an HO scale resin kit for a vintage Pullman day-car (Pullman plan 320) as delivered to the DT&FW; Union Pacific, Denver & Gulf





Railway; and Colorado & Southern Railway in 1887. Cars built to plan 320 were also delivered to C&NW in 1887 and 1888. The model project is in conjunction with restoration currently underway in Cheyenne on the vintage prototype Car 57. The principal resin components in the craftsman-type kit include the body shell, roof, and bolster-platform assemblies. White-metal fittings include stacks, vents, railings, gas tanks, and queen posts. Glazing material and wire for truss rods are included. The body kit is \$55 plus \$5 shipping. Appropriate trucks are available at \$12 pair. Decals that include appropriate car numbers are available for DT&FW, Union Pacific Denver & Gulf, and Colorado & Southern at \$6 per road name. Order from Mike Pannell, 1120 Cactus Hill Road, Cheyenne, Wyoming 82001. Phone 307-221-2371 or email at [michael.pannell@btintemet.com](mailto:michael.pannell@btintemet.com).



Here is an early look at the initial test shots of the Skyline dome, Budd baggage, and Park dome-observation car from **Rapido's** ([www.rapidotrains.com](http://www.rapidotrains.com)) forthcoming HO scale model of The Canadian, the famous cross-country train operated by the Canadian Pacific.

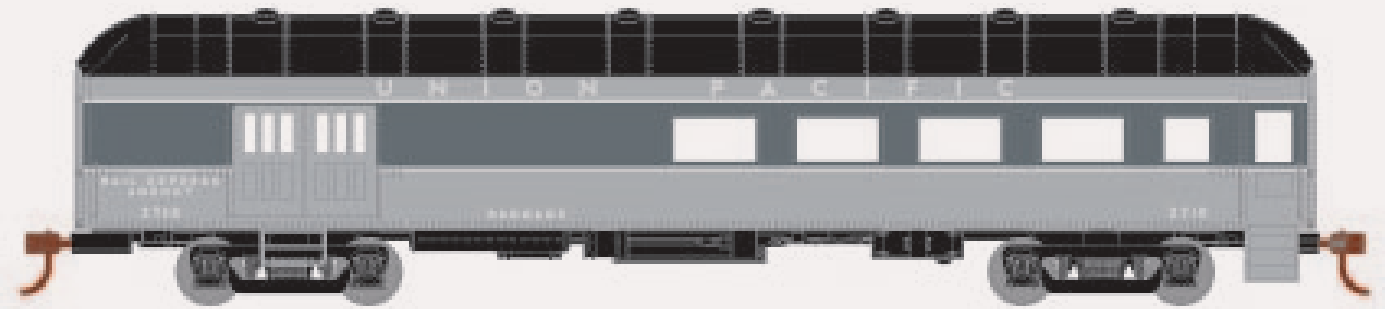


Shown to the left is the four-slide base used to produce bodies for The Canadian. In the center is the central core that forms the inside of the Park series observation car. The slides for the end on the left, the near side and roof have been removed. Only slides for the right end and far side of the car are shown in place.

**River Point Station** ([www.riverpoint-station.com](http://www.riverpoint-station.com)) reports it will begin delivery of its 2007 Ford Expedition EL SSP emergency vehicle during the 3rd quarter of this year. The HO scale ready-to-run model will have



5-spoke wheels and come with emergency vehicle details including a simulated LED light bar, tinted clear window inserts, and pre-colored interiors. The models are molded of ABS plastic and have a simulated chrome-finish on the grille. Models decorated for specific owner/operators are \$22. Painted models without lettering are \$19 each.



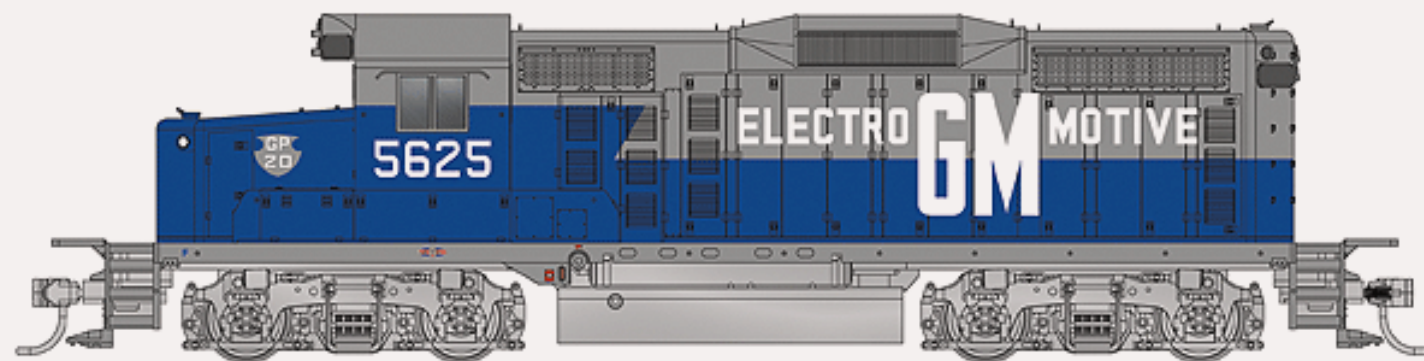
**Roundhouse division of Athearn** ([www.athearn.com](http://www.athearn.com)) has set a November release date for a series of six Harriman-style arch-roof passenger cars previously sold by MDC. Initial road names will include Canadian Pacific, New York Central, Southern Pacific (Daylight scheme) and Union Pacific. Equipment will include a baggage car, RPO, combine, coach, diner, and open-end observation. Upgrades to the original tooling include separate grab irons and a removable roof held in place with magnets. The HO scale ready-to-run models will have an MSRP of \$39.98 each.



**Tangent Scale Models** has released three new decorating schemes for its HO scale ready-to-run model of the 70-ton drop-end welded class G31B gondola that ACF built for the Pennsylvania Railroad beginning in 1948. The new liveries include a PRR car in the 1959 scheme of freight-car red and a late Shadow Keystone herald, Atlantic Coast Line in the original 1952 black paint with distinctive white delineators along the bottom of the car, and a Wabash car as repainted in 1962 in freight-car brown with white lettering. Tangent reports that the colors, lettering placement, and typefaces have been thoroughly researched to insure a faithful replica of the prototype. Other features include scale-sized tie-downs, see-through tie-down holes, wire grab irons, wire coupler lift bars, full interior detail, air hoses, road-specific brake wheels (Universal or Equipco), and 70-ton ASF A-3 Ride-Control trucks with metal wheels. The cars are priced at \$30.95 each and come with metal Kadee® couplers. Multiple



road numbers are available and discounts are offered for quantity purchases. Other road names and an undecorated model are also available. Visit [www.tangentscalemodels.com](http://www.tangentscalemodels.com) for ordering information.



Walthers ([www.walthers.com](http://www.walthers.com)) has a Proto 2000® EMD GP20 scheduled for release late this year. Paint schemes will include CB&Q, Norfolk Southern, Cotton Belt, and an EMDX-ElectroMotive Division demo unit. Walthers says the drive mechanism will feature a 14:1 gear ratio using precision helical gears for quieter operation. Prototypical details of this low-hood diesel include dynamic brake housing, flared-top 48" front and rear radiator fans, winterization hatch, Leslie S-3L horn, and cab-mounted headlights. Models equipped with sound and DCC will have a list price of \$299.98. Standard DC models will be available at \$199.98.



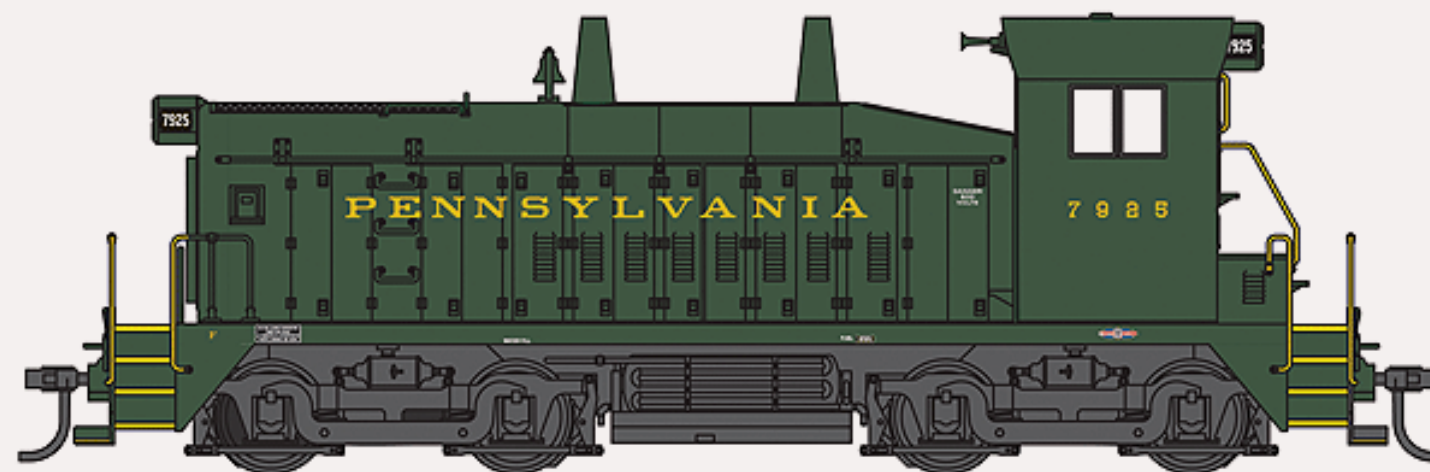
Walthers will deliver HO scale wood-sheathed 2-bay war-emergency hopper cars decorated for ATSF, Baltimore & Ohio, N&W, and CB&Q in late December. Features of the ready-to-run Platinum Line™ cars include a die-cast metal underframe, individual grab irons, detailed brake equipment, and metal wheel sets. Single cars will have an MSRP of \$29.98. A 3-pack with three different road numbers will be priced at \$89.98.

Walthers will produce eight HO scale Santa Fe 1956-era El Capitan passenger cars featuring real metal stainless-steel plated finish. Additional features include tinted windows, factory-installed grab irons, full underbody detail, and

correct trucks. A 24" minimum radius is recommended. Availability is expected in late December or early January. The El Capitan cars will include a 73' baggage car, and a 63' railway post office car, at \$69.98 each, and an 85' baggage-dormitory car with rooftop transition shroud at \$74.98. The Hi-Level cars are all 85' long and are priced at \$79.98 each. They include a 68-seat step-down coach, a 72-seat coach, a diner, a "Sky Lounge," and a 68-seat step-down coach with a tail sign.

A limited edition of nine El Capitan cars will also be available with special factory-installed enhancements including interior lighting, Preiser figures, and a lighted tail sign on the last step-down Hi-Level coach. The limited-edition set will consist of a baggage car, RPO, a baggage-dormitory car, and six Hi-Level cars. Each car will have a numbered certificate of authenticity. The nine-car set is priced at \$964.64 with production limited to 350 sets. For additional details visit [www.walthers.com](http://www.walthers.com).

To lead the El Capitan, Walthers will produce Proto 2000® Santa Fe warbonnet EMD F7A and F7B diesels with prototype-specific details and plated real-metal finish to match the El Cap set. The MSRP of standard DC versions will be \$169.98 each and \$329.98 for an A-B set. DCC versions with sound will be offered at \$259.98 each and \$479.98 for an A-B set.



Walthers has scheduled more of its popular Proto 2000® SW9 diesel switchers for arrival in September. The HO scale ready-to-run models are based on Phase 3 prototypes as they appeared from approximately 1957 to the early 1960s. In addition to the Pennsy version shown here, other schemes will include Baltimore & Ohio, Burlington Northern, and Milwaukee Road. Basic features include a die-cast chassis, 5-pole skew-wound motor with machined brass flywheels, cab interior with crew, see-through foot boards, and LED headlights with constant and directional circuitry. Standard DC models will have an MSRP of \$169.98. Models with QSI® sound and DCC will be priced at \$259.98.





For those operating on a somewhat smaller budget, Walthers will release an EMD GP9M diesel locomotive in December with an MSRP of just \$54.98 (see picture). Road names on this no-frills HO scale ready-to-run model will be C&NW, CP, Farmrail, Pittsburgh & Ohio Central, St Maries River Railroad, and South Branch Valley.

**Yardbird Classic Trains** ([www.yardbirdtrains.com](http://www.yardbirdtrains.com)) offers repairs, replacement parts, detail parts, and full restoration service for Mantua, Tyco, Bowser, Roundhouse and other vintage brands of HO scale motive power. Custom building, detailing, and kit-building services are available, as well as painting, lettering, and weathering.

## N SCALE PRODUCT NEWS



A new run of **Athearn's** ([athearn.com](http://athearn.com)) PS-2 2893 cu. ft. covered hopper has been scheduled for December with three road numbers each for Burlington Northern, D&RGW, Erie, and MCOX/CEMEX. The ready-to-run N scale cars feature machined, non-magnetic metal wheelsets. They will have an MSRP of \$19.98 each. An HO version of the same car is also scheduled for release in December.

Here is a close-up of some of the details on **BLMA's** ([www.blmamodels.com](http://www.blmamodels.com)) N scale Trinity 53' class RAF53C spine cars scheduled for release to dealers later this month. Decorating follows the 1997-built TTX 5-unit prototype. The ready-to-run model features a die-cast metal frame and dozens of separately applied plastic and etched-metal components. The cars come with Micro-Trains® body-mounted couplers and ride on BLMA's new 70-Ton ASF Ride Control trucks with metal wheels.



**Dennis Henry** ([www.brasscarsides.com](http://www.brasscarsides.com)) is taking reservations for N scale etched brass sides for Northern Pacific lightweight 56-seat coaches 586-587. The sides replicate prototype cars built by Pullman-Standard in 1954 and are designed to be used with American Limited Models N scale core kits. Reservations are required and only enough sides to fill orders will be produced. Availability will be toward the end of June with prices expected to be about \$24. Anyone interested in these sides should contact Dennis Henry at [dchenry@gac.edu](mailto:dchenry@gac.edu) without delay. HO scale versions may also be produced if sufficient reservations develop. They would be priced in the \$34 range with production toward the end of July.

Reservations are now being booked by InterMountain for **Centralia Shops** all-new N scale railway post office car. Delivery is expected this winter with the first 12 road names to include C&NW, PRR, NYC (20th Century scheme), NYC (post-war scheme), Penn Central, Illinois Central, Great Northern, SP (COSF), SP (gray), Milwaukee Road, Illinois Central, and Union Pacific. Two numbers will be offered for each road except the Milwaukee RPO will come in one number only. The cars will have a list price of \$49.95 and will feature wire grab irons, interior lighting, and Micro-Trains® trucks and couplers. Centralia Brand products are marketed by InterMountain Railway ([www.intermountain-railway.com](http://www.intermountain-railway.com)).





**Fox Valley** ([www.foxvalleymodels.com](http://www.foxvalleymodels.com)) reports good progress is being made toward developing a series of N scale Milwaukee Road rib-side cabooses. The injection molded bodies will feature etched-metal running boards, wire grab irons, and Micro-Trains® body-mounted couplers Both straight-frame and drop-frame equalized trucks with FVM metal wheel sets will be offered as appropriate to the era. The initial release is due in September with the distinctive cabooses in their 1939-1941 appearance with a high bay-window that extends up to the letter board, straight-frame equalized trucks and both the original and black roof scheme, the latter having a Milwaukee Road herald below the bay window. October will see the arrival of the 1946-era cabin cars featuring a lower bay-window in both paint schemes. Part three of this initial run is scheduled to arrive in November, and will cover the 1951 version with low bay-window, drop-frame truck, and both paint schemes. The N scale ready-to-run models will have an MSRP of \$32.95 and will be offered in two road numbers.

**Intermountain** ([www.intermountain-railway.com](http://www.intermountain-railway.com)) has a number of new N scale freight cars coming later this summer including a class R-40-23 reefer at \$19.95, each decorated for PFE (double herald), PFE (black & white double herald), PFE (modern gothic), Northern Pacific, Western Fruit Exchange, and Milwaukee Road. Also a 1937 AAR 40' boxcar at \$21.95 for New York Central, Virginian, M&StL, Nickel Plate Road, Northern Pacific, SAL, Monon, and Maine Central. A 50' AAR single-door boxcar at \$19.95 each is scheduled to arrive in July or August for New York Central (jade green), ATSF, CB&Q, Southern Pacific, Pennsylvania Railroad, and Grand Truck Western. All cars listed will be available in multiple road numbers.

Due from **Kato USA** ([www.katousa.com](http://www.katousa.com)) in September is a new run of N scale California Zephyr cars with new names and numbers.



These classic cars should pair nicely with Kato's August run of D&RGW and Western Pacific EMD F3A and F3B locomotives we mentioned here last month. Also due from Kato in September is a GE Phase III Heritage P42 unit decorated as Amtrak's 40th Anniversary locomotive #145.

### Micro-Trains Line®

([www.micro-trains.com](http://www.micro-trains.com)) has a 4-pack of N scale log cars coming in November. The quartet will be priced at \$64.95, with each car featuring a load of logs. Other projects underway at M-T include the release of more circus equipment decorated for Ringling Bros. and Barnum & Bailey™ including an FP7 diesel locomotive in two road numbers due to arrive this month along with a 3-pack of circus sleeper cars. July will see the availability of a 3-pack of front-end equipment specially fitted for circus use including one stock and two animal/supply cars. An August delivery date has been set for a 4-4-0 steam locomotive decorated for Ringling Bros. and Barnum & Bailey™. The FP7 and steam locomotive are both sourced from Model Power®.



**Tichy Train Group** has a new ready-to-run 4-car wreck train. Priced at \$99.95, the N scale set includes a crane, boom car, tool car, and crew's car. The cranes are all painted black with a variety of schemes applied to the other three cars. Road names include Southern Railway (black boom car, oxide red tool car, and Pullman green crew car), Southern Pacific (all gray), Pennsylvania (all yellow), B&O, Great Northern, and NYC (all oxide red), Santa Fe, and Union Pacific (all silver). The models come with Micro-Trains® trucks and couplers. Tichy brand products are marketed by InterMountain Railway ([www.intermountain-railway.com](http://www.intermountain-railway.com)).



**Trainworx** ([www.train-worx.com](http://www.train-worx.com)) is scheduling a November delivery date for an N scale P-S 85' flat car with straight side sills (previous releases all had fishbelly sides) decorated for Transport Leasing. The new release will include five 40' drop-frame high-cube trailers decorated for L&N Family Lines, Frisco, Norfolk & Western, XTRA Lease, and Southern Railway. Each scheme will be available in six road numbers.



**Walthers** ([www.walthers.com](http://www.walthers.com)) has released a limited run of Alco RS-2 diesel locomotives in its Proto N™ line. In addition to an undecorated version, the ready-to-run locomotives will be available in two road numbers each for Green Bay & Western (red), New Haven (McGinnis orange), and New York Central. The N scale model comes ready for standard DC operation with all-wheel drive and electrical pickup, dual machined flywheels, Accumate® knuckle couplers, and directional headlights with constant Intensity. It has a list price of \$99.98.

Walthers will release a group of Trainman 50'6" boxcars late next month with a list price of \$13.95 each. The ready-to-run N scale models are based on a series of 5,400 cars ACF built beginning in 1974. Spotting features include non-terminating corrugated ends, diagonal paneled roof, and a 10' sliding door (non-operating). Paint schemes will include Burlington Northern (cascade green), Green Bay & Western (yellow), HCRC-Hillsdale County (green), Meridian & Bigbee (brown), Union Pacific (yellow), Vermont Northern (yellow and black), CSX (blue), and Railbox (yellow and black).

Another run of N scale 70' baggage-express cars is due later this month from **Wheels of**



**Time** ([www.wheelsotime.com](http://www.wheelsotime.com)). Paint liveries on the ready-to-run models will include B&O (merged scheme), Canadian Pacific, CB&Q, Frisco, Missouri Pacific (Jenks scheme), Norfolk & Western (Tuscan), Southern Pacific (ex EP&SW), Wabash (COSL), and Northern Pacific. Decorated cars will be priced at \$42.89 each. An unlettered car in Pullman green with a black roof will also be available at \$40.99. The D&RGW car pictured is from a previous production run.

## NEW DECALS FOR ALL SCALES

**Bluff Creek Trains** is selling decal sets for Fort Dodge Line. Each set contains two decal sheets with color inserts. Sets for N scale are \$10, HO sets \$12, and O scale decal sets are \$18.50. Add a shipping fee of \$1.95 for orders up to four sets. Send orders to Bluff Creek Trains, P.O. Box 35, Pilot Mound, Iowa 50223.

**Craig Harrison** has several variations of HO scale decals for 1946-1976 era streamlined passenger cars of the Richmond, Fredericksburg & Potomac Railroad. The lettering sets are available in aluminum, Dulux gold, and black. Each set provides road name, car names, and numbers for any of the 38 lightweight streamlined passenger cars operated by the RF&P. Each Harrison lettering set includes car information and lettering instructions. The sets are priced at \$5 each or two for \$9. Add \$1.44 per order for waterproof shipping and postage. They may be ordered by sending a Money Order (only) payable to Craig A. Harrison, 782 Valley Street, Vauxhall, New Jersey 07088-1225.

New decals from **Jerry Glow** (<http://home.comcast.net/~jerryglow/decals/decals.html>) include HO scale sets for a SLSF-Frisco USRA rebuilt boxcar (designed for an Atlas or kit-bashed Tichy model), M&StL stockcar (for a modified Proto 2000® model), Northern Pacific postwar 40' boxcar (for a modified Branchline model), Armour reefer in either the original or billboard style, NYC USRA 2-bay hopper car, and both TRAX and PCX meat reefers leased to Armour.

**Microscale Industries** ([www.microscale.com](http://www.microscale.com)) has N and HO scale lettering sets for New York Central stainless steel passenger cars, Western Pacific steel cabooses, CGW early and late cabooses, Milwaukee Road covered hoppers, and Burlington Northern ACF/Pullman-Standard 2-bay covered hoppers. The last two items are also available in O scale. Also new are N scale decals for Trailer Train 50-, 60-, 68-, 85-, and 89' flat cars.





**Micro-Mark** ([www.micro-mark.com](http://www.micro-mark.com)) has introduced decal sheets with patterns of resin-deposited rivets, louvers and grillwork. The rivets come in several different patterns in both curved and straight lines. They are available in both HO and O scale at \$14.95 each..

## About our news and events editor



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

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

## Briefly noted at press time...

... ExactRail will soon announce release dates on three new HO scale freight cars including a Magor-built 4750 cu ft covered hopper at \$44.95, a Greenville 65' corrugated-side mill-service gondola at \$34.95, and an FMC-built 4000 cu ft gondola at \$22.95. We'll have complete details for you, including road names for each model, in our July report. Also coming from ExactRail is a rerun of its Platinum series Greenville 60' boxcar decorated for DT&I, Penn Central, Conrail, CSX/NYC, and Norfolk Southern.

... Pennsylvania Railroad wagon-top auto and boxcars, and Part 3 of General American Airslide covered hoppers are featured articles in Volume 22 of the Railway Prototype Cyclopedia. Until June 11, 2011, the new volume is available at \$24 postpaid to U.S. address. Missouri residents add \$1.90 state and local sales tax (\$25.90 total amount). For addresses outside the U.S., add \$6 (Canada) or \$12 (Europe and Australia). Send check or money order to RP CYC Publishing Co., P.O. Box 451, Chesterfield, MO 63006-0451. After June 11, the price will revert to the normal \$29.95.

... For N scale hobbyists, Atlas is working toward a late 2011 release of an 85' trash flat car in several road names. The release will include unique 20' hi-cube MSW trash containers.

... We've also learned that Atlas will have a triple set of HO scale Thrall 53' articulated well-cars ready late this year. Six road number combinations will be available for Pacer Stack Train and TTX, plus an undec version. The release will be accompanied by a 3-pack of 40' containers decorated for Evergreen, Uniglory, Genstar and Wan Hai.

... Rapido Trains will include a Café-Bar-Lounge and a 10-5 Sleeper in its N scale Panorama Line. ■



**Reader Feedback**  
([click here](#))



## Send us your product announcements

If you are a hobby manufacturer with a product announcement, just [click here](#) and submit your announcement to us.

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

### DISCLAIMER

The opinions expressed in this column are those of the writer and do not necessarily reflect the opinion of *Model Railroad Hobbyist* or its sponsors. Every effort is made to provide our readers with accurate and responsible news and information, however, neither *Model Railroad Hobbyist* or the writer of this column can be held responsible for any inaccuracies or typographical errors that may inadvertently appear in this column.





## Selected Events

### June 2011

**CALIFORNIA, RICHMOND**, June 25, San Francisco Bay Area Prototype Modelers 2011 Meet, St. David's School Hall, 871 Sonoma St. Includes model displays (no contests) and clinics by George Manley, Blaine Hadfield (ExactRail), and Thom Anderson (Western Pacific HS). More info including directions at [www.bayareaprototype-modelers.net](http://www.bayareaprototype-modelers.net).

**CALIFORNIA, SAN DIEGO**, June 20-July 29, Railroad Summer Camp for Kids at San Diego Model Railroad Museum, 1649 El Prado, Balboa Park. Sessions include museum tours, railroad history, railroad workbooks, railroad safety education, diesel/steam engine mechanics, and assembling model railroad freight car. Registration open for six 5-day sessions in three different age groups. Details from Olga Cortes at 619-696-0199 or visit [sdmodelrailroadm.com/#/summer-camp/4533422272](http://sdmodelrailroadm.com/#/summer-camp/4533422272).

**COLORADO, LITTLETON (Denver)**, June 10-13, Fifth Annual Rocky Mountain RPM Meet, Littleton Baptist Church, 1400 W. Caley Ave. Info at [rockymountainprototypemodelers.org](http://rockymountainprototypemodelers.org). CANCELLED.

**CONNECTICUT, COLLINSVILLE**, June 3-4, New England/Northeast Prototype Modelers Meet at Canton Community Center, 40 Dyer Ave. Includes clinics and vendor tables. Additional info at [neprototypemeet.com](http://neprototypemeet.com).

**KANSAS, MERIM, (Kansas City)**, June 25, Ninth Annual KCNG Narrow Gauge Meet, Antioch Branch, Johnson County Library, 8700 Shawnee Mission Parkway. Clinicians include Miles Hale and Dennis Brandt. HO<sub>n3</sub> layout tours to John Vandenberg and Doug Taylor's home. For additional information contact Larry Alfred at [captlalfred@gmail.com](mailto:captlalfred@gmail.com).

**KANSAS, OVERLAND PARK (Kansas City)**, June 21-26, 27th National Garden Railway Convention, Overland Park International Trade Center, 15th at Metcalf. Details at [www.ngrc2011.com](http://www.ngrc2011.com).

**MARYLAND, TIMONIUM**, June 25-26, Great Scale Model Train Show & Railroad Marketplace, Maryland State Fairgrounds. Produced by Howard Zane and Ken Young ([www.gsmts.com](http://www.gsmts.com)).

**OREGON, PORTLAND**, June 4, On30 Modelers Meet, Columbia Gorge Model Railroad Club, 2505 North Vancouver Avenue. Includes layout tour, modules, clinics, and vendor displays. Info from Gil Hulin at [ghuline@earthlink.net](mailto:ghuline@earthlink.net).

**PENNSYLVANIA, HERSHEY**, June 22-26, National N Scale Convention. Harrisburg/Hershey Sheraton Hotel, 4650 Lindle Road, Harrisburg. Info at [nationalscaleconvention.com](http://nationalscaleconvention.com).

### July 2011

**CALIFORNIA, BAY AREA**, July 10-14, Bay Area Garden Railway Society Convention, self-tour of approximately 50 garden layouts. Info at [www.bagrs.org](http://www.bagrs.org).

**CALIFORNIA, McCLELLAN, (Sacramento area)**, July 13-17, 2011 National Summer Steamup, headquartered at Lions Gate Hotel, 3410 Westover St., phone 916-643-6222. Includes operating small-scale live steam equipment from around the world. Send inquiries to [steamup@summersteamup.com](mailto:steamup@summersteamup.com).

**CALIFORNIA, SACRAMENTO**, July 3-9, 2011, Combined NMRA National and National Association of S Gaugers Annual Conventions, Sheraton Grand Hotel. Info at [x2011west.org](http://x2011west.org).

**CALIFORNIA, SACRAMENTO**, July 6-7, Railroad Prototype Modelers Meet (in conjunction with NMRA National Convention). Sacramento Convention Center Complex, 1400 J Street. Includes RPM clinics and model displays (no contests). Info at [x2011west.org](http://x2011west.org).

**CALIFORNIA, SACRAMENTO**, July 7-9, 2011, National Train Show, Sacramento Convention Center. Info at [x2011west.org/trainshow.html](http://x2011west.org/trainshow.html).

### Future

**CALIFORNIA, BUENA PARK**, August 7, 2011, Railroadiana & Transportation Show. UFCW Hall, 8550 Stanton Avenue (at Crescent Avenue). Info at [www.californiaexpress.net](http://www.californiaexpress.net).

**ILLINOIS, LISLE**, Oct 20-22, 2011, RPM-Conference (formerly Naperville RPM). Produced by Joe D'Elia. Speakers TBA. Hickory Ridge Marriott (630-971-5000) Info at [www.railroadprototypemodelers.com](http://www.railroadprototypemodelers.com).

**ILLINOIS, COLLINSVILLE, (St. Louis area)**, Aug 5-6, 2011, 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. Info from John Golden at [golden1014@yahoo.com](mailto:golden1014@yahoo.com) (812) 929-7181, or Dan Kohlberg at [paducah@mindspring.com](mailto:paducah@mindspring.com).

**KANSAS, BENTON (Wichita area)**, November 5-6, 2011, Railroad Prototype Modelers Meet, Benton Lions Community Center, 150 S. Main Street. Info at [www.midcontinentprototypemodelers.org](http://www.midcontinentprototypemodelers.org).



## Selected Events *Continued ...*

**MARYLAND, ELLICOTT CITY**, Sept 1-4, 2011, Steel Mill Modeler's Meet, Turf Valley Resort. Includes layout tours, seminars, models, and displays focusing on modeling steel mills in all scales. Sponsored by Magarac Society. Info at [peachcreekshops.com/2011steelmeet.php](http://peachcreekshops.com/2011steelmeet.php).

**MARYLAND, TIMONIUM**, October 29-30, 2011, Great Scale Model Train Show & Railroad Marketplace at Maryland State Fairgrounds. Produced by Howard Zane and Ken Young ([www.gsmts.com](http://www.gsmts.com)).

**MASSACHUSETTS, MANSFIELD**, Nov 2-5, 2011, Craftsman Structure Convention, Holiday Inn. Info at [csc11.net](http://csc11.net).

**MASSACHUSETTS, PEABODY**, Oct 13-15, 2011, 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 [modelrailroadexpo.com](http://modelrailroadexpo.com).

**MICHIGAN, GRAND RAPIDS**, July 29-Aug 4, 2012, NMRA National Convention and National Train Show ([www.gr2012.org](http://www.gr2012.org)).

**NEW MEXICO, ALBUQUERQUE**, June 6-9, 2013, Rails Along the Rio Grande 2013, NMRA, Rio Grande Division 6, Rocky Mountain Region Convention at Marriott Pyramid North. Layouts, clinics, tours, train show, opsig sessions, UPRR modelers showcase night, BNSF RR modelers showcase night, banquet and more. Info from Al Hovey at [alhovvey@comcast.net](mailto:alhovvey@comcast.net).

**NORTH CAROLINA, CARY**, October 27-30, NMRA Mid-East Region 2011 Convention, Embassy Suites Hotel at Raleigh-Durham-Research Triangle East, 201 Harrison Oaks Blvd. Info at [www.mer.nmra.org](http://www.mer.nmra.org).

**NORTH CAROLINA, HICKORY**, September 7-10, 2011, 33rd National Narrow Gauge Convention, Hickory Metro Convention Center. Layout tours, clinics, vendor displays, prototype events and narrow gauge camaraderie. Speakers are Trains editor Jim Wrinn and David Pfiesser from National Archives. Headquarters hotel (Crown Plazz) is sold out. Visit web site at [narrow-gauge2011.com](http://narrow-gauge2011.com) for information on alternative hotel space.

**OHIO, MOUNT VERNON**, September 17 thru Oct 6, 2011, exhibit of "Life Along the Line," original railroad photography of O. Winston Link, at B&O Depot, 507 West High Street. Hours and fee information available at [mount-vernondepot.org](http://mount-vernondepot.org).

**PENNSYLVANIA, MALVERN**, Mar 23-25, 2012, RPM-Valley Forge Meet. Info at [phillynmra.org/RPMMeet.html](http://phillynmra.org/RPMMeet.html).

**WASHINGTON, SNOQUALMIE**, Aug 19-20, 2011, 17th Annual Northwest Logging Modelers Convention, Snoqualmie Depot, 38625 SE King Street. Vendor displays, model contest, vintage machinery, clinics and layout tours. Additional info from Clark or Lloyd at [loggingmodeler@gmail.com](mailto:loggingmodeler@gmail.com) or phone 310-951-9097. ■





# REVERSE RUNNING: Has the age of hobby innovators ended?

Stepping outside the box with a contrary view



— by Joe Fugate

I got into the hobby in the late 1960s and it didn't take me long to hear about the "Wizard of Monterrey", John Allen.

John was one of the first to present a layout "wholistically", both visually and operationally. John's freelanced Gorre & Daphetid (pronounced "gory and defeated") was a work of art and was loaded with innovations.

A review of how John pursued the hobby illustrates just how forward-thinking he was.

John modeled in HO using code 70 nickel silver rail on real wood ties in the late 1940s – an era when everyone else was using code 100 brass rail on fiber ties.

John applied realistic weathering to everything – rolling stock, structures, even scenery. Most would never think of "trashing" their beautiful models with a finish that indicated age.

John used animation and sound in a number of his realistic scenes, back when many of the layout photos in the modeling magazines were of nice models on a plywood pacific layout.

John built a mechanical Rube Goldberg momentum throttle when power packs with a direction switch and rheostat had been available for less than two decades.

John used diodes to get constant lighting on his loco headlights back when open-frame motors with less-than-great operating characteristics were the state-of-the-art in model loco technology.

I could go on and on to list out John's other innovations in the

early '60s ... scenery to the floor, shelf instead of table layout design, clever use of mirrors in scenery, using real water in a scene ...

Roll the clock ahead 10 years from the 1960s to the 1970s, enter the next major innovator, Allen McClelland.

Allen McClelland took modeling an integrated model railroad to a totally new level.

Allen's "beyond the basement" staging revolutionized layout design. Most serious modelers today consider staging a requirement for their track plans.

"Roundy-round" and spaghetti track plans were still rather common in the 1980s. Allen's approach to track planning preferred a linear walk-around design letting the track have a sense of going somewhere.

Allen's "good enough" philosophy likewise is huge. Don't sweat the details, time is not unlimited, so focus on what matters and get the overall impression right. Don't lose any sleep over the things that don't matter as much.

Allen's landmark V&O story for the first time systematically outlined a compelling end-to-end philosophy of how an integrated model railroad should work.

John Allen and Allen McClelland's innovations energized the hobby for decades. They gave us all a keen sense of direction and purpose to our modeling.

So where's the modern equivalent of these hobby giants? John passed away some 40 years ago, and it's now going on 30 years since Allen McClelland's innovations altered the face of the hobby forever.

Aren't we overdue for some imaginative new ideas in the hobby – for something to give new energy and direction to model railroading?

Use the reader feedback button and post your opinion – has the age of hobby innovators ended – yes or no?

If you believe the age of innovators has NOT passed, then please tell us *who* you believe is the modern version of John Allen and Allen McClelland – and also tell us why!



<b>Clickable Advertiser Index</b>	<b>Page</b>
Accu-Lites .....	12
Backdrop Junction .....	24
Bar Mills .....	13
BLMA .....	3
BPL Brassworks .....	9
Canyon Creek Scenics .....	32
Clever Models .....	24
CMT .....	15
Craftsman Structure Convention 2011 .....	46
Dallas Model Works .....	4
DCC by Design .....	24
Digitrax .....	6
ExactRail .....	5
Fine Scale Model Railroader Expo .....	55
Jeff's Trains .....	14
Litchfield Station .....	23
Micro-Mark .....	25
Model Monster Works .....	24

<b>Clickable Advertiser Index, continued</b>	<b>Page</b>
Model Railcast Show .....	18
Model Trains Video .....	11
NCE .....	21
Pline .....	24
RailMaster Hobbies .....	17
Railpub .....	24
Rapido Trains .....	7
ShelfTrax .....	24
Scotty Mason Show .....	25
Southern Digital .....	33
Summit USA .....	24
TAM Valley Depot .....	63
The Fiber Optic Store .....	25
Traintek .....	33
Trains, Videos, and Parts .....	20
X2011-West NMRA National Convention ..	25
Hobby Marketplace .....	24

<b>Clickable Topic Index</b>	<b>Page</b>
Editorial – Publisher’s Editorial .....	10
Editorial – Reverse Running .....	104
First Look – Changes - a RR comes to life .....	74
First Look – Fantasonics - scale sounds .....	75
Humor – Derailments .....	106
Layouts – The Willoughby Line .....	34
Layout Design – The Cascade Southern .....	26
News – June Events .....	102
News – June Old Yard Master .....	90
Operations – Installing a clock system .....	76
Operations – Build a loco carrier .....	80
Q and A – MRH Questions, Answers, and Tips ...	16
Rolling Stock – Flat car Tank Loads .....	47
Scenery – Do it yourself crates .....	22
Structures – SP storage shed .....	62
Structures – Urethane structure tips .....	64
Staff Notes .....	12
<hr/>	
Other – Cover .....	1
Other – MRH Sponsors .....	2
Other – Table of Contents .....	8
Other – Bonus downloads .....	14

**For the love of model trains**

**Coming in the July 2011 issue**

- Al Frash’s BNSF N scale empire
- Building a helix, step-by-step
- “Speedbashing” a Ready-to-run loco in record time
- eBay for model railroaders - part 3 - selling
- Easy home-made lumber loads
- New one evening projects

... and lots more!



**Derailments, humor,  
and Dashboard on  
next page ►**



# Deraillments

humor?



If you're the first to [submit a good bit of humor](#) and we use it, it's worth \$10!

DASHBOARD

**When talking to hobby vendors, please remember to mention MRH.**