HAVING FUN WITH TRAINS

MAY 2018 | FREE

MRH

MODEL RAILROAD HOBBYIST

ALSO:

- TOMA contest Grand Prize
- Buffalo Creek & Gauley
- Decoders with braking
- SW1500 lights and sound
- Accurail box car prototypes

... and more inside!

NMRA NATIONAL CONVENTION KANSAS CITY 2018

Rick McClellan's FRISCO Line

READ NOW

STAFF CREDITS

HAVING FUN WITH TRAINS
MRH
MODEL RAILROAD HOBBYIST

Model Railroad Hobbyist | May 2018 | #99
(Updated 04/29/18)

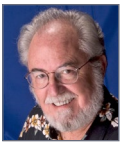
RATE THIS ISSUE

ISSN 2152-7423

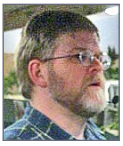
Editorial Staff


Joe D. Fugate, Publisher and Editor


Patty Fugate, Pasteup and Layout


Richard Bale, News and events


Jeff Shultz, News and events, Tech Assistant


Joe Brugger, Copy Editing


Mike Dodd, Copy Editing

Advertising

Les Halmos, Account Manager
Daniel Nava, Advertising Assistant
Jean-François Delisle, Marketing Assistant

Columnists

Larry Smith, Narrow Gauge/Shortlines
Bruce Petrarca, DCC
Ken Patterson, Reporter at large

Rotating Columnists

Jack Burgess, Getting Real column
Nick Muff, Getting Real column
Mike Rose, Getting Real column
Tony Thompson, Getting Real column

Rob Clark, Imagineering
Dave Meek, Imagineering
Ray Dunakin, Imagineering

Issue password: May2018

Published for the glory of God. What's this?

MRH SPONSORS

Model Railroad Hobbyist | May 2018 | #99

A – D

MRH Sponsors | 2

E – R

S - Z

A DIFFERENT SLANT ON THE USRA 0-6-0 with SLOPE TENDER

DCC and DC MODELS IN NEW ROADNAMES

Offered in DCC-equipped and DC (analog) models, our USRA 0-6-0s feature smoke and an operating headlight. The NMRA-compliant DCC-equipped version is now available as Baldwin Locomotive Works #26 and Wabash #516. (The historic #26 was used by Baldwin for switching duty at its immense Eddystone Plant.) The newest roadnames for our DC models are Canadian Pacific #6269 and Soo Line #344. Whether you choose DCC or DC, you'll enjoy having a different slant on your HO layout with these 0-6-0 steam locomotives!

DCC ON BOARD

DCC 0-6-0 • MSRP $159.00 each

BALDWIN LOCOMOTIVE WORKS #26
Item No. 51610

Click to learn more

WABASH #516
Item No. 51611

DC 0-6-0 • MSRP $132.00 each

CANADIAN PACIFIC #6269
Item No. 50607

Click to learn more

SOO LINE #344
Item No. 50608

Other DC 0-6-0 roadnames available:

Item No. 50603	UNION PACIFIC® #4442
Item No. 50604	SANTA FE #2128
Item No. 50612	B&O®
Item No. 50615	PRR #3234

SHIPPING NOW!

Bachmann Industries, Inc. • 1400 East Erie Avenue • Philadelphia, PA 19124 USA • www.bachmanntrains.com

Click for more information.

Table of Contents

Model Railroad Hobbyist | May 2018 | #99

FEATURES

Table of Contents | 2

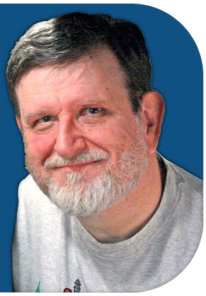
COLUMNS

NEWS and EDITORIAL

ALSO:

• INDEX • TABLE OF CONTENTS

PUBLISHER'S MUSINGS



Model Railroad Hobbyist | May 2018 | #99

Joe Fugate asks, is this really a ready-to-run hobby?

RATE THIS ARTICLE

A common lament in model railroading discussions in recent years has been that there is no craftsmanship left in the hobby any longer because everthing has become ready-to-run.

I like what Railroad Model Craftsman editor Steve Priest said in a recent TrainMasters TV interview:

"One of the complaints I hear a lot as a magazine editor is 'there's nothing to do in the hobby anymore, everything is ready-to-run.' I'm like 'wow' ... that is a very naive statement because ready-to-run just gives you starting points."

I have to agree with Steve. Thinking that ready-to-run means we as modelers don't need to build anything any more is an overly simplistic and unrealistic viewpoint.

Let's start with 40% of our readers that do not model in HO standard guage. Are the hobby shelves just bulging with ready-to-run products for all the other scales?

In a word: No. They are not bulging with everything you need in ready-to-run form. Like Steve says, all ready-to-run does is give you some starting points, especially if you're modeling something

other than HO standard gauge. You can't just buy everything you need and never build anything yourself.

Modeling a prototype accurately has become very popular in the last decade or two. Pick any railroad – can you buy everything you need to model your chosen prototype accurately?

Take my own prototype, the 1980s Southern Pacific. As a larger class 1 railroad, the SP has a lot of ready-to-run products available for it. That helps, but I can't buy off the shelf everything I need to model it correctly off the shelf.

All ready-to-run does for me is let me buy ready-made the things that are available, to save some time. Meanwhile, I can use that reclaimed time to build all the things I can't buy. And I have to tell you, that list is long. I need to kitbash or scratchbuild certain

types of rolling stock: some classes of outside-braced woodchip cars come to mind, as well as some SPMW water cars.

I need to build SP structures since I can't buy many of them off the shelf. I need to build bridges, again because the proper types of bridges just aren't available to buy. I need about ten such bridges on the Siskiyou Line, both for the old layout and for the new one.

My layout will have many wood products mills, and none of those are commercially available. Oh, I can scrounge a few detail parts here and there, but most of these buildings need to be built from scratch. I have something like twelve wood products structures needed for my layout.

And we haven't begun to address all the detail parts the layout will need. And this is in HO, which is supposed to be overrun with ready-to-run product. What about the 40% who do not model HO

standard gauge?

See why this view is so naive? Yes, there is a lot of stuff on the market. But the modeler with specific goals will quickly find gaps in the market. Anyone who wants to build a model railroad with any level of prototype accuracy *has* to kitbash and scratchbuild.

At the end of the day, all ready-to-run can do is get you farther down the road on doing a layout But you're still a long way from having a railroad unless you roll up your sleeves and build, build, build!

Issue 99 and counting ...

With the May 2018 issue, we've reached issue number 99. Next issue, June 2018, is magazine number 100.

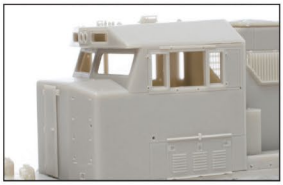
We are planning some very special things for the next issue, so you don't want to miss it!

We have commissioned a number of special articles from authors like Mike Confalone, Victor Roseman, and Richard

WAY MORE THAN AN UPGRADE

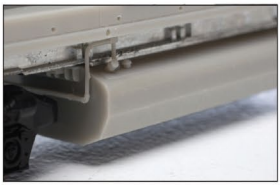
ANNOUNCEMENT **ARRIVING SUMMER OF 2018**

The SD60e program was developed to modernize surplus 1980s-built SD60 diesels with upgraded electronics. The new locomotives improved fuel efficiency, increased horsepower output to 4000hp, and improved crash-worthiness with new cabs, and in some cases, new fuel tanks. With several specialty paint scheme locomotives on the Norfolk Southern roster, these engines also provide added color to the fleet. Athearn® brings the SD60E to life in Genesis®, "As close to real as it gets" with Tsunami2 sound by SoundTraxx.



NS-designed Crescent Cab

Rebuilt inertial/clean room



NS specific crash-worthy fuel tank per prototype

KEY FEATURES INCLUDE:

- Era: 2010 to present day
- Brand new tooling
- LED lighting including illuminated ground lights and number boards
- New see through photo-etch steps
- separately installed wire grab irons
- Fully assembled
- Multiple cab and body variants
- Razor-sharp printing and painting
- McHenry® scale knuckle spring couplers
- Machined metal wheels
- Minimum radius: 18" recommended: 22"

VISIT ATHEARN.COM FOR COMPLETE LISTING OF ROAD NUMBERS AND PRICING

Find us on: YouTube® Facebook® and Twitter®

HORIZON HOBBY | VISIT Your Local Retailer | CLICK Athearn.com | CALL 1.800.338.4639 | SERIOUS FUN®

Bale. Richard has been doing a series on freight car hardware like roofs, doors, brake wheels, and car ends. In June, Richard presents *Freight Trucks of the Twentieth Century*, which is an article you don't want to miss.

I will also give you an update on my Siskiyou Line 2 project. If you've been wondering how the dismantling of Siskiyou Line 1 has been going and are curious to learn about Siskiyou Line 2 rising in its place, then check out the June issue. I'll give you all the latest on my progress.

So tell all your model railroading buddies about this very special issue 100, coming up this June!

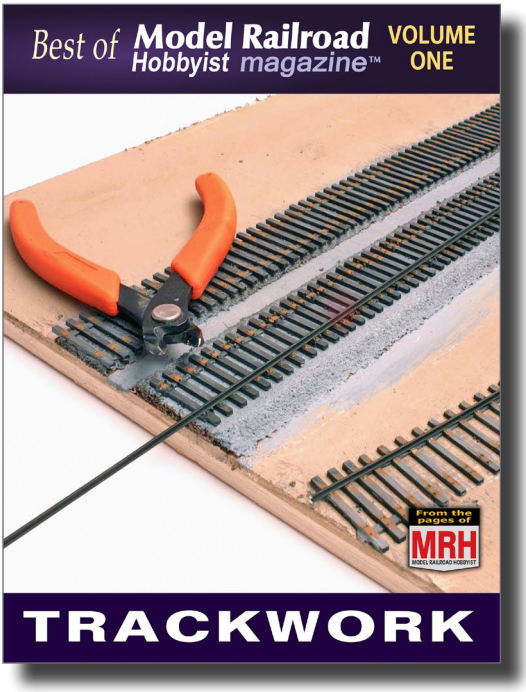
New "Best of MRH magazine" paperbacks coming ...

We've been asked if we would ever do a paper version of MRH magazine and we've said no because the economics don't support it.

However, doing a series of paperback books with the best articles from the first 99 issues of MRH and no ads is economically viable, so we have decided to print them.

We're organizing each book by topic, and aiming for about 100 pages per paperback with no ads. If you've wished for a paperback version of the best MRH articles, here it is!

Volume one, which we're aiming to release this summer, is on trackwork. The best



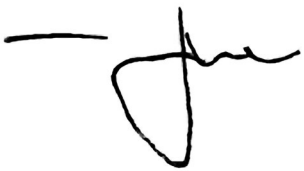
trackwork articles from MRH we're planning to put in his 100-page paperback book include:

- Editorial - Turn a small track project into a large one
- Laying track on the KCT
- MicroEngineering track 101
- Track ballasting tips
- Track is a model too
- Painting and weathering turnouts
- Build an operating switch stand
- Construct a helix
- Poor man's jig-built turnouts
- Improve an Atlas crossover

You can think of these as a magazine on steroids, with a topical editorial and loaded with the best MRH articles on one single topic, but with no ads. Each one will be totally meat. We expect the price to be about $29 list, but the introductory price will be $19.95 + S&H.

We have several other volumes planned: Volume 2: LAYOUT DESIGN, Volume 3: LAYOUT TOURS, Volume 4: ROLLING STOCK, Volume 5: LOCOMOTIVES, Volume 6: SCENERY, Volume 7: STRUCTURES, Volume 8: TIPS & TRICKS, and Volume 9: BULDING LAYOUTS.

Note that because these paperback books have no ads, the paper format allows us to pack a lot into each one. This also gives those who *only do paper* to finally see what they've been missing in MRH all these years! ☑



VIEW READER COMMENTS
click here

Last issue's ratings

The five top-rated articles in the April 2018 issue of *Model Railroad Hobbyist* are:

4.7 Modeling the Arizona & California
4.6 What's Neat: Renumbering, BNSF layout, ...
4.6 Imagineering: Modeling a turntable - 2
4.6 Reverse Running: More layout for nothing?
4.5 DCC layouts and locomotives

Issue overall: **4.3**

Please rate the articles! Click the reader comments button on each article and select the star rating you think each article deserves. Thanks! ■

WHAT ARTICLES* AND VIDEOS* DO YOU NEED?

Tell us, and we'll do our best to get them* for you!

**model railroading articles & videos, of course!*

TAKE OUR SURVEY >>

amazon

Hurry: survey closes soon!

MRH
MODEL RAILROAD HOBBYIST

Survey respondents get a chance to win a 7" Kindle Fire tablet!

(10 tablets will be awarded)

MRH ... Questions, Answers, Tips

Model Railroad Hobbyist | May 2018 | #99

compiled by Joe Brugger

RATE THIS ARTICLE

Freight car spots and transloads

Q. I am planning to have team tracks on my N scale switching layout. Lance Mindheim talks about having more car spots on a layout versus more turnouts. Is it still prototypically accurate to have multiple car spots (representing different industries/businesses) on one team track here in the 21st century? Do Class I railroads still do this today?

—Wendell

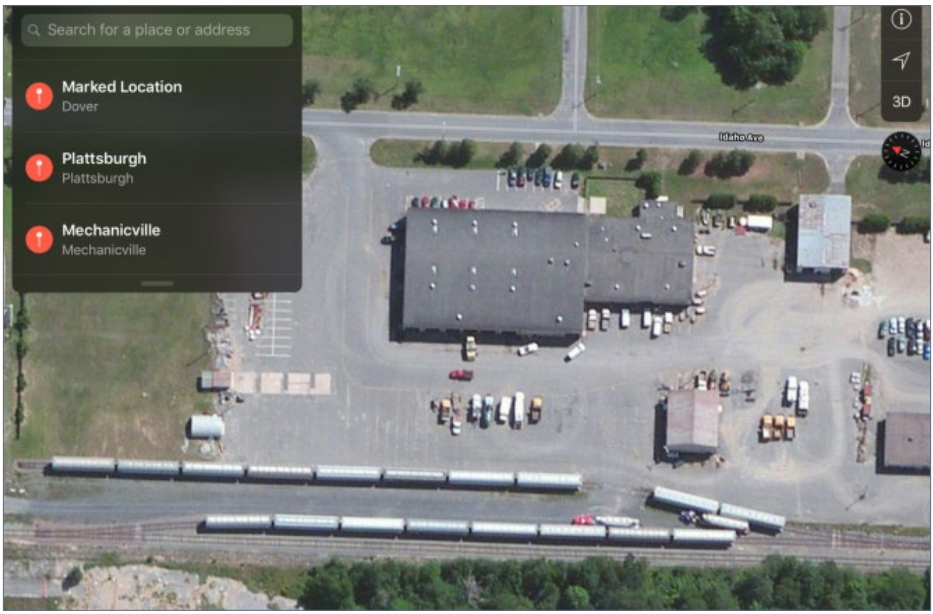
A. Dave Husman: By definition, "team tracks" have no "spots" because there are no industries assigned to them. There may be "spots" because the tracks might have different facilities (overhead crane, end ramp, loading dock, paved access), but they aren't industry-specific spots. They are public tracks and might have literally hundreds of customers use the same tracks. If a customer leases a track (and then, by definition it's not a "public" track) then it might have industry-specific spots.

If a railroad creates some sort of break-bulk facility then it might lease or make arrangements for specific industries to be assigned specific parts of the tracks, but that's not a "team track."

Detail spots are a local thing. They are rarely placed on a waybill. I did a study of prototype waybills on a class 1 railroad and out of several hundred waybills I looked at, only a few had any kind of spot (mostly generic spots) and none had detail spots.

Detail spots are assigned by the local industry and communicated with the switching request the industry gives the crew or railroad, or they are standing instructions given to the crew.

Barry Karlberg: Nope, no spots for team tracks on short lines I ran. First-come, first-served even at transloads.



1. Railroad spurs, warehouse space, and easy highway access for trucks make up a transload facility in Plattsburg, NY.

The only exception would be a track which is leased by a customer for transloading ... but then it wouldn't be a team track.

Bill Brillinger: Transload facilities are sort of modern team tracks. Transload facilities often consist of one or two tracks on a concrete pad and are operated by private companies instead of the railroad. Sometimes transload facilities will also have rail-served warehouses. Some transload facilities will have special spots for tank car loading, but otherwise they will just let the customer know where their car is when they arrive. They can receive almost any type of car.

There is a company on the Canadian subdivision that I model that was using a team track in Emerson, with a capacity for eight cars, for transload for many years. They are currently building a 60-car transload facility north of Emerson since they have outgrown the track in town.

There is a company in Winnipeg that uses a truck with a pump on it to mix different grades of fuel in tank cars at a transload facility. They blend fuel from several different cars into empty cars based on customer specs, and ship the new blends out.

The team track is alive and well.

Read more about transload facilities in *Progressive Rail* at progressiverailroading.com/rail_industry_trends/article.aspx?id=52369.

MOW car colors in the '30s and '40s?

Q. Does anyone know the most common color(s) generally for MOW cars before VE Day? I model a narrow gauge line in WWII and want to use a spare tender as an outfit water car. I know the D&RGW used gray as a common MOW color, but what did the other railroads use? I know yellow or orange was common in later years, but what about in the '30s and '40s?

—P51

A. Benny: D&RGW used brown for its MOW equipment in the same time frame (1920s-1930s). The repaint to gray started in the 1940s.

Bremner: The Southern Pacific used box car red through the 1950s.

Donnie: Until 1952 on the Union Pacific, wrecking cranes (derricks) and locomotive cranes, pile drivers, and rotary plows were painted like steam locomotives, meaning black with aluminum lettering. MOW "house cars" like bunk cars, tool cars, kitchens etc. were painted No. 32 Outfit Car Gray on their sides and roofs. Ends, trucks and underframes were No. 33 Freight Car Red.

Dave Husman: Box car red or a similar freight car color was used by a lot of railroads for maintenance equipment. Aluminum (also called silver) was popular after WW2.

Graeme Nitz: The Pennsylvania Railroad used yellow for MOW service and silver or ray for "company service" cars.

Contribute to the thread at mrhmag.com/node/32111.

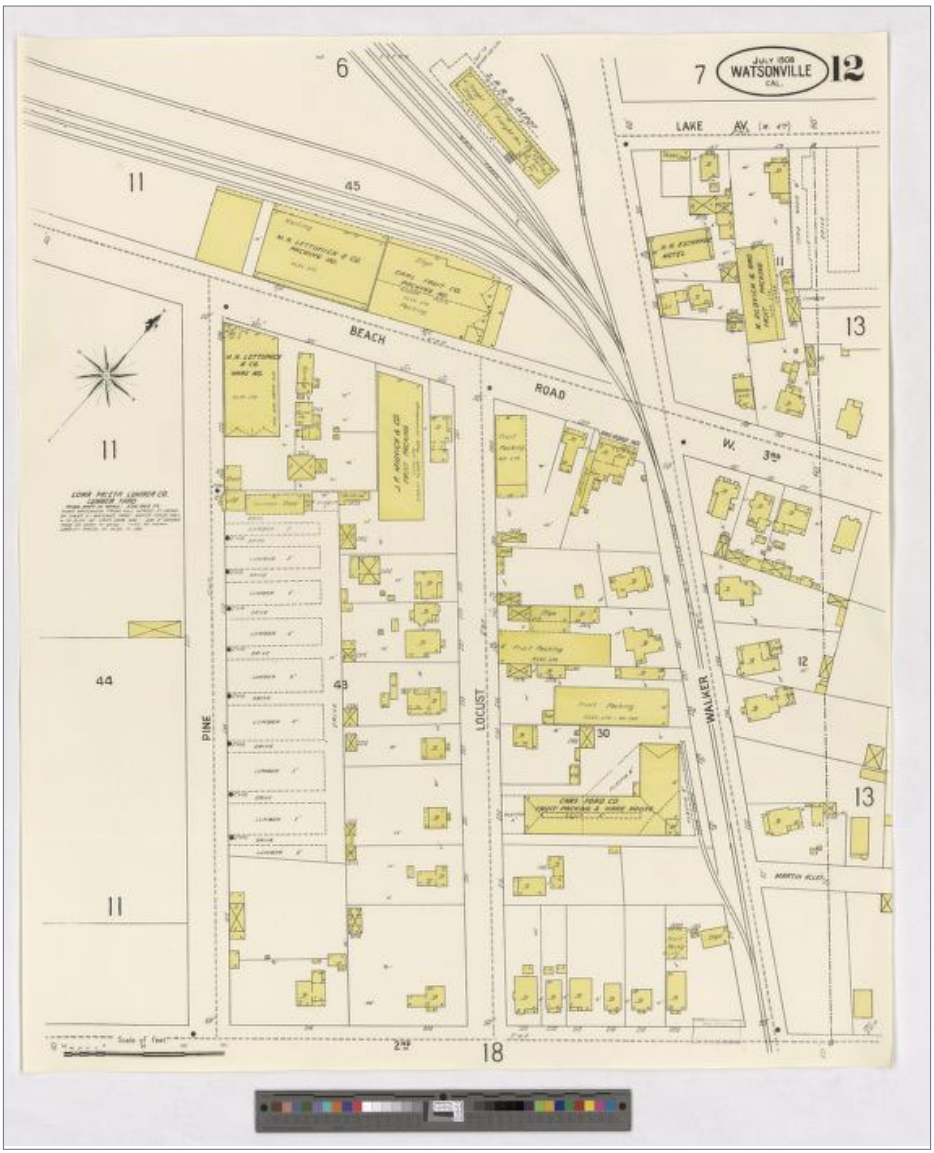
2. In the 1980s, Union Pacific selected quartz green, aka Kenefick green, for most maintenance of way equipment.

Sanborn map source

Gsinos: People have talked about Sanborn maps for quite some time. This May 2017 announcement from the Library of Congress, at www.loc.gov/item/prn-17-074/?loclr=twloc-new talks about their project to put them all online by 2020.

The news release says:

> "The Library of Congress has placed online nearly 25,000 Sanborn Fire Insurance Maps, which depict the structure and use of buildings in U.S. cities and towns. Maps will be added monthly until 2020, for a total of approximately 500,000.
>
> "The online collection now features maps published prior to 1900. The states available include Arizona, Arkansas, Colorado, Delaware, Iowa, Kentucky, Louisiana, Michigan, Nebraska, Nevada, North Dakota, South Dakota, Vermont, Wisconsin and Wyoming. Alaska is also online, with maps published through the early 1960s. By 2020, all the states will be online, showing maps from the late 1880s through the early 1960s.
>
> "The Sanborn Fire Insurance Maps are a valuable resource for genealogists, historians, urban planners, teachers or anyone with a personal connection to a community, street or building. The maps depict more than 12,000 American towns and cities. They show the size, shape and construction materials of dwellings, commercial buildings, factories, and other structures. They indicate both the name and width of streets, and show property boundaries and how individual buildings were used. House and block numbers are identified. They also show the location of water mains, fire alarm boxes, and fire hydrants.



3. A Sanborn Fire Insurance map of Watsonville, CA, shows rail-served businesses. *Library of Congress*

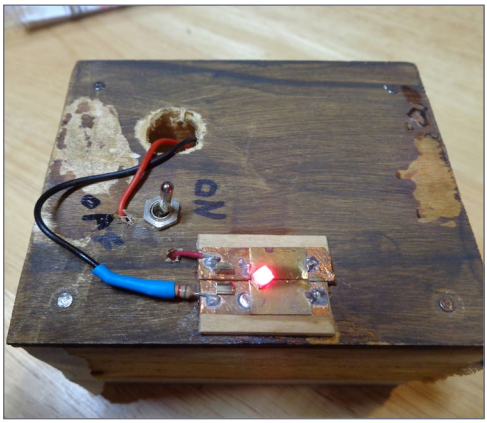
RATE THIS ARTICLE

"In the 19th century, specialized maps were originally prepared for the exclusive use of fire insurance companies and underwriters. Those companies needed accurate, current, and detailed information about the properties they were insuring. The Sanborn Map Company was created around 1866 in the United States in response to this need and began publishing and registering maps for copyright. The Library of Congress acquired the maps through copyright deposit, and the collection grew to 700,000 individual sheets. The insurance industry eventually phased out use of the maps and Sanborn stopped producing updates in the late 1970s."

Read more at mrhmag.com/node/30547.

Tips

Cheap LED tester



4. Spare parts were enough for Rance Thompson to get his LED checker up and running.

I saw a checker for surface-mount LEDs in an article, but I would have had to order parts from too many places to make it the way they described. That's when I decided to put together my own. This project only required a few items that were available in my train parts drawers.

I drilled a half-inch hole in a 3" x 4" scrap of 1/8" plywood, for a 9-volt battery connector to pass through. Next, I cut a wooden stir-

ring stick into two 1" pieces and glued them side-by-side on the plywood, leaving a space the thickness of a resistor wire.

Next, I covered the sticks with ¼" copper foil to make terminals. I soldered a 1 K resistor to the negative lead of the 9-volt connector and soldered it to one side of the copper foil. I then inserted an on/off switch in the positive lead, mounted it to the plywood, and pushed the connector top thru the hole. To make this more comfortable to use, I made a small enclosure from scrap wood.

I attached a 9-volt battery, placed an 0603 SMD LED between the two pieces of foil, and watched it light up. Other size LEDs can also be checked, so I can be sure the LED works before wiring it up.

The fancy one in the article looks a lot better, but this one only cost about $3 and a little of my time. If you have a small project box, that would work for an enclosure.

—Rance Thompson

• INDEX • TABLE OF CONTENTS

Get paid for your tip

We pay $25 per tip we publish, or $40 each if the tip also includes a photo or finished drawing.

Click here and select article type TIP. ■

VIEW READER COMMENTS
click here

DCC IMPULSES column

Model Railroad Hobbyist | May 2018 | #99

GUEST COLUMNIST **JOE FUGATE** LOOKS AT MODERN DECODERS WITH BRAKING FUNCTIONS ...

BRUCE IS OFF THIS MONTH, SO I (JOE FUGATE) am doing a guest DCC column in his place.

Many of the newer decoders now implement a braking feature on one or more function keys. This enables setting up a loco decoder to behave more like a real loco, and operate it using both a throttle and a brake.

But how does this work, exactly?

Because the decoder now has a programmable braking capability, you can set the decoder's acceleration and deceleration momentum to a higher value to make the locomotive take a while to get up to your throttle speed setting and to coast if you drop the throttle to zero.

To stop the locomotive in any relatively short distance, you must press the braking function key rather than using the throttle to stop it.

1. Back in January 2014, *MRH* presented a video of switching on Mike Confalone's Allagash layout using a sound decoder-equipped loco featuring high momentum and braking. In this column, I show how to configure the settings on a modern DCC sound decoder to get this realistic behavior. (Click this image to watch this 11 minute video in case you missed it.).

This simulates more how a real locomotive behaves, so if we want to get that behavior, we can now program our DCC decoders to run the loco in this fashion.

It takes a little getting used to, but after operating with a decoder that has the momentum and braking set up like this, I find running with both a throttle and brake to be *a whole lot of fun.*

I especially like the way the loco and train feel like they now have great mass. I also have discovered running slower makes it easier to stop where I need to. If I run faster, it becomes harder to stop quickly.

"I especially like the way the loco and train feel like they now have great mass."

I have never liked it when operators at my op sessions jet around while switching – I much prefer operating at a realistic speed. But with normal decoder settings, running slow is optional and you can easily cheat – and some of my operators do just that when I'm not looking!

But with a decoder set up like this with lots of momentum on the throttle, you now *must run slowly, or you can't stop quickly.* If you try to cheat and go too fast, you will be sorry!

With sound in a decoder that has these features, the sounds reinforce the experience [1]. When I crank up the throttle, the prime mover revs up well before the loco speed catches up. When I apply the brakes, I can hear the groan of the brakes as the loco slows, often accompanied by some random brake squeal just as the loco comes to a stop.

I feel like I'm running a full-sized locomotive! It makes operating a lot more engaging because I have to think ahead to keep this great mass under control – and I *love it.*

Setting up a decoder with momentum and braking

How do you set up one of the newer decoders to operate like this?

Basically, you set some DCC configuration variables (CVs) to high values to get the increased momentum. Two values need to be changed: acceleration (CV3) and deceleration (CV4). While

that sounds simple enough, not all decoder manufacturers do acceleration and deceleration exactly according to the NMRA spec.

But before we get into all the vendor variations, let's start with the NMRA's official momentum specs and learn what the decoders are all supposed to do. DCC guru Mark Gurries has spelled this out quite well on his website:

WEB: sites.google.com/site/markgurries/home/technical-discussions/momentum-compatibility

So I owe a lot to Mark for my explanations in this column.

CV3: Acceleration rate

The NMRA DCC standards say the value you put into CV3 gets used as a delay between speed step increases, delaying how quickly a speed increase takes effect.

With a value of zero in CV3, there is no acceleration momentum. Throttle speed increases get relayed immediately to the motor.

Key DCC configuration variables (0-255)

Momentum CVs: not all decoders comply; see text.

CV 3 = Acceleration
CV 4 = Deceleration

CV 23 = Consist acceleration
CV 24 = Consist deceleration

Braking CVs vary greatly by decoder vendor, see text.

2. Here is a summary of the CVs that need to be reconfigured to get this new more-realistic momentum and braking behavior.

"When I crank up the throttle, the prime mover revs up well before the loco speed catches up. When I apply the brakes, I can hear the groan of the brakes as the loco slows."

Larger numbers in CV3 increase how long it takes a given throttle speed increase command to take full effect at the new speed setting.

CV3 is something you typically adjust as part of setting up a locomotive for the first time. Possible value range is 0-255.

Let's break down the official delay formula. It defines the total delay from zero to the maximum speed step as:

(CV3 x 0.896)

To see how this works, let's look at some examples.

Example 1: CV3 = 0 (minimum value).

Result: 0 x 0.896 = 0 seconds to go from a standing stop to full speed at the max speed step. Throttle response is instant.

Example 2: CV3 = 5.

We compute 5 x 0.896 = 4.48 seconds to go from a standing stop to top speed at maximum throttle. So if I rotate the throttle knob fully from zero to

WHY 0.896?

Why does DCC use 0.896 for its momentum multiplier? That's one of the mysteries of the universe – it's never explained in the NMRA DCC documentation.

maximum, it takes the loco about 4.5 seconds to reach top speed from a standing start.

Notice, this is the *total delay* going from stop to max speed. If I'm using 28 speed steps, for example, this is the delay when going from a standing start at zero to top speed at speed step 28.

To get the more useful *delay between individual speed steps,* just take the total delay and divide by the number of speed steps you're using.

(CV3 x 0.896) / (number of speed steps in use).
Speed steps can be 14, 28, or 128.

For example: **CV3 = 5, using 28 speed steps.**

We take the CV3 value and compute 5 x 0.896 / 28 to get a 0.16-second-delay between speed steps when turning up the throttle.

If you are at speed step 0 and you turn the throttle up to speed step 10 out of 28, it will take a total of 10 x 0.16 seconds – or 1.6 seconds to reach the new higher speed.

Here is a table [3] with the total delay from minimum to maximum depending on the value in CV3 (also applies to CV4 – but more on that in a moment). The table also shows the delay per speed step.

CV4: Deceleration rate

Deceleration works exactly the same as acceleration except it gets applied when slowing down instead of when speeding up. Let's look at some examples.

Example 1: CV4 = 0 (minimum value).

Result: 0 x 0.896 = 0 seconds to go from max full speed to total stop. Throttle response is instant.

Example 2: CV3 = 50.

We compute 50 x 0.896 = 44.8 seconds to go from max full speed to total stop. Throttle response is extremely delayed when stopping.

To get the delay per speed step change, as with CV3, take the CV4 total delay and divide by the number of speed steps you're using.

(CV4 x 0.896) / (number of speed steps in use).
Speed steps can be 14, 28, or 128.

For example: **CV4 = 50, using 28 speed steps.**

We compute 50 x 0.896 / 28 to get a 1.6-second-delay between speed steps when turning down the throttle. If you're at speed step 5 and you turn the throttle to zero, it will take 5 x 1.6 seconds = 8 seconds total to come to a full stop from speed step 5 with 50 in CV4.

CV3/4 value	Total delay (min: sec)	Delay per speed step (sec)		
		14	28	128
0	0 : 00.0	0.0	0.00	0.000
5	0 : 04.5	0.3	0.16	0.004
10	0 : 09.0	0.6	0.32	0.008
20	0 : 17.9	1.3	0.64	0.016
30	0 : 26.9	1.9	0.96	0.024
40	0 : 35.8	2.6	1.28	0.032
50	0 : 44.8	3.2	1.60	0.040
60	0 : 53.8	3.8	1.92	0.048
70	1 : 02.7	4.5	2.24	0.056
80	1 : 11.7	5.1	2.56	0.064
90	1 : 20.6	5.8	2.88	0.071
100	1 : 29.6	6.4	3.20	0.079
110	1 : 38.6	7.0	3.52	0.087
120	1 : 47.5	7.7	3.84	0.095
130	1 : 56.5	8.3	4.16	0.103
140	2 : 05.4	9.0	4.48	0.111
150	2 : 14.4	9.6	4.80	0.119
160	2 : 23.4	10.2	5.12	0.127
170	2 : 32.3	10.9	5.44	0.135
180	2 : 41.3	11.5	5.76	0.143
190	2 : 50.2	12.2	6.08	0.151
200	2 : 59.2	12.8	6.40	0.159
210	3 : 08.2	13.4	6.72	0.167
220	3 : 17.1	14.1	7.04	0.175
230	3 : 26.1	14.7	7.36	0.183
240	3 : 35.0	15.4	7.68	0.191
250	3 : 44.0	16.0	8.00	0.199
255	3 : 48.5	16.3	8.16	0.203

3. The NMRA-specified momentum delay response for different values in CV3 or CV4.

CV23 and CV 24 consist momentum adjustment

The NMRA DCC spec defines two more CVs to adjust the values in CV3 and CV4 when the loco is in a consist: CV23 and CV24.

These CVs *work only* if the value in consisting CV19 is not zero – in other words, the loco is in an advanced "decoder" consist. They are not used if the loco is in a command-station consist or a basic consist (all locos use the same address in CV2).

These CVs are considered to have a positive value from 0-128, and a negative value from 129 (-1) to 255 (-127). Here is how these two CVs work.

CV23: Consist acceleration adjustment. Adds to or subtracts from the acceleration value in CV3. This CV23 value is used to modify the "mass of the train," in other words. The value in CV3 never changes.

CV24: Consist deceleration adjustment. Adds to or subtracts from the deceleration value in CV4. The value in CV4 never changes.

Let's look at an example.

Example: Deceleration CV4 is 10, which means an unconsisted loco at the max speed step will take 8.96 seconds (10 x 0.896) to reach a full stop. If CV23 is 40, that adds to CV4 to get a total deceleration for the consist of 10 + 40 = 50. We then get:

"The idea is to simulate the extra mass of a full train, adding to the delay needed to stop."

The Future of Model Railroading

ESULLC 23 Howard Street Montoursville, PA (570) 980-1980

CabControl WIRELESS CONTROL SYSTEM

- ✔ Completely wireless model railroad operation
- ✔ Ergonomic, Android based remote control unit with TFT Display
- ✔ Internal database capable of holding more than 16,000 locomotives with specific names and symbols and up to 28 functions per locomotive.
- ✔ Easy to create multiple unit consists Capable of configuring and controlling more than 1,000 switches and other accessories
- ✔ Conveniently updatable with internet connection
- ✔ Runs all DCC decoder equipped locomotives
- ✔ Automatic train detection using RailCom-Plus®
- ✔ Integrated 7A Booster

ESU Mobile Control II

+ Android operating system
+ 3.2" TFT Display, 800x400 resolution
+ Large Dial for easy speed control and direction change capabilities.
+ 4 user-personalized buttons
+ Micro USB port for Software Updates and battery charging
+ 5-8 hours of battery life.
+ 3.5 mm stereo headset port (microphone & headphone)

ESU Integrated Control Unit

+ CabControl creates a wireless network for over 32 wireless controllers
+ Connects through your LAN to provide internet connection
+ USB Port for Software Updates and throttle charging
+ DC 5.5 mm / 2.1 mm socket for external regulated DC power supply

Locomotives

Data for over 16000 locos can be held in the system
Loco Icons show the engine you are running
28 colorized graphical Icons for easy function identification

Accessories

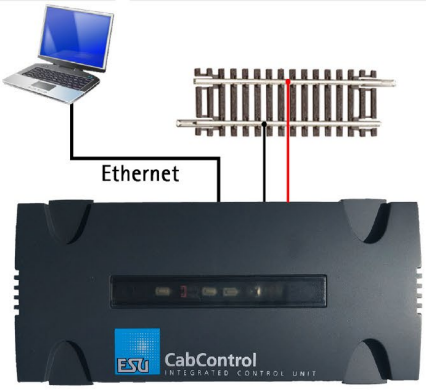
More than 1000 accessories can be controlled and can have status visually displayed

Consisting

Easily created virtual consists so no CV changes are needed
Ability for all functions to be controlled while in consists

Conveniently Updatable

Updated easily for free as new features become available



YouTube Click here for a short introductory video!

• INDEX SUBSCRIBE (free) • TABLE OF CONTENTS

50 x 0.896 = 44.8 seconds to come to a full stop when at the max speed step.

The values in CV3 and CV23 work similarly, but they affect how quickly the loco gets to max speed from a full stop instead. If CV4 is 10 and CV24 is 40, then the consist will likewise take 44.8 seconds to reach full speed at the max speed step from a full stop.

The idea is to simulate the extra mass of a full train, adding to the delay needed to get up to speed or to stop.

Vendor variations in acceleration / deceleration

Now that you understand the official NMRA acceleration and deceleration functionality, let's see how various vendors actually implement it [4]. Mark Gurries' website mentioned previously is the source for this table.

All the vendors support the NMRA standard except ESU

NMRA CV	NCE	DIGITRAX	TCS	ESU 3.5	ESU V4.0	MRC
CV3	NMRA	NMRA	1	NMRA	2	NMRA
CV4	NMRA	NMRA	1	NMRA	2	NMRA
CV23	NMRA	--	NMRA	--	--	--
CV24	NMRA	--	NMRA	--	--	--

-- Not supported

1. TCS supports CV3 and CV4 but optionally allows dividing the range up into 3 d used for the low speed momentum range including stop. For each range, they d zeros in these extra CVs, which makes the decoder exclusively use CV3/4 values extra CVs do they go into effect.

2. ESU V4.0 decoders use a non-standard momentum scaling factor that is not c sensitive. In other words, you must multiply your desired CV3/4 value for a give effect as a value in an NMRA-compliant decoder.
The equation is: (CV3 * 0.25) / (number of speed steps in use). Speed steps bein
The equation is: (CV4 * 0.25) / (number of speed steps in use). Speed steps bein

LokSound v4.0 and TCS. Let's look at how the differences work for these two vendors.

ESU Loksound v4.0 decoders. The big difference is that Loksound v4.0 does not use the 0.896 multiplier, but instead uses a multiplier of 0.25. To get the same effect as the NMRA formula, you need take the value you were planning to put into CV3 or 4 and multiply it by 3.6 first.

Suppose I wanted to put a value of 50 in CV4 (deceleration) using the NMRA guidelines, giving me a total delay of 44.8 seconds between max and zero.

If I put 50 into CV4 on a Loksound decoder, the total delay will instead be: 50 x 0.25 = 12.5 seconds, *not* 44.8 seconds.

To get the NMRA equivalent of 50, I need to multiply the Loksound value by 3.6, which means I need to put 50 x 3.6, = 180 into CV4.

SoundTrax›	Lenz	Paragon (BLI)	QSI
NMRA	NMRA	NMRA	NMRA
NMRA	NMRA	NMRA	NMRA
NMRA	--	NMRA	NMRA
NMRA	--	NMRA	NMRA

4. Vendor support for the NMRA acceleration/ deceleration CVs. Table courtesy of Mark Gurries.

lelay ranges using 8 more CV's. CV3 and CV4 then get
o follow the NMRA formula. TCS decoders default to all
as expected. Only when you put non-zero values in the

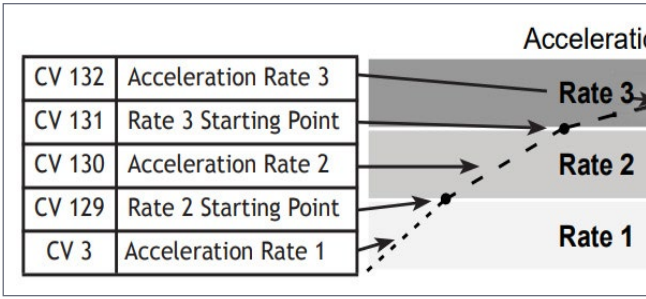
ompatible with the NMRA standard: it is 3.6 times less
n momentum level by 3.6 to get the same momentum

ng 14/28/128.
ng 14/28/128.

This also means the max acceleration or deceleration you can put into CV3 or CV4 on a Loksound decoder will be equivalent to an NMRA value of 70.

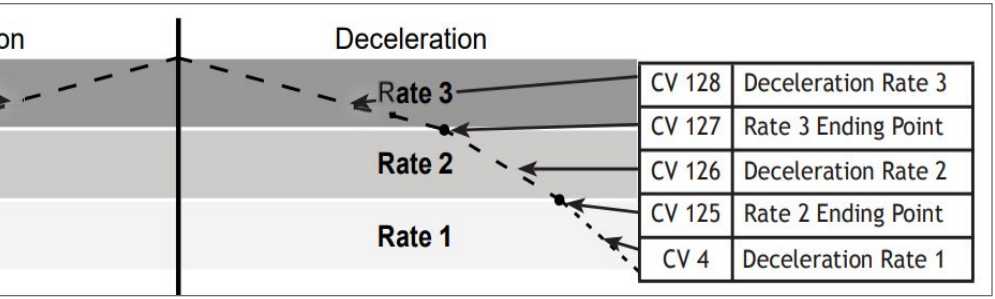
This is a total delay of just over one minute – on our typically compressed layout mainlines, this may not be that much of a limitation.

5. TCS decoders' optional expanded (and more complex) variable-momentum CVs. CVs 125-132 default to zero, which turns them off and only CV3/4 get used.



TCS WOW Sound decoders. TCS decoders include additional momentum CVs beyond CV3 and CV4. From the TCS manual:

TCS variable momentum can be used to design precise and independently adjustable Acceleration and Deceleration (variable momentum).



The TCS manual goes into more detail on how use the optional custom acceleration and deceleration curves.

However, you can make a TCS decoder act just like an NMRA-compliant decoder if you make sure CVs 125-132 are all zero. The factory default for CV125-CV132 is zero, which makes a TCS Wow Sound decoder use only CV3/4 as expected.

Using high-momentum settings for CV3 / CV4

Okay with this background, let's implement the high-momentum idea I discussed early in this column.

To enable the high-momentum behavior, let's start with an acceleration (CV3) and deceleration (CV4) setting of 70. What does this give us?

Example 1: CV3 = 70, speed steps = 28.

Result: 70 x 0.896 / 28 = a 2.24 second-delay between speed steps. From a standing start to speed step 5, it will take 5 x 2.24 seconds = 11.2 seconds to reach speed step 5.

Example 2: CV4 = 70, speed steps = 28.

Result: 70 x 0.896 / 28 = a 2.24-second delay between speed steps. At speed step 15, it will take 15 x 2.24 seconds = 33.6 seconds (right at half a minute) to come to a full stop.

Notice that with deceleration set to 70, stopping the train takes a lot of time … and distance. You can see how these decoder settings create a sense of great mass, and how important a braking function becomes to stopping more quickly.

MRH is looking for a DCC Jedi ...

MRH's current DCC Columnist, Bruce Petrarca, is retiring as of the August 2018 issue.

MRH pays a premium rate for columnist articles. Press the button below if you might be interested in becoming our new DCC columnist.

MRH MEDIA

Send us your qualifications »

6. I deal with the settings in the latest sound decoders from these three vendors in this column to get this more realistic loco behavior. These three vendors' sound decoders have become the most popular.

Braking functions

With the increased momentum setup completed, how about the braking so we can stop more quickly?

The NMRA has no official specification for how braking works, so vendors implement their own variations of braking.

SoundTraxx Tsunami2 decoders. On the Tsunami2 (TS2) decoders, you have three different braking functions: independent (i.e., loco only) brake, train brake, and dynamic brakes (diesel only).

The setting behaves essentially the same with all these brake functions, so we won't get into which of these three braking functions is involved.

We'll just talk about how the brake setting works overall. (Note, these three brake functions do have different sounds associated with them, however!)

TS2 Braking allows you to decrease the deceleration setting by -1 to -127 based on what value you put into the specific brake CV. Putting a 129 in the brake CV is a -1, putting 255 in the brake CV is -127.

• INDEX • TABLE OF CONTENTS

"Now you can see why running slower helps. You can stop a lot quicker if you're running slower when using the brake."

You can also increase the deceleration delay via braking (make the brakes less effective and things even harder to stop) if you wish using values 0-128, but that's not something we care to do.

Assuming we have a value of 70 in CV4 (deceleration), then if we put 170 (-42) in the TS2 specific braking CV, we will get an effective braking deceleration rate of 70-42, or a much quicker decel rate of 28 with the brake function pressed.

To see what this means, let's compute 28 x 0.896 / 28, which gives a 0.896 second-delay between speed steps when braking the locomotive.

If you are at speed step 15 out of 28 and you press the braking function, it will take a total of 15 x 0.896 seconds = 13.44 seconds to come to a full stop. This is compared to 63 seconds to come to a full stop without using the brake and just dropping the throttle to zero.

Note at speed step 1, it takes 0.896 of a second, or just under one second to come to a stop with the brake set at this value. Without the brake, just dropping the throttle from speed step 1 to zero means the loco will coast to a stop in just over 2 seconds with a value of 70 in CV4.

Now you can see why running slower helps. You can stop a lot quicker if you're running slower when using the brake.

The independent / loco-only brake should stop a light loco fairly quickly, so you would want a high deceleration reduction (-40 maybe) in the TS2 independent brake CV 117.

The train brake should not stop a full train as readily as the independent brake, so you should use a smaller deceleration reduction (-25 maybe) in the TS2 loco brake CV 118.

Finally, a dynamic brake (diesels only) should take the longest to slow the train, so use an even smaller value (-10 maybe) in the TS2 dynamic brake CV 116.

As for which function keys to use, from the factory TS2 decoders use F11 for the brake. Pressing F12 toggles between the independent brake and the train brake on F11. The dynamic brake is on F4.

ESU Loksound decoders. To get their new independent brake feature on F10, you need to be using ESU's Full Throttle sound files upgrade released in 2016. Using their programmer, you can get and upload this update to older ESU decoders.

Pressing the brake function key (F10) causes the loco to decelerate using 50% of the value in CV4. For example, if CV4 is 180 (NMRA value of 70), then pressing F10 causes the loco to slow as if CV4 was 90 (NMRA value 35). (Remember you need to divide the Loksound value by 3.6 to get the NMRA value equivalent.)

"At speed step 1, a loco with these settings will coast to a stop in 2.24 seconds, but will brake to a stop in 0.8 of a second."

Once you do the math on these numbers, you find for a loco running at top speed will coast to a stop in just over one minute. But pressing F10 causes a loco running at full speed to stop in just over 20 seconds.

At speed step 1, a loco with these settings will coast to a stop in 2.24 seconds, but will brake to a stop in 0.8 of a second.

ESU released an additional sound file update in September 2017 that adds an adjustable braking rate in CV179. If the value in CV179 is less than what is in CV4, then the braking rate in CV179 is used instead.

This allows you to create a very responsive or a very sluggish brake, depending on what value you program into CV179.

For example, if the loco has CV4 at 180 (NMRA value of 70), but I program a value of 45 (NMRA value 13) into CV179, pressing F10 will cause a loco at full speed to come to a stop in 11.25 seconds. At speed step 1, the loco will brake to a stop in less than half a second.

TCS WOW Sound decoders. TCS WOW Sound decoders have a rich variable-braking feature. Pressing F7 applies the brake.

Once you press F7, you get a 20% application of the brake. Each additional press of F7 adds another 20% of braking. Five presses of F7 give you 100% braking, somewhat like the prototype "emergency" brake setting.

TCS also has braking rate CVs defined, allowing you to adjust the braking-rate as desired. See the table below.

CV	Default	Brake Rate	Default full speed stop
CV183	32	Brake rate 1 (1 press)	28.7 sec
CV184	26	Brake rate 2 (2 presses)	23.3 sec
CV185	16	Brake rate 3 (3 presses)	14.4 sec
CV186	8	Brake rate 3 (4 presses)	7.2 sec
CV187	3	Brake rate 2 (5 presses)	2.7 sec

7. TCS WOW Sound decoder braking rate adjustment CVs.

Summary

One big caveat – using these new sound decoder momentum and braking features does mean you can't mix sound decoders from different vendors into a single consist. They don't work the same, especially when it comes to the braking. All the decoders in the consist need to be from the same vendor for this to work properly.

The simplest solution for your fleet is to pick a single sound decoder vendor for all your locos and stick faithfully to that one vendor's decoders. This may be a problem for clubs.

8. In this short Loksound demo video clip on TrainMasters TV, Matt Herman of ESU demonstrates the great sense of "mass" these settings produce when accelerating or coasting. Click this image to play this video clip.

If you can standardize on a single sound decoder vendor at least within a given loco consist, adding a higher acceleration and deceleration along with braking can make operation very engaging.

The great sense of mass is captivating. When you apply the brake and get the brake groan and random squeal as you come to a stop, it doesn't get much more realistic! ☑

RATE THIS ARTICLE

TRY IT, YOU'LL LIKE IT

Once you try a sound loco set up as I describe in this column, running locos set up the old way will never be the same.

LITE AND NARROW column

Model Railroad Hobbyist | May 2018 | #99

Larry Smith explores the Buffalo Creek and Gauley ...

RATE THIS ARTICLE

My first encounter with the Buffalo

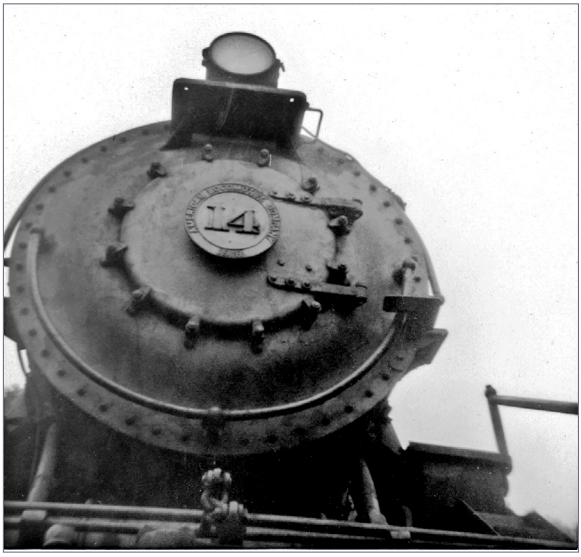
Creek and Gauley short line in West Virginia came when I picked up the November 1959 issue of *Model Railroader* at the Crummett's drug store in my home town. I was 18 at the time and had just entered college.

I purchased the issue of MR really looking for the second part of a three-part article by Jack Work on building a coal mine. As a side note, I've read and reread this set of articles over the years and have discovered more information about the prototype complex since then. For example, the lower floor of the tipple is reversed on the model versus the prototype.

Much to my surprise, I found an article by Paul Larson on the Buffalo Creek and Gauley along with a track plan for a model railroad. I would learn later that some of the assumptions made were wrong, in both the article and in the included track plan.

Six months later, on May 20, 1960, I found myself viewing and riding the actual railroad!

1. BC&G #14 passing engine shed with Shay 19 and Climax 3 in the engine shed at Swandale. *William Gordon photo*



2. BC&G #14 in yard at Dundon WV before the 1960 fan trip.

3. BC&G fan trip, June 1963.

4. Railbus B taken before the 1960 trip.

The history of the railroad

The Buffalo Creek and Gauley was chartered in April 1904 as a wholly-owned subsidiary of the Elk River Coal and Lumber Company. The goal was to build a 105-mile standard gauge railroad from Dundon, WV in Clay County to a point near Huttonsville, WV in Randolph County.

Dundon was at the junction of the Elk River and Buffalo Creek where a connection to the Coal and Coke Railroad was available. The purpose of the railroad was to tap the vast natural resources owned by the parent company.

The story often repeated about the origins of the Elk River Coal and Lumber Company: in 1903 Joseph Gardner Bradley inherited 102,000 acres of land in Clay County, WV from his grandfather, who had it given to him by the US government for "services rendered". The story also says that Bradley formed the ERC&L and became its president at the young age of 22.

While there is some truth to this story, there are some discrepancies. William Warden, in his 1994 book West Virginia Logging Railroads, using research by and quoting Neva Walling of the Clay County Historical Society, stated that in 1903 nine Pennsylvania businessmen, one of whom was Bradley's uncle, acquired the tract of land as the Elk River Coal and Lumber Association.

The railroad was chartered two months before Bradley became associated with the board of the ERC&L.

We don't know what went through the minds of those board members over a hundred years ago but being confronted with a young 22-year-old fresh out of Harvard law school, they made a decision and hired him as CEO of the BC&G and sent him to Dundon as superintendent of the railroad. He would hold this position, with different titles, until the company was sold in the 1950s.

5. BC&G #14 under steam in Dundon yard the morning of a fan trip.

Construction on the BC&G started from a connection with the Coal and Coke Railroad at Dundon and initially served a new coal mine nearby. The mine was located on the mountain across from where the company store would eventually be built.

In retrospect, a lot can be said for and against company towns. Given there wasn't a reliable source of transportation to get workers to the isolated areas where coal was mined, or timber was cut, such towns were a necessity, at least at the turn of the last century.

What began as a necessity evolved into a pseudo-feudal system with employees owning nothing and receiving no real money for their work.

With the company town of Dundon established, further construction on the railroad had the tracks reaching Cressmont by 1909. The first locomotive arrived on the property in 1905. It was a 4-4-0 of unknown origin and builder, although speculation indicates it may have been a B&O locomotive that had been built by Baldwin.

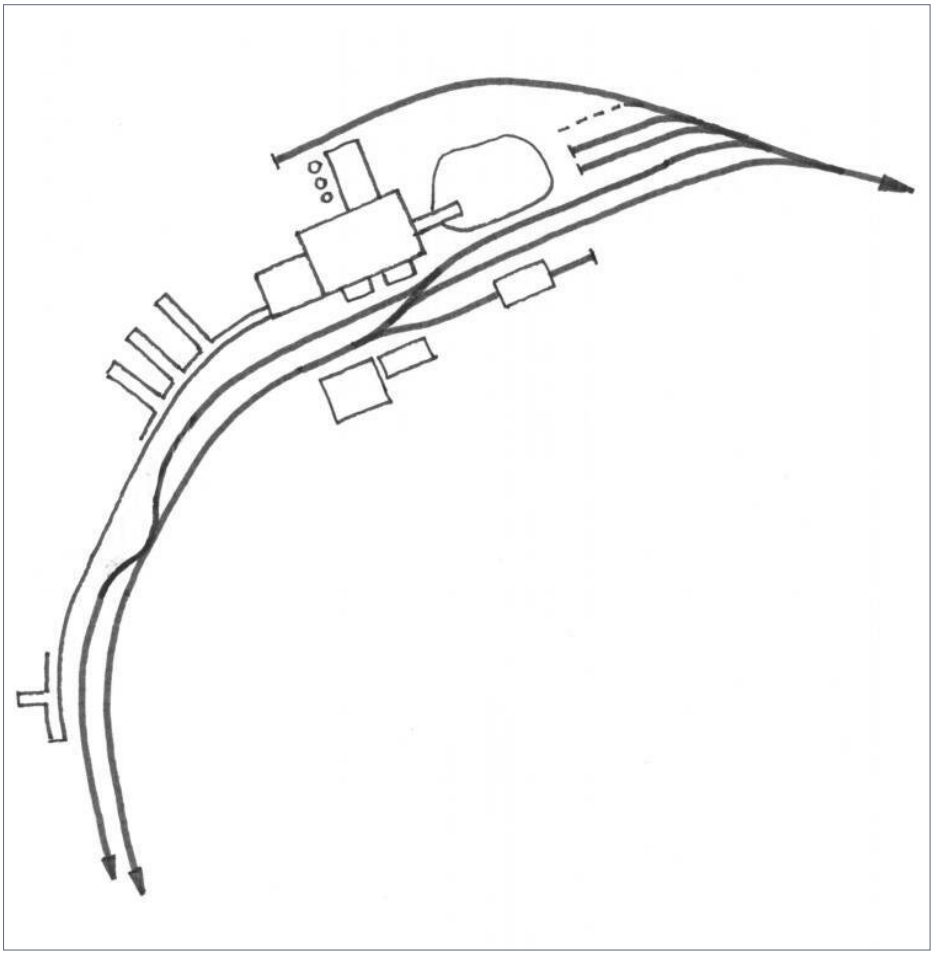
The railroad also purchased an unknown quantity of wooden hoppers and gondolas. Some sources indicate that two coaches arrived on the property at the same time as the Number 1.

Located approximately 10 miles from Dundon, or a third of the way up the railroad, was the town of Swandale where Barren She, a creek, met Buffalo Creek. A good understanding of the history of Swandale comes from both Kathy Gaskin's "Reflections on Swandale,"

6. BC&G Railbus B at Dundon, used as J.G. Bradley's private car. *Don Ross photo*

(buffalocreekandgauley.com/REFERENCES/Internet/Internet.html) as well as a history of Swandale compiled by Elvin Frame.

In 1910, the ELRC&L Co. let a two-year contract to Charlie Deal to saw logs taken from the company property. He built a circular sawmill at the place where the Barren She joined the Buffalo Creek. In late 1913, a second circular mill was built near the first.



7. Swandale track plan.

In early 1914 ERC&L Co. started construction of a band sawmill near the second circular mill but halted construction in late 1914 due to the start of WWI. Sometime around 1918, construction of the band sawmill resumed. The mill started production on April 6, 1919 with the cutting of a large chestnut log.

The following excerpts about John Swan are from an unidentified biographical sketch provided by Elvin Frame:

> " 'Captain' John Swan, born in 1845, spent his early life in North Carolina where he learned the logging business and built several mills. He came to Clay County, WV in 1899 where he continued the study of growing forests and up-to-date logging practices.
>
> "From the beginning, he appreciated the value of the oaks and poplars which grew in the eastern section of the county. He planned to convert them into a source of perpetual wealth by wise cutting of the matured trees. He put an experimental operation at the mouth of Turkey Run on the south side of the Elk River six miles north of Dundon. He eventually built the mill on the Buffalo Creek where the Barren She comes in from the south.
>
> "Captain Swan was the ERC&L Superintendent of Lumber and Timber Operations from 1903 through 1915/1916 and it was for him that Swandale got its name. Swan may have been one of the original nine shareholders of the ERC&L Co."

Then, in the 1909 to 1911, period the railroad was built the rest of the way to Widen and the Rich Run Mine was constructed, with the first shipment of coal from the Rich Run Mine was made on July 14, 1911.

The fact that the Rich Run Mine in Widen wasn't in operation until 1911 is supported by a finding made by Frank Criswell in

8. Company store at Swandale. *Patsy Baughman photo*

9. BC&G #13 at Widen tipple. *William Gordon photo*

the 1908 ERC&L Financial Statement. In that document, there is reference only to the Dundon mine and a proposal for a second mine in Dundon about 1000 feet from the original. No mention is made of mine in Widen.

Interesting, even though the Dundon mine closed at some point, the coal from the Rich Run Mine in Widen continued to be marketed as "Dundon Coal" and was marketed as such until the Rich Run closed. As Frank Criswell observed in a 1928 ERC&L Financial Statement, coal from the Widen mine is referred to as "Dundon Red Ash Coal" and "Dundon Low Sulphur Gas Coal."

The Rich Run Mine was pretty much the whole reason for the BC&G. Countless tons of coal were moved from Widen to the interchange with the B&O at Dundon in the years before the mine closed in 1963. Widen was a classic Appalachian mining town. The tipple and associated buildings dominated the landscape, and it and everything was covered with coal dust.

10. BC&G un-numbered steamer in Dundon yard, never run on the railroad. *Don Ross photo*

11. Of Course they know how to swim! ERC&L #19 waiting for logs to be loaded on Lilly's Fork. *William Gordon photo*

All the buildings were there, however, to make it a town that could fully support the 1274 residents in 1925. That number had halved to 600 by 1960. There were houses for the employees, a bank, a big company store, schools, churches, a YMCA and many other structures. All buildings were owned by the ERC&L Company.

BC&G railroad operations

The BC&G located its modest engine facility in Dundon near the point where Buffalo Creek joins the Elk River. Dundon is about 45 miles northeast of Charleston and sits just across the Elk River from the small town of Clay.

About a mile west of Dundon, the BC&G interchanged with the Coal and Coke Railroad, later to become a part of the B&O. Even with a mainline of less than 19 miles, in the 1950s and '60s more than 60 to 80 hoppers a day were exchanged at the Rich Run Mine. In 1960, the annual output of the mine tallied approximately 1,000,000 tons of bituminous coal, making the BC&G the busiest all-steam railroad remaining in the US at that time.

The BC&G bought two engines new, Baldwin Consolidation #2 in 1911 and Baldwin Consolidation #4 in 1926, and it continued to acquire steam engines long after other railroads had dieselized. They purchased consolidations #13 and #14 in 1950 from the Kelly's Creek and Northwestern, another shortline near Charleston, WV.

12. Cody Burnette's dad oiling #19. ERC&L has already sold the company to W.M. Ritter and the loco has been relettered. *William Gordon photo*

The ELC&L logging line acquired three Climaxes new over the years and purchased its last steam engine, Shay #19, from the Cherry River Boom & Lumber Company in 1957. This engine and other geared engines traveled into the woods along the Lilly Fork.

While the Rich Run Mine at Widen closed in December of 1963, Georgia-Pacific continued to operate the sawmill. The BC&G hauled lumber from Swandale to Dundon until February 27, 1965.

According to Warden's book, "the Plymouth diesel took over the job of hauling finished lumber to Dundon. But G-P saw the supply of merchantable timber dwindling and the cost of logging what remained kept growing constantly. The logging operation in Clay County was terminated in 1968. However, by this time, trucks were hauling the lumber to Dundon for loading on the flat cars at the B&O interchange."

For a short line of less than 19 miles, traffic on the railroad was quite heavy. In 1920 two freight trains and four passenger trains ran each day. The morning and afternoon passenger train, usually only a coach and, and later a railbus – would leave thirty minutes before the freight train from Widen left for Dundon.

The reasoning for this schedule involved taking the miners from the third shift home and picking up the mail from the B&O for delivery to the towns on the line. The freight train delivered the hoppers that had been loaded overnight to the B&O interchange and picked up the empty cars waiting for it. All trains originated in Widen and returned there at the end of the day.

The railroad didn't have any turntables but did have two wyes. One was at Avoca, just outside of Dundon, and at Bone Town Gap, outside of Widen.

The BC&G turned the locomotives at Avoca and ran tender-first to the B&O interchange. This led Paul Larson in his MR article

to make an erroneous statement that the BC&G operated tender first all the way from Widen.

Logging operations

Swandale served as the base of operations for the logging part of ERC&L. At around 6 a.m. each day, whichever locomotive was available, Shays 12 and 19 or Climax #3 would be taken to the company store for orders.

After arriving, the locomotive would back up to the empty flats by the log pond, couple on to five of them, and add the bobber caboose. Exiting Swandale, the train – with the tender leading – headed west to Avoca and ERC&L trackage.

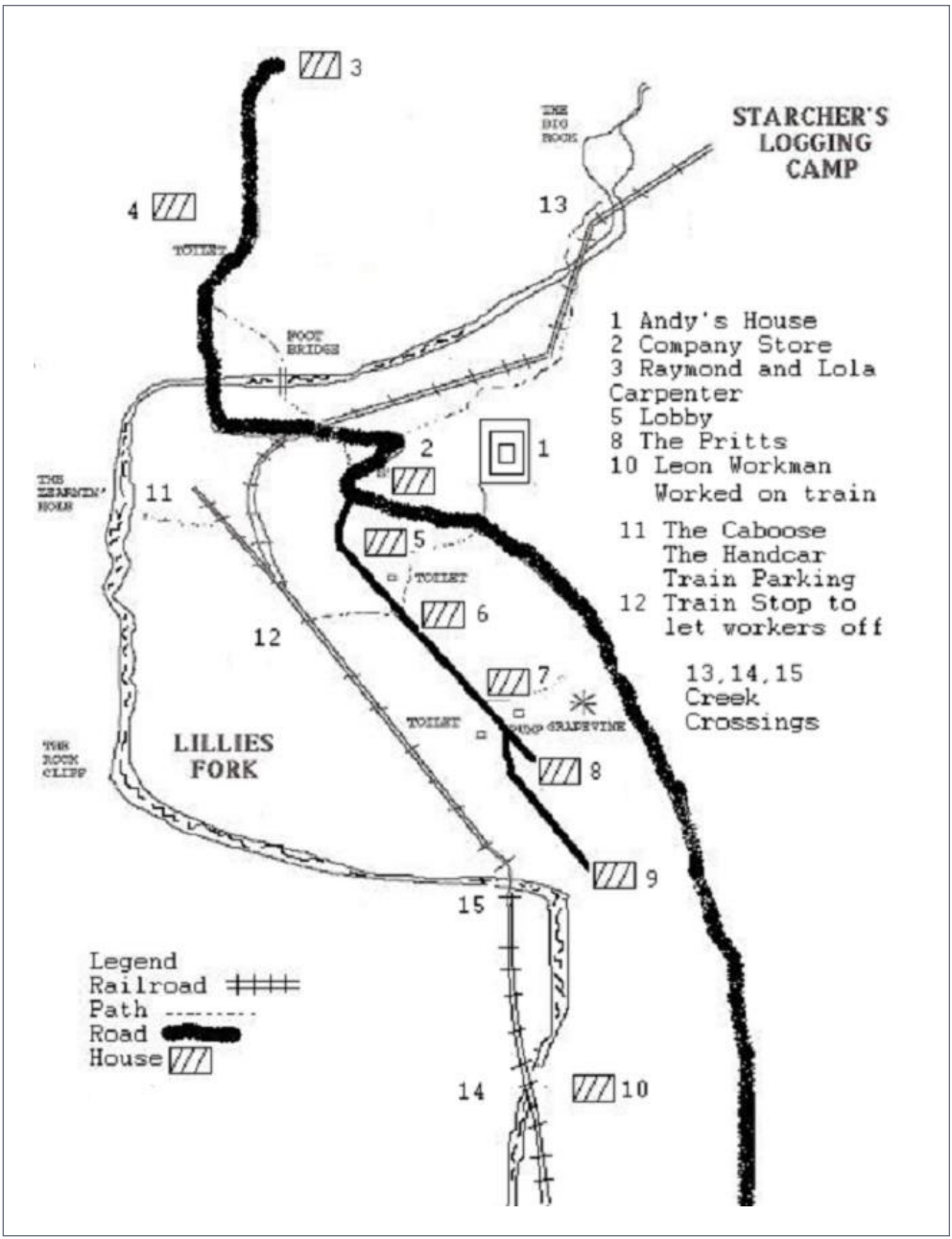
The Avoca wye allowed routing the log trains from the BC&G to their trackage going up Lilly Fork. The Lilly Fork trackage varied in length over the years but reached about nine miles into the woods. In some places the track ran right down the creek and in at least twenty places forded the stream.

About a mile from Avoca came Starcher's Logging Camp. Starcher's is one of those made-for-modeling communities. It consisted of seven houses, a building called the lobby (more like a community center where the loggers would play poker), and a company store.

In a siding at Starcher's, Climax #3 would tie up every night along with the fuel for the American log loader.

Lilly Fork meandered through the valley and the railroad crossed it four times before exiting. A dead-end dirt road paralleled the railroad leading to the houses, eventually crossing the tracks and the creek. For a detailed location of the buildings, roads, and track, see the drawing of Starcher's Camp [13].

When the train had loaded, the Shay backed out of the woods to Avoca, turned the engine on the wye, put it on the front of the



13. Starcher's Camp.

train, and headed east to Swandale. Five loads of logs made for a good day's work in the 1950s.

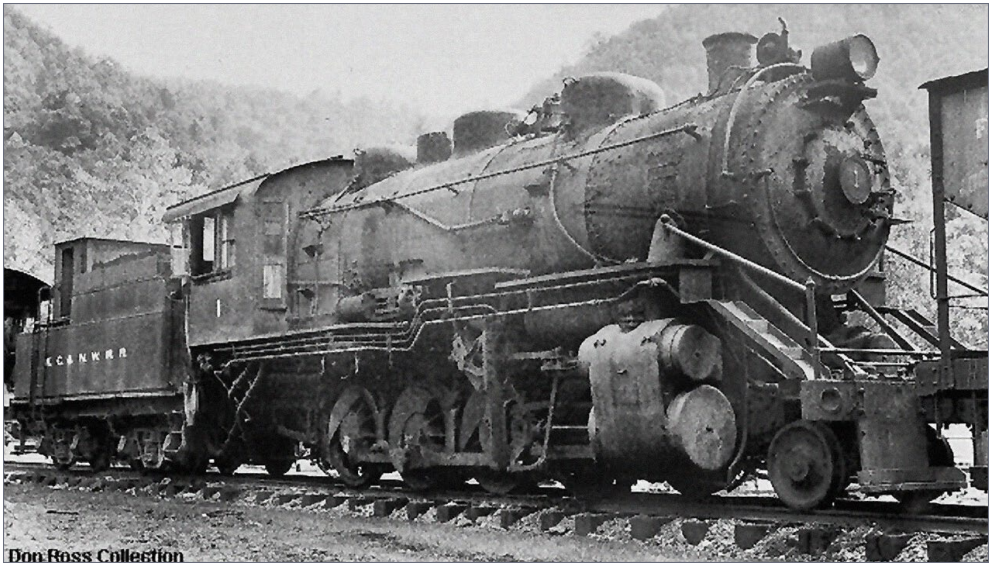
Cody Burdette recalls that if the train had been to the end of Lilly Fork, or if there had been a derailment, it would not get back to Swandale until late in the evening, even as late as 7 to 9 p.m. at times. In these cases, the Shay would return with a near-empty coal bunker, too!

Cody also indicated that on some rare occasions, the trains stayed all night in the woods.

The loaded log cars got spotted on the log pond track, the engines were serviced and then spotted on the power house spur for the night. The logs got unloaded early the next morning before the train left for the woods again.

14. Loco # 3 on steel train. *Cody Burdette collection*

15. BC&G #4, August 1956. *Harold Vollrath collection*



16. Kelly's Creek and Northwestern 1 became BC&G 13. *Don Ross photo*

Besides the log train, the ERC&L usually operated a second train each day. This train, sometimes referred to as "the steel train," ran behind Climax #3, the woods locomotive, which stayed at Starcher's Camp.

On the same siding at the camp sat the fuel tank for refueling the American log loader. The loader was self-propelled, having been converted from steam to diesel in 1945 and only taken as far as Starcher's Camp when it needed refueling. Climax #3 returned to Swandale about once a month for a boiler washout.

The train consisted of a flat car or two and hauled the rail, ties, and tools to lay track. The lightweight construction of the trackwork used in the woods is evident in photos.

The ties came from rough-hewn logs, with light rail laid on a crude roadbed. In places where the ERC&L forded Lilly Fork, rocks formed both the ballast and a bridge for the ties.

Other logging operations

East of Widen

Cody Burdette reports that in the late '20s and '30s logging took place east of Widen, beyond the tipple. Trees cut in that area sometimes came in at over eight feet in diameter.

All the log trains had to pass under the tipple. At that time, the American log loader ran on steam and had a stack that could be folded down, so it could pass under the tipple.

The logging locomotive, Climax #3, had to wait at the tipple until switching of the coal train completed before it could proceed to Swandale.

WHITSTONE – Little is known about this line and more information is being sought.

HAMRICK'S RUN - Little is known about this line and more information is being sought.

ROBINSON FORK - This was a line about eight miles long that followed Robinson Creek about 4 miles east of Swandale. It reached all the way into Nicholas County. Logging here took place in the 1920s, perhaps lasting into the 1930s.

TAYLOR FORK - This line was about seven miles east of Swandale and was also about eight miles long. It followed Taylor Creek. Logging here started here in the mid-1930s after operations ended at Robinson.

Robinson and Taylor Forks trains hauled logs from all the areas between Lilly Fork and Widen.

17. Loco #17 with gob train.

ERC&L gob train operations

What's gob, you may ask? Gob, tailings, or boney is the shale, rock, dirt, and anything else that comes out of the mine along with the coal. It gets separated from the coal by either mechanical means or by pickers. Men called pickers stood by the conveyors and watched for anything that didn't look like coal. They grabbed it and dropped it into chutes going to waiting cars or to another conveyor.

At the Rich Run mine, Clark side dump cars carried gob away from the tipple to two gob piles located east and west of the tipple. The western gob pile just west of Widen was the largest, at over 100 feet above the main line of the BC&G. Gob trains reached the top by going to the Widen wye and then working up a series of switchbacks to the top. The ERC&L maintained six second-hand and sometimes even third-hand Mikado locomotives to do this job.

The gob trains had six Clark cars for the western gob pile and three Clark cars for the eastern. Crews included an engineer, fireman, and a brakeman. There wasn't a caboose, so the brakeman rode in the cab of the locomotive.

A train left the tipple for a gob pile about every hour with 45-50 cars loaded in an eight-hour shift. This whole operation ended in 1959 when Euclid trucks took over the operation.

When I visited the gob pile in 1960 and climbed to the top, I found all the steam locomotives sitting cold on top of the western gob pile! Within a year, three of them would be scrapped and a fourth given to the Collis P. Huntington chapter of the NRHS.

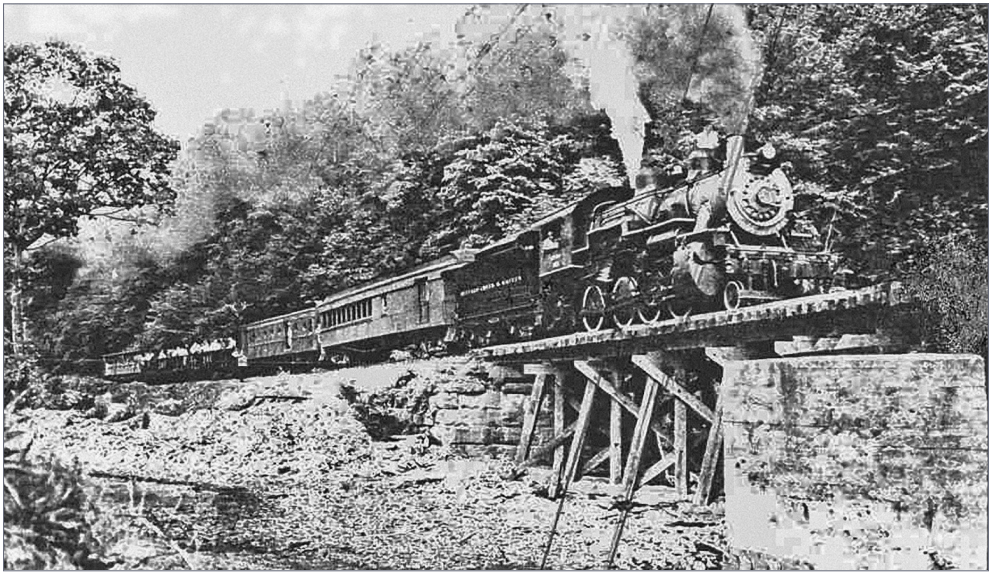
As a side note, Number 10, the locomotive donated to the National Railroad Historical Society, had its smoke box door ride back to Huntington in the backseat of a 1953 Plymouth with the three of us in the front seat!

We later reunited the door with the locomotive when it got cosmetically restored and put on display at the former B&O station in 1977. While they lettered and numbered it as a B&O Mike, it has since been renumbered back to 10 on the cab with nothing on the tender.

Fan trip fun with modeling suggestions

Have you ever looked at a child's face the first time they went to Disney World and entered the park? That look of amazement and wonder of the sights and sounds that were almost overpowering even to the adults with them? That must have been the look on my face when I entered Dundon yard the first time and saw not one, but three, fully operational steam engines.

The wonderful smell of coal smoke drifted over the yard, while the sound of an air pump would break the silence intermittently. Of course, the silence vanished as we got out of the car and found



18. Sand Fork repair. *Richard Manning photo*

friends who had arrived earlier. We were all gathering for the first fan trip sponsored by the Collis P. Huntington chapter of the NRHS, scheduled for the next day: Sunday, May 29, 1960.

Getting together with Bob Withers, a longtime friend and a major B&O expert, we explored the equipment and yard of the BC&G. We even walked down to the B&O interchange and up onto the highway bridge that crossed the railroad and the river.

Bob tried to get me to cross the railroad bridge but my problems with the bridge height and the open ties stopped me cold. On our return, Bob was climbing on some equipment and heard a ripping sound. It was his pants splitting! Making a hasty retreat to Dundon, he found one of the ladies who took a needle and thread to make the repairs.

After a good night's sleep, I slept in the caboose on the seat, while Bob and some others slept in the sand house. Some of the guys, knowing Bob wanted to get up at around 2 a.m. to go meet

19. Cressmont Dairy end view.

20. Freight approaching Cressmont. *William Gordon photo*

the B&O local, got on the roof of the sand house and stomped around to keep him awake. A grumpy Bob Withers did make it to the B&O in time to meet the local!

There were two other chapters of the NRHS involved with the May 1960 fan trip on the BC&G, and they had chartered a special train to operate over the B&O from Washington, D.C.

Chartering a train wasn't that unusual during this time. A high school in Parkersburg, WV always chartered a train when they played a Huntington, WV team, as it was about 100 miles between the two cities.

The B&O special passed Dundon at 8:30 p.m. on Saturday, May 28, 1960, bound for the Daniel Boone Hotel in Charleston. It

had passenger GP9 6606, coaches #3539, #3511 and #3543, and umbrella inspection flat car #8017. It returned at 9:35 a.m. Sunday, May 29, with #6606, coaches #3543, #3511 and #3539, and umbrella flat #8017.

BC&G 2-8-0 #4 with BC&G combine 16 (the taping car) went down to the interchange and took the flat off the special. Then #4 put the train together up at the Dundon shop, and well as I can remember, it included BC&G diner X6 (former Reading coach), two BC&G combines, former Pennsylvania P-70 combines0, three B&O modified gondolas, the umbrella car, and BC&G #C-1. Then Shay #19 coupled on ahead of #4 and we left at 10:46 a.m.

If you have ever been around railfans, especially around fan trips, they can be a little crazy. It can go from chasing a speeding train

21. BC&G #4 has just set off a box car brought in from the B&O, and now must get to the empty storage track above the tipple. *William Gordon photo*

22. BC&G Bus A, Sand Fork. *Source unknown*

along a highway while shooting video out of the car window to putting a camera between the rails and letting the train roll over it!

When riding on a train, the railfans may hang out windows and doors, lean off platforms, and sometimes even get on the roofs of moving cars. All of this just to get the right picture!

Fortunately, none of that happened on this trip – or at least we didn't know of it happening. As for crazy drivers chasing the train: there weren't any paved roads to Widen.

The first stop for photographers was Adair, an isolated area east of Dundon. The railroad traversed a shelf with a rock cut on one side and the creek on the other. Because of the way the sun lit the area, the train only stopped here on the outbound part of the

trip. This would make a great modeling area for a shelf or TOMA because of the narrowness of the scene.

The second stop was Sand Fork trestle. Strikers dynamited this trestle along with #4 bridge during the 1952-53 mine war. The

23. Loco #14 on Cressmont bridge. *J.Brown photo*

Mack railbus A was trapped between the destroyed bridges. Until temporary bridgework could be put into place, mail and passengers were carried to the bridge by train then transferred across the creek to the railbus, then to #4 bridge and finally to the waiting train to finish the trip to Widen.

It was also in this section that the railbus got stopped and robbed in October 1952. This was considered to the last train robbery in the U.S.

The train pulled across Sand Fork trestle, from which the temporary bridgework had been removed just two months before the fan trip and let the passengers off for a photo run.

I was in the cab of Shay #19 – yes, I did get to ride in the cab for a time and was on the walkie-talkie coordinating the run with the late John Killoran, when I heard "Larry, tell them to move the locomotive back a little further." Before I could answer, another voice came over the speaker, "Locomotive?"

The next thing I heard was John replying in military jargon and not making much sense. "Huh," came from the third voice, and then silence as they went out of range.

What John had done without telling anyone was that he had "borrowed" the walkie-talkies from the Civil Air Patrol and thought that due to the remoteness of the area no one would be the wiser.

They didn't figure it out until one of the planes came into the range of the walkie-talkies! John never did say how he returned them without getting into trouble.

Cressmont, the location of the company dairy, was the next stop for photos. The train crossed a short bridge and road that led into the dairy. It operated up until the company was sold to Consolidated Coal.

A large cache of dynamite was found on the Cressmont bridge but was removed before it could be exploded. After that, guard shacks were added at all the bridges.

The next stop was at Swandale, the home of the ERC&L. The train stopped here for water and a 45-minute rest stop. Shay #19 was cut off and stayed here for the rest of the trip.

Located in a wide valley where Barren She joined Buffalo Creek, Swandale was the location of the sawmill and locomotive facilities of the logging side of the railroad.

The track plan for Swandale [7] locates the different structures for the town.

Bridge #4 or Robinson bridge was the next stop. As with the Sand Fork trestle, a photo run was made, however this time we

24. BC&G #13, May 1958. *Harold Vollrath collection*

25. BC&G Mack railbus A at Strasberg. *Don Ross photo*

didn't have a problem with Civil Air Patrol. One thing to note, on the BC&G bridges, there weren't any guardrails and despite being called trestles, they were of deck girder construction.

The last two stops on the trip were the Widen Wye and Widen. The Widen Wye was east of the town of Widen and was the beginning of the grade and switchback for the gob line.

As explained earlier, the gob trains had stopped by 1960 and there was no more use for the switchback other than to get to the abandoned locomotives stored at the top.

After topping off the coal in the tender (the BC&G didn't have any coaling facilities on the property and always refueled at the tipple) the train was wyed for its return to Dundon. There were a couple of photo runs during the trip back but nothing like the ones going to Widen. We arrived back in Dundon at around 5 p.m.

The B&O special went back to Charleston for another night at the Daniel Boone Hotel. On Monday it went back to Grafton where the three coaches were added to No. 12, the eastbound Metropolitan Special.

Overall, the fan trip was a success and a second one was scheduled for October. Oh – and about those nutty railfans, no one got injured because of recklessness.

Modeling the BC&G

Because of its location in a creek valley, the BC&G would make a great TOMA or shelf layout.

Look at Brooks Stover's new BC&G at buffalocreekandgauley.com. His new layout is a compressed version of his last and was done because of a move. It is in S scale. While you are at it, check out Phil Bonzon's HO version of the BC&G as well.

For the HO modeler, Bachmann makes a heavy consolidation that is an excellent fit for the latter years of the railroad. If you can locate them, they also have a 90-ton Shay and a Climax. Athearn-Roundhouse has an old-time Consolidation for the early locomotives, if you can find one.

For BC&G-specific rolling stock, Bowser has GLA hoppers lettered for the BC&G. Bev-Bel produced a model of the second order of BC&G hoppers. Passenger cars are a bit more difficult to find given the portholes in the ends and sides. They are PRR P-70 cars and Bachmann has produced them without the portholes.

The crane is a dead ringer for the Tichy crane. There are no Clarke dump cars available. Spring Mills Depot is producing B&O C-1 cabooses lettered for the BC&G. You can also get one in B&O as well, as they had one on the property still in B&O lettering.

Layout Concept - BC&G in 1963

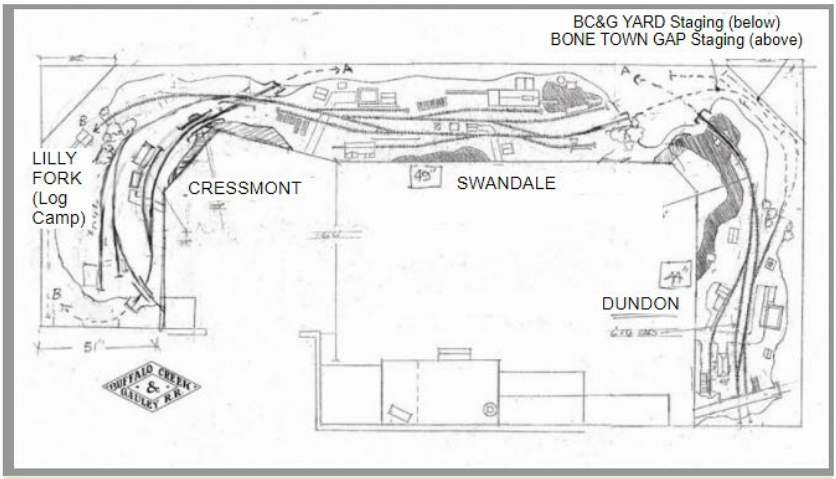
The new layout represents the BC&G in its very final years...1963-1965.

As documented elsewhere on the site, in 1963 the big Rich Run Mine at Widen was closed. After the closing, BC&G trains ran only 9 miles to Swandale where they delivered empty boxcars and flatcars for loading and picked up loaded cars of lumber destined for the B&O interchange at Dundon. Chip hoppers also appeared in the consists as wood chips from the sawmill were now being sold instead of burned. Trains ran just three days per week and were typically much shorter than in the golden years with 6-8 cars being typical. Because there was no place to turn locomotives at Swandale, BC&G engines ran tender-first back to Dundon.

Logging continued in this period with geared engines and the 45-ton Plymouth #20. This operation will also be modeled on the new layout.

Before dismantling the large layout I staged a few photos to explore the images that could be created on 1963-era BC&G layout. Here a BC&G train is ready to depart Swandale for the B&O interchange with loads of finished lumber, running tender first. Compare to the prototype photo above.

Track Plan



26. Brooks Stover's new BC&G layout website at buffalo-creekandgauley.com.

N scale has the same range of items available from Bachmann. Atlas makes a Shay. Bowser makes the hopper cars in N.

Because of their unique nature, the structures for the railroad will have to be scratchbuilt. Phil Bonzon has posted dimensional drawings on the BC&G website. They have been for the most part downsized for model railroads.

Cody Burnette and Patsy Baughman, mentioned in this article, were long-time residents of Swandale and Dundon. Cody's dad was the engineer of the log train, and Cody was the hostler for the logging locomotives.

More of his story is posted on the BC&G web site at www.buffalocreekandgauley.com, which I have permission to use. Patsy provided stories about life along the railroad and details that would have been lost had Brooks Stover not gathered them in one place.

Bob Withers is a long-time friend and even as a boy kept meticulous journals about trips he made and consists of trains he saw. He is the author of several books on the B&O and has a Morning Sun color book on the BC&G.

I thank all of those who have helped me with this article directly or indirectly. ☑

VIEW READER COMMENTS
click here

WHAT'S NEAT column

Model Railroad Hobbyist | May 2018 | #99

RATE THIS ARTICLE

Ken Patterson cuts in a new scene, Mike Budde scratchbuilds Stack Packs, we visit N scale and Fn3 layouts and view new drone footage ...

This month we look at Patrick Lana's beautiful N-scale layout along with Ron Keiser's indoor Fn3 layout. Mike Budde stops by and shares with us how he scratchbuilt Stack Packs and flat cars in HO scale. Steven M. Conroy shares fantastic drone footage and Ken modifies the topography on a corner of his home layout. ☑

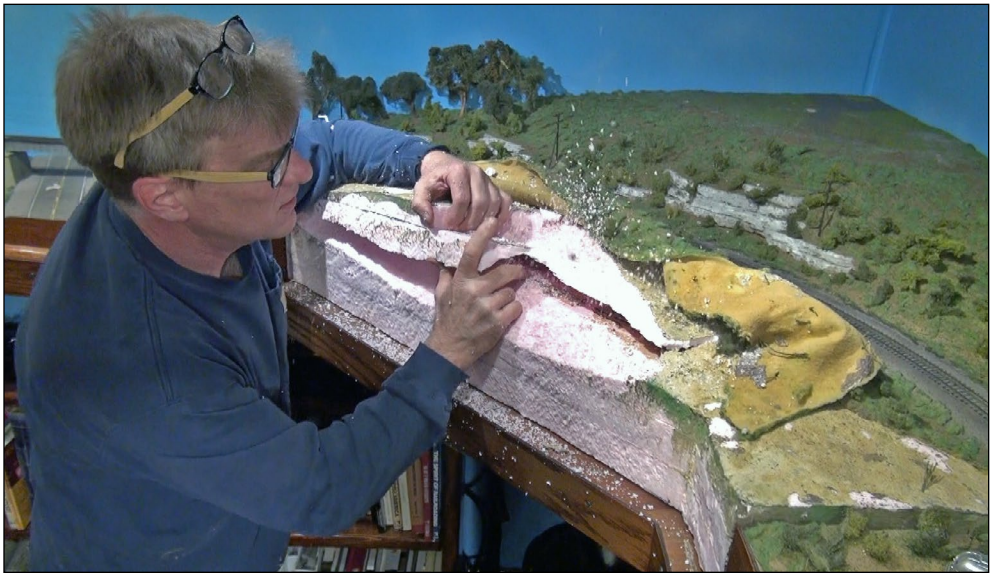
VIEW READER COMMENTS
click here

PHOTOS AND VIDEO OF SUPERB MODELING

1. (Above) For layout construction this month, I wanted to change a corner of my layout where the track curves with a 48" radius. I wanted to cut away a hill in the foreground to reveal a descending valley with a new dirt road. The ¼" plywood fascia pulled right off to reveal the Liquid Nails that had held it in place. The plywood will be reattached with Gorilla Glue.

2. (Top right) I started the project by peeling back fake fur that was glued in place with Liquid Nails six years ago. The fur is strong and will not tear, as it is saturated with dirt and Woodland Scenics Scenic Cement. Starting at one end, I carved the foam down with a pruning saw, working my way across the scene and pulling out large chunks of foam.

3. (Bottom right) After some time, I broke down and used the electric chainsaw to speed up carving the hills and the dirt road incline. The chainsaw saved me 30 minutes of hand carving. I followed this up with the Stanley Surform plane to carve the final topography and the new dirt road.



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

WATCH NOW »

4. I marked the road with a black marker, then trimmed and cut the fake fur on the layout, clearing an area in the vegetation for the road.

VIEW READER COMMENTS
click here

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

WATCH NOW »

5. I placed a drainage pipe in the scene – a brass tube painted gray – and then built up the topography with Foam Pro spray, filling in a ditch where our new road will connect to the existing road in the scene. After the Foam Pro expanded and cured hard and firm, I cut it down with a handsaw, creating a rough roadway.

Playback problems? Click here ...

6. The topography around the drainage pipe is carefully cut to feather the land down to the edge of the plywood. I used the Surform to trim the foam and carved the top of the plywood to match the scenery to the fascia.

7. I spread premixed DAP Flexible Drywall Joint Compound with a painter's knife to fill exposed bubble craters in the Foam Pro and smooth the road surface.

8. Brown latex paint seals the exposed pink foam to retard foam shrinkage and give the scene a nice earth tone color. After the paint dried, I glued the fake fur into place with the Great Stuff Foam Pro, applying an even layer and pressing the fake fur sections into the foam. Steel weights hold the ground cover in place while the foam expands and cures.

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

WATCH NOW »

9. I spread an even layer of backyard dirt on the scene, covering the road and feathering the dirt along the edges of the fake fur sections using an artists paint brush and my fingers. I applied Woodland Scenics ground foam to the scene, using light and medium green. I then soaked the dirt road and surrounding scenery with sprayed scenic cement.

10. After the dirt dried, I sanded the road smooth with 150 grit sandpaper and applied more scenic cement to further glue things into place, pouring it straight from the bottle and letting the glue dry for 12 hours.

11. Turning my attention to the sides of the layout, I placed the plywood in position and drew a line along the scenery's edge where the plywood would be cut to match the new topography. With this cut, I glued the wood sides back on the module with Gorilla Glue and water. I used tripods and broomsticks to hold the plywood in place while the glue cured for 20 minutes.

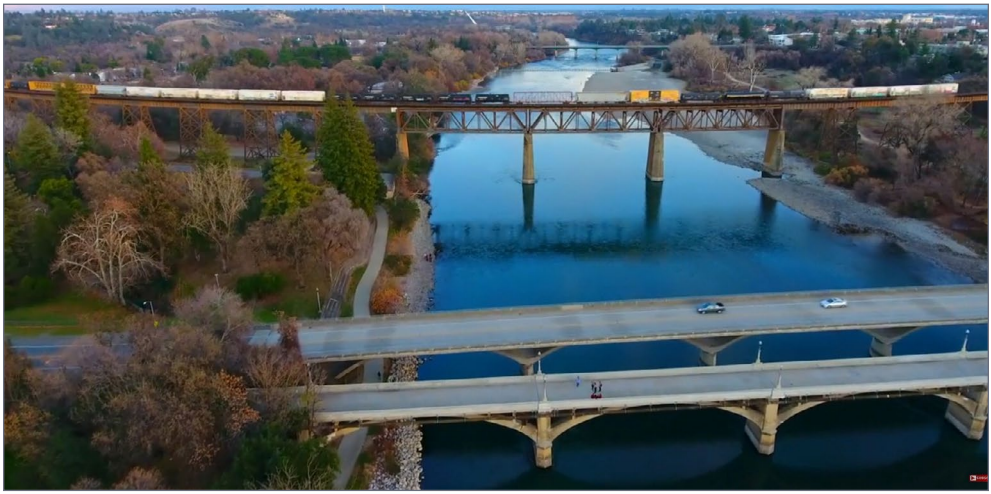
12. Silflor weed tufts enhance the scene, further blending the dirt road into the fake fur grass areas. Then I covered the scene with small bushes and trees made from bent wires, with poly-fiber and ground foam vegetation. These bushes add depth to the scene and replicate wild Midwestern summertime growth.

VIEW READER COMMENTS
click here

• INDEX • TABLE OF CONTENTS

13, 14. I covered the background hill with trees made from sagebrush armatures, creating a forest along the edge of the telephone poles and wires. And with that, the old corner of the layout has a fresh and interesting new look to it with topography that gives a clear view of the right of way and just enough different vegetation to add depth and realism.

Modeling ideas from above



15. Stephen M. Conroy provides us with more fantastic real railroad footage. Pay close attention to the color of the water, the trees, the toned-down colors of the distant automobiles, and the rust on the bridges as you watch the video.

VIEW READER COMMENTS
click here

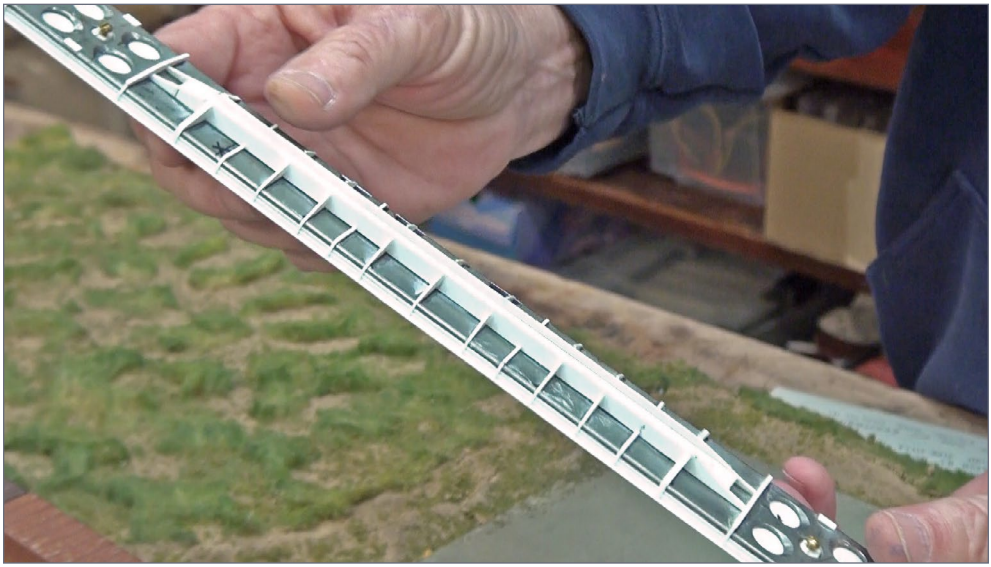
Also see the new "What's neat this week" weekly video podcast!

WATCH NOW »

Mike Budde makes Stack Packs

This month, Mike shows how he scratchbuilt flat cars and the Stack Pack containers to go with them for Southern Pacific trailer trains. Mike relied on an article in the SP Train Line magazine. He decided to build 14 flat cars –10 PLH10s and 4 PLH 21s to go with 40 containers, four to each flat.

16. The containers were open on one end to accept three Cadillacs, Buicks or other full-size GM cars from 1971 to 1976 until smaller GM cars came out in 1977 and rendered the Stack Packs obsolete. The containers were loaded on the flats with their open ends to the center, with only 4" of clearance, making access by vandals almost impossible.



17. Mike built each car from scratch, starting with an Accurail flat car weight and building styrene shapes and ribs until he had a close resemblance to the prototype cars.

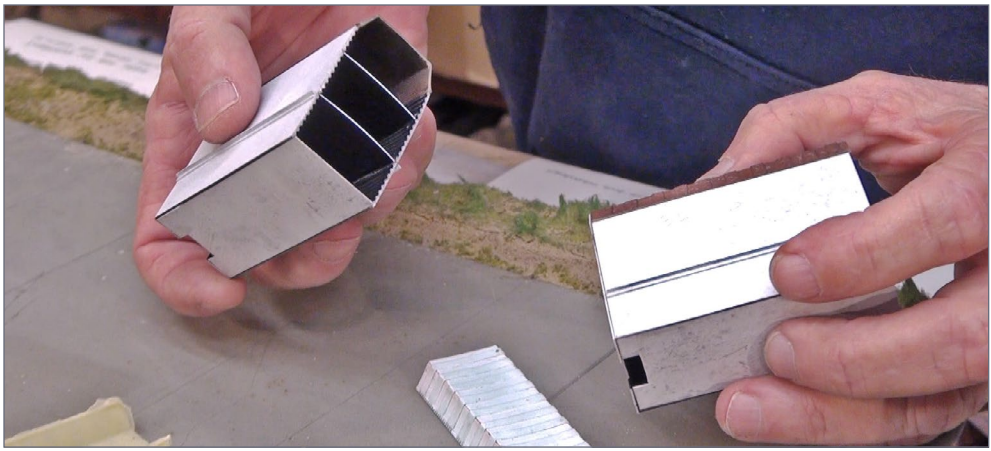
VIEW READER COMMENTS
click here

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

WATCH NOW »

18. The coupler sat on the deck the PLH10 flat cars, which have 28-inch wheelsets. Risers were scratchbuilt on the ends of the low-riding flats so any cars or trucks could clear the topside coupler boxes.

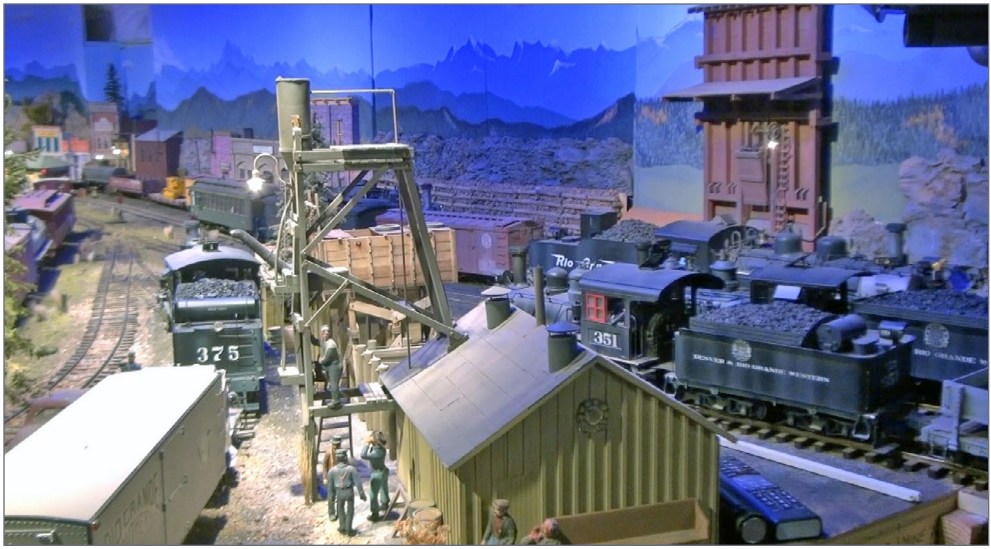
19. Mike used Shapeways printed parts on the sides of the cars to represent the inspection holes for the trucks.



20. Mike scratchbuilt a roof section for the containers and made a rubber mold to cast 40 of them for the project. He used styrene to build simple shapes to represent the containers sides, ends, and decks in assembly-line fashion until he had 40 of them ready for paint and decals.

21. He had decals made by Precision Design Company. After 1977, the flat cars became the decks for auto racks and the containers were scrapped or used for storage sheds.

Ron Keiser's Fn3 Layout



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

WATCH NOW »

22, 23, 24. (Left top and bottom, above) In this month's video, we see Ron Keiser's beautiful Fn3 (1:20.3 scale models on 45mm gauge track) large scale indoor layout. It took eight years of building to recreate the Animas Canyon type of vertical scenery with a Gold Rush-era flavor. Ron has created dozens of vignettes, with perfectly painted figures, that tell stories. From the campfire to the graveyard there are bits of dry humor in many of the scenes. The layout has a dark side – as you turn off the room lights, blue LEDs around the ceiling of the layout cast a blue night lighting effect that still allows you to see the models.

Street lights and interior building lights reveal full interiors. Ron's degree in commercial art is evident in his scenery design. Trees as tall as 2', scratchbuilt from caspia branches, cover the mountainsides from floor to ceiling. The locomotives are a mix of Accucraft and Bachmann with freight cars from Phil's Narrow Gauge, Accucraft, and Bachmann. Building flats along the walls are made from wood and cardboard covered with paper brick material. The layout wraps around the entire basement and is a real treat to see in this month's video.

Patrick Lana's N scale empire

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

WATCH NOW »

25, 26. (Left top and bottom) Patrick Lana has built a freelanced version of the CRANDIC in N scale. The Cedar Rapids & Iowa City layout occupies a 40' by 25' space with Iowa scenery from end to end. Corn and soybean fields made from grooved and painted foam give the subliminal effect of acres of land. Cities in between the farms give the operator the feeling of going someplace. It takes 12 guys to operate the layout, usually once a month on a Saturday from 10 a.m. to late afternoon. A typical operating session takes six hours. Patrick says the real joy for him is watching others make his layout come to life. His CRANDIC is set in 1968 Iowa with expansive scenes. Many structures are scratchbuilt from cardstock with brick overlays and scale windows. In this month's video, Pat's crew show how well this fantastic empire runs.

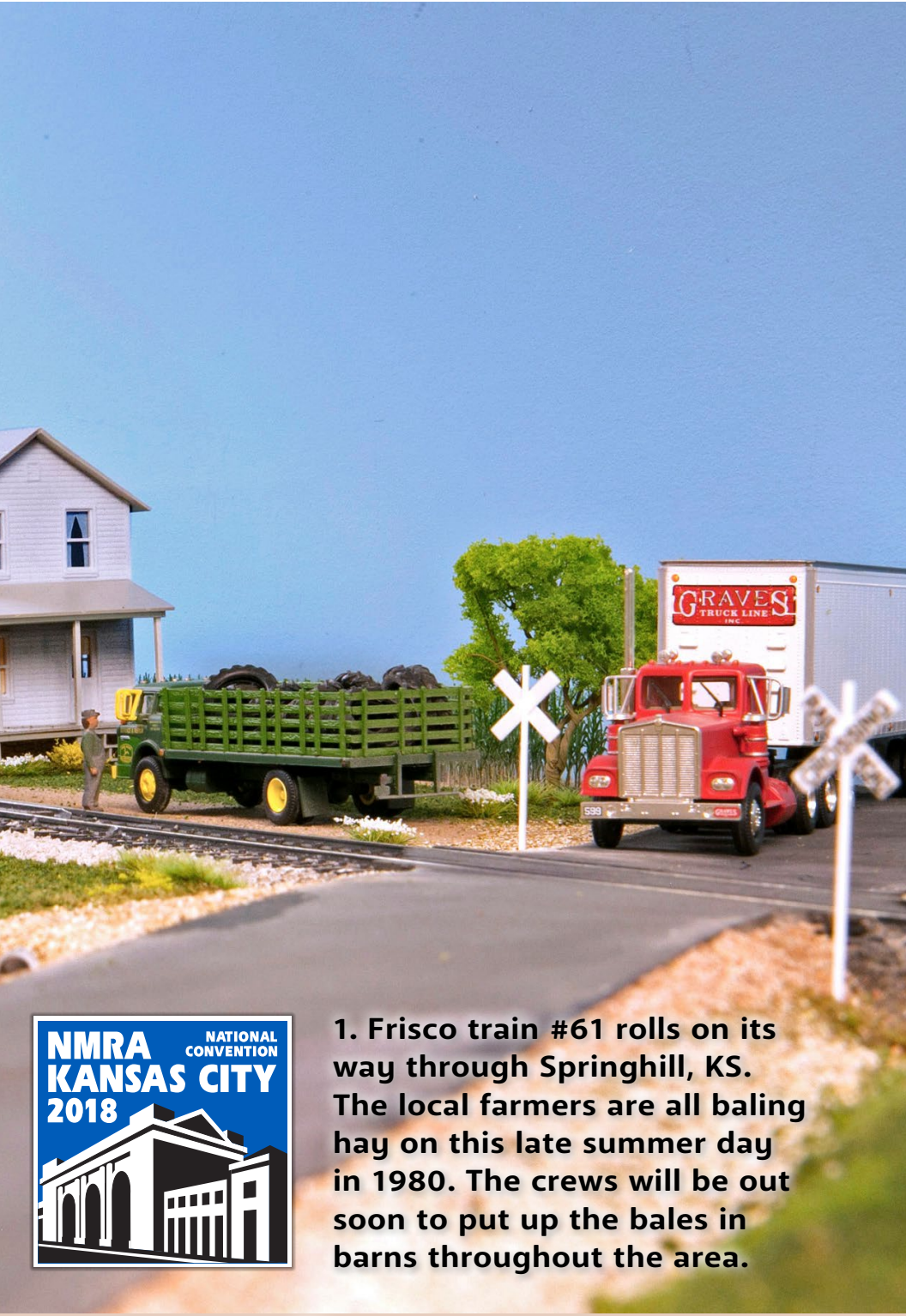
MRH Marketplace

• INDEX • TABLE OF CONTENTS

Rick McClellan's FRISCO

Photos by Cade Smith

See this late-1970s era railroad during the 2018 NMRA Convention in Kansas City this August …



NMRA NATIONAL CONVENTION KANSAS CITY 2018

1. Frisco train #61 rolls on its way through Springhill, KS. The local farmers are all baling hay on this late summer day in 1980. The crews will be out soon to put up the bales in barns throughout the area.

MRH: Rick, tell us about what you have created here.

Rick: What I've created in my basement surprises some folks. When I tell them I have a train layout, they often think it's a four by eight sheet of plywood, which a lot of layouts are.

I tell them mine is "many sheets of plywood" – and when you come to my basement, you will find an HO scale railroad. It's a miniature, linear transportation system with a radio control system that allows train crews to walk along with the train as it travels the layout.

It features the Frisco Railroad, and right now it's set in the period 1978 to 1981. And it features long trains and lots of switching, with several yards on the layout.

It also has other railroads: the MKT and the Missouri Pacific. One of the lines that comes onto the layout has some switching. Transfers also run between the connecting railroads in Kansas City with the Frisco and with the MKT.

I also have transcontinental through trains dropped off by the Union Pacific at Kansas City that travel the Frisco to Memphis, and on to Birmingham where they're transferred to the Seaboard Coast Line.

So, when you come to my basement, you're going to see a lot of trains, a lot of long trains, in fact. And I think it's fun watching the trains move. If you come to operate, I think you're going to have fun operating the trains.

2. Train and truck meet at a grade crossing south of Springhill, KS. The Graves truck driver wisely yields to the train approaching the crossing. The cupcakes on his dash may melt in the summer sun if he doesn't eat them soon.

MRH: What does "Frisco" means to you?

Rick: The Frisco has a special meaning to me. While I didn't grow up in Kansas City, the Frisco served Kansas City. I grew up in Springfield, Missouri but later moved to Kansas City. Springfield is the heart, the center point of the X of the Frisco system.

As a five-year-old child, I saw them switching the cars back and forth in Springfield yard from my grandmother's house on East Avenue. To me, the only railroad in the world was the Frisco.

Later the locomotives became orange and white, making them easier to see – and I saw them all over town! The Missouri Pacific had a small presence in Springfield, but probably 95% of the railroad activity in Springfield was the Frisco.

I couldn't find Frisco train sets. Everything was Santa Fe, Pennsylvania, or New York Central. When I modeled as a youth, that's what I had to model.

Later, I found out there is a lot of Frisco memorabilia and photographs out there, so I started studying the Frisco in earnest by acquiring such things. In my house, I have some of these things hanging on the wall.

The items include marketing materials, photographs, and patches. I even have a piece of china or two. I have a spike hammer in the hallway. I also have a brake wheel, a class light, and other things from the real railroad.

My dad helped me collect some of these things. And I just like having these things around; I like looking at them. It reminds me of Springfield. When I moved to Kansas City, the Frisco was still here, up until the merger. If you come to my house, you're going to see Frisco stuff!

MRH: What do people see when they first enter the layout room?

Rick: When you step out of my workroom into my layout, the first thing you're going to see is a long hallway with railroad on either side. There is a yard on the left, and a yard on the right.

You are stepping into the Frisco 1978 to 1981. And you're at the northernmost part of the railroad in Kansas City.

To your left, you see the 19th Street yard, just west of downtown Kansas City – the area called West Bottoms. Kemper Arena is there, the ICG used to be there, and way back, it was the stockyard area.

3. It's 1980 and the BN-Frisco merger looks like a "go." As a result, Burlington Northern power now can show up working Frisco yards and mainlines. Here BN SD9 #6139 shoves the Rosedale yard cars into a clear track.

Trains would drop off thousands, maybe millions of heads of livestock. There were several packing plants there. I don't have all that on my railroad, but I do have the Frisco yard there.

There were also many freight houses there. I don't have all the freight houses; couldn't fit them all in.

On your right, you'll see the Frisco Rosedale Yard, and that's the outbound yard. This yard is in Kansas, so the first yard on your left,

the 19th Street Yard, is in Missouri. At one time Rosedale, Kansas was a town and a stop on the railroad. It serves as the first stop past Union Station, the Rosedale Depot. That's what I'm modeling.

The MKT railroad disappears off to the right. When you enter the door, you won't see it, because the MKT is down around the corner.

MRH: Tell us about your journey in the hobby.

Rick: I have been modeling for about 40 years and I still have to pause and absorb all the amazing products available today. I never in my wildest dreams thought a complete Frisco locomotive roster was possible without a lot of work.

Like everyone else, I started painting and lettering Athearn locomotives and they were good. Then in the 1990s we got Kato, improved Life-Like, Intermountain and other locomotives and cars. Now newer manufacturers are producing even better, near-perfect equipment that allows us to do less work on equipment and focus on the layout to run them on.

Initially, I ran trains with block control and then graduated to the Keeler CTC80 command control system, a quantum leap. I barely got that under my belt when the siren call of DCC grabbed me with multiple lighting functions and sound.

Just when I think it can't get any better, now we have amazing decoders and other electronics to make everything run like silk. Sound is icing on the cake and specific locomotive sounds, horns, etc. is remarkable. It just keeps getting better and better. What is next and can I afford it?

This means I can now focus on structures and scenery. I have never had a layout this complete, ever. Even more will be completed before the convention in August. I hope some of the readers can take the tour of my layout.

4. The Frisco inbound yard at 19th Street also has locomotive and caboose maintenance facilities. Yard switchers #362 and #364 begin work on an inbound train as two sets of road power idle on the engine service track.

MRH: What would you say is your current hobby passion?

Rick: My long-time passion has been operating. The engines, cars and layouts are nice but when operated by a good crew, the model railroad comes to life. Each operating session is unique and takes on the personality of the crew. I delight in how op sessions fulfill my vision as the layout owner and how it recreates a small piece of railroad history.

My current passion is building structures and scenery, both long-term weaknesses! To cure my structure phobia, I have been creating some large, scratchbuilt structures on the layout including the 12th Street bridge and 19th Street engine house – with good results, I might add.

My recovery included building large structure kits and accepting something less than perfection in my models. My "close enough" buildings give the feel of a specific location – which has been my goal. I wish I would have built structures earlier!

I credit my friend Bill Hirt for guiding me on scenery. His work using the latest available scenery materials got me moving on my own scenery. The use of these materials, including tufts, is fast, easy, and effective.

My wife Jo has done some really nice work with the scenic materials and the flower tufts. The layout almost looks alive now!

MRH: So tell us more about how you operate. With two yards, sounds like there could be a lot going on.

Rick: The Frisco was unique in that it had two yards in Kansas City. Most railroads here had one plot of land large enough to handle inbound and outbound freight in the same yard. Many railroads had small yards scattered around town for holding cars for the packing plants and other industries. But for their main yard, almost all railroads that I'm aware of do inbound and outbound yards on the same plot of land.

The Frisco "shoehorned" in a couple of medium-sized yards: Rosedale, the outbound yard on the Kansas side– and 19th Street, the inbound yard just west of downtown.

All inbound trains, which would be northbound trains, would terminate at 19th Street, and then their trains would be broken up. Cars would go to local jobs to switch at the local industries within the Bottoms, or other cars would be transferred over into the Rosedale area and switched from there.

All the cars going to connecting roads got sorted to a track, and when the track filled up, those cars would be taken to the connecting roads.

If you were taking a train out of Kansas City and going south (which is the only way you could go) you would get your power at 19th Street. The 19th Street yard in Kansas City had the only loco servicing facility. It serviced the cabooses as well.

When leaving town on the Frisco, you picked up your locomotive and your caboose at 19th Street, and then traveled the couple miles south over to the Rosedale yard. There you drop your caboose on the north end, run around your train on a clear track, then back the power onto your train. Another crew on the north end would take your caboose and attach it onto your train.

Then you'd pump up your air, get your clearance, and once cleared, then you would start heading south down to either Tulsa or Springfield, one or the other.

If you went to Tulsa, points south from there would be either Oklahoma City or Dallas. If you were going to Springfield, from there you went to St. Louis, Memphis, or Birmingham, or even down to Arkansas. There was a rail line that went down to Fort Smith.

From there you go through the rest of the layout. The Kansas City part is maybe 20% of the layout. When you travel through Kansas on the layout, you'll go through Merriam, Lenexa, Spring Hill, Paola, Fontana, Fort Scott, and Garland. I'm representing all these towns on the layout, although highly compressed.

If you're going to Springfield, you cross the state line and go through Lamar, Missouri, after which you "miraculously" end up in Springfield, Missouri. If you're taking the Tulsa route, you jump off at Edwards Junction, and then go into staging.

"The Frisco 'shoehorned' in a couple of medium-sized yards: Rosedale, the outbound yard on the Kansas side – and 19th Street, the inbound yard just west of downtown."

But it's a fairly long run on my layout from Kansas City to Springfield, or from Kansas City to Tulsa staging.

I tell people: bring some good shoes, because you'll do some walking when you operate here. I think most folks enjoy all the sights along the way when they run these entire routes.

I'm still building the layout and it's not done. That said, there are still interesting sights along the way to pique your interest.

MRH: How do people react when they come in, and aisle after aisle they see how much layout is here?

Rick: A manager at work wanted to bring her son over – he was 12 at the time. When he hit the door, he looked left at the layout going off across the basement, and he looked right at all the layout going

5. The Frisco handled several through trains between the Seaboard Coast Line and the Union Pacific. Power and cabooses were pooled meaning that any railroad's power and cabooses were used to get the train to its destination. Here we see Frisco GP38AC 662 teamed up with SCL 1910 on a Northwest Forwarder bound for Seattle. Not sure the fish will bite until the NWF is past.

off that way. Then he looked at his mom and he said, "Mom, can we do this at home?" And she said, "No way."

This layout is not quite what people expect.

I don't think they understand we run things like a miniature transportation system. It's a lot more than a child's train orbiting in circles. It's more like a very large chess game, where you're moving the pieces.

The operation is strategic: you're taking your train somewhere for a reason. We're simulating the transport of goods someone has bought from someone else, and they're going from the seller to the buyer. It's our job to get them there.

And that's what we do. We come in, accept these roles of yard-master, road crew, switch crew, dispatcher. We all take those roles on, and we play that part for some three hours.

I can look at a train, and I can tell where that train came from based on the cars I've learned were in captive service between point A and point B, or by seeing the power that's on the train.

I can say, "Hey, that's a train coming north out of Memphis, because they have insulated box cars in pool service to Schlitz Brewery, so they're hauling Schlitz beer out of Memphis." Or I can look at a lot of reefers coming out of Kansas City, going south.

If I see a lot of reefers, and a lot of pig traffic going south, my first thought is, "Hey, that's the Southeastern transcontinental train where the UP has the Frisco as the bridge to the Seaboard Coast Line in Birmingham. I can tell by looking at the train what it is: I don't even have to look at the paperwork the operator has.

So it's a miniature transportation system. I'm recreating history, so I tend to think of myself as a historian. We don't model it 100%. But I'm looking at timetables, at the equipment as it ran on the prototype, I'm modeling the structures that were standing at that time – all as far as the photographic evidence allows.

I'm doing my best to recreate a time and a place in history and to get a nostalgic feeling from operating it. I love this hobby

MRH: Sounds like realistic operation is a big part of the hobby for you?

Rick: The philosophy of many modelers in Kansas City, is we can operate on a plywood central, and it's fine. As long as there's decent track, a good locomotive with clean wheels, a decent command control system, and paperwork that tells me clearly what to do, I'm good.

Good paperwork is important. I don't want to be asking the layout owner every five minutes what I need to do with a car. You can write the name of the industry beside the track, or on a piece of paper, and that's fine.

I'll drop that boxcar at that location if you tell me that's where the car goes, and you've clearly identified that location as the receiver for that boxcar. I can play that illusion for a long time.

We hope they will eventually place some sort of structure on that area. I'm not saying you have to do it the next session, or even six months from now.

The scenery, the structures, the automobiles, the backdrop, and all that stuff doesn't make it operate any better or any worse. But it does make the experience a little better later on.

But no, you don't need scenery, you don't need structures, you don't need that stuff to have fun operating. You just need to be

6. Train #61 rolls through Lenexa, KS on its way to Springfield with 25 cars. The track men in front of the station plan their day and hardly notice the engineer of engine 662 blowing for the crossing.

able to move cars reliably, and have a system by which to move those cars.

MRH: Okay, for you and a lot of the Kansas City area modelers, good ops trump good eye candy.

Rick: Let me relate a quick story. We have a gentleman here, Jim Eudaly. He has a nice, large layout, and I'm sure he has many fine brass pieces in his layout collection.

Jim did a clinic that really surprised me. He brought in a brass passenger car set box, and asked everybody, "What does it take to operate a railroad? Be as basic as you can be."

7. Train RHKC (Rush Island-Kansas City) is an empty coal train headed from St. Louis to the UP in Kansas City. Here RHKC passes over the Bull Creek Bridge south of Springhill in the summer of 1980.

People called out, "Oh, we need track. Okay. We need a locomotive. Okay, we need some cars."

He didn't open the box up, but kept asking us what elements you need to operate a railroad.

So he opens the box. He pulled out BRIO track (the wooden track sections) and says, "Okay, well I have track here."

"Okay, and we need a locomotive, here's a locomotive." So he sets a BRIO locomotive on the track.

"You said we needed cars," and he pulled out a couple of BRIO cars with the little magnets that hold them together.

"You said we need a siding, okay, here's a switch, and here's a siding. So here's our main." He built this in like a couple of minutes using BRIO wooden track sections.

We were stunned, but the point is a good one: you don't need big, expensive things to operate. You could operate with BRIO, if you wanted to. Your command control system would be your hand, pulling the train along. It's not fancy electronics, but it's still a control system.

That impacted me. I thought, "You know, it doesn't have to be a big darn deal. It really doesn't."

Everyone operating today started somewhere. I've operated on a lot of small layouts that would fit in this 13 by 13 space we're in. You can keep three guys busy for a few hours, and they still couldn't get all the work done.

MRH: That is a great story. What's the main thing you're working on right now?

Rick: I said scenery wasn't important, but once you've run the railroad for a while with bare benchwork, it's a nice change to put scenery down, put in structures and vehicles – that sort of thing.

It adds to the depth of the scene your modeling. It brings the layout to life, especially if you're doing summertime, like I am. It starts to look like a new layout almost, to see all the green show up. The plywood sprouts trees and grass – it even sprouts buildings and vehicles!

It also tells you, "Hey, I'm in 19th Street Yard, because there's the 12th Street Bridge on the north end." Or, "I'm in Lenexa, because here's Lenexa Feed & Seed with its grungy, corrugated tin-sided building."

Signature buildings tell you where you are. One of the biggest compliments is when somebody says, "Hey, that's the 12th Street Bridge, nice." Or, "Hey, I remember the Lenexa Depot at Pflumm and Kansas City Road."

So signature buildings make the layout experience deeper and richer. I've had a couple of folks say, "You know, that Lenexa Feed & Seed Company is still there, but some business bought it and is remodeling it, but the building is still there!"

8. Rick likes using three and four unit loco consists on many of his trains. He currently is installing sound decoders into his loco fleet as he can afford it. He prefers to put two sound locos per consist, with the sound locos on the end. He feels that gives him the best sound.

That tells me I did my job. I'm a historian – I placed a miniature building that looks like Lenexa Feed & Seed in my model of Lenexa, and somebody recognized it. Anyone who's going to operate the railroad will spot cars there, too, so it serves a good purpose.

MRH: What about trackwork – curve radius and turnouts?

Rick: My minimum mainline radius is 31" although I will use 32" where I can. I am using #6 turnouts everywhere. Recently, however,

I installed some Walthers #10 turnouts as a high speed crossover. I also have started building #6 Fast Tracks turnouts. They're more reliable than the Atlas turnouts I was using.

MRH: What challenges have you faced with this layout?

Rick: I started this layout in 2001 and there have been challenges to having a large layout. I did not realize how much work it would be when I first started. But it's not work every single day unless I want it to be work.

A guy named David Barrow visited here once. People might've heard of David Barrow – he walked throughout my layout that was well along and filled much of the space, but not all the benchwork was up yet.

David saw the still empty space. He looked at me, then he looked left, then right. Finally he looked back at me and asked "Are you crazy?"

I shrugged it off at the time, but I do think I'm a bit crazy. I started this thing, and here years later I'm *still* building it.

MRH: Do you have help, like in work sessions?

Rick: In Kansas City, many guys have layout work sessions. They'll have several guys over and they'll work on scenery one night, or they'll work on track, or they'll work on whatever.

I had help building the interior walls. I had a little bit of help on the benchwork, but most of the benchwork is mine. I had a small amount

of help on track work, and then I decided I'd take that on myself. I'm picky with track. I just prefer to work mostly on my own layout.

That's not to say that I haven't had help, because I have. I've had people like Steve Priest build things for me, which is great. Like the bridge over Bull Creek – Steve built that bridge for me. Steve and Joel (Steve's son) have also weathered some engines. I don't ask: they offer, so I say, "Well, here are some boxes, take them home and weather them."

There are guys who have regular work nights and that's great. If they can dedicate one night a week to managing 15 guys who show up to work on the layout, that's fine. For me, I'd rather do it myself, at my pace, and be the one responsible for the results.

MRH: What about help with the electrical or DCC side?

Rick: Initially, I ran trains with block control and then graduated to the Keeler CTC80 command control system, a quantum leap. I barely got that under my belt when the siren call of DCC grabbed me. I upgraded to a Digitrax simplex wireless system.

I'm in the process of installing Tsunami2 sound decoders in my fleet. Right now, I'm running one or two sound decoders per loco consist. My loco consists are generally two, three, or sometimes four locos. I'm starting to put two sound locos in a consist, preferably on the ends in a consist with three or four locos.

"I've had people like Steve Priest build things for me, which is great. Like the bridge over Bull Creek – Steve built that bridge for me."

Sound is icing on the cake and specific locomotive sounds, the horns, all the sounds are just remarkable.

I've had a lot of help learning Decoder Pro and programming the Tsunamis thanks to a local expert, Keith Robinson. Right now we're doing signals, and Bret Overholtzer has been key on programming those, because I couldn't program them myself.

MRH: Tell us more about how you run an op session.

Rick: The way we operate the Frisco is pretty similar to what other modelers in Kansas City do. I've gone all the way from Dallas to St. Louis to Minneapolis – and even out to Colorado, and a lot of guys operate the way I'm going to describe it, with minor variations.

The base unit is the car card. Each car has its own card with its data on it. It has a waybill tucked inside that tells the contents of the car, where the car came from, and where the car's going.

When you pick up this "car paperwork" – like on a real railroad, you know what that car's supposed to do. We operate with verbal track warrants. Some guys use a radio system, I use a party line telephone system.

The train crew calls the dispatcher when they're ready to leave. This can be a train that's originating, or a local that has made its drops and is ready to go to the next town.

You call the dispatcher and get a verbal clearance to go to the next point on your journey. It can be the next town you're switching, or the next major city where your train might be terminating.

So each train operator works with the dispatcher in order to get authority to move their train.

MRH: Tell us about your signals, we see some on the layout.

Rick: We're just starting to add signals to the Frisco. They look cool, but we don't have them lit yet.

We do have the block detection in, and we have the turnout throw and detection in: it's all on a computer. It's the LCC (Layout Command Control) system.

I don't know how many of those are being used on other layouts: I know the system itself is pretty new. Putting all the parts together really wasn't as bad as I thought it would be.

I wouldn't say using LCC was easy, more somewhere in the middle between easy and hard. The nice thing about having signals – if you have a signaled railroad, it cuts down on the chatter back and forth between the crews and the dispatcher.

Sometimes in sessions there can be several people trying to get to the dispatcher at the same time. But if the dispatcher has his signal panel, he can set their route up without even talking to them.

Dispatch can now more readily talk to the local guy who's making a lot of short hops, for example. He may not talk to the guy going from one end of the railroad to the other, he just routes him across the railroad with the signals.

Signals do take a bit of work to put in. There's a lot of wiring. Of course, there's logic to where you want signals to be placed. And sometimes you have to bend the rules of the prototype to make things work. You may have to mix the prototype with the fun factor and with practicality to get the best operating session using signals.

I've wanted signals for a long time but they weren't a high priority. But it's now the logical time to put signals in. We're adding them a block at a time, working our way south just like we built the railroad.

MRH: What kind of equipment are you running?

Rick: I don't think we talked earlier about the variety of cabooses, motive power, freight equipment, and such. Like many modelers, I've never met a railroad that I didn't like.

If I can justify putting it on my layout, I'll do it. This layout enables me to do a variety of railroads through various means. For example, with

transfers, I can have ICG power, I can have MKT power, I can have Union Pacific, that sort of thing. With transfers, you can see roads that you wouldn't otherwise see running across the Frisco itself.

I would like to say I invented this idea, but no. When I moved here I saw other modelers in Kansas City using that rationale to get foreign power on their layout, so I adopted it.

The railroad that I'm doing, the Frisco, actually was a bridge route between railroads on the west end, with the Seaboard Coast Line on the east end. So on the west end, from the Pacific Northwest, the UP sent trains across the Frisco to the Seaboard Coast Line and on to the east coast.

The Santa Fe did the same thing from the lower western half of the United States. Trains from the California area would go east, and they might send that traffic through the Frisco, on to the Seaboard Coast Line. So that enables me to have UP road power. I can have

9. The MKT had trackage rights over the Frisco from Paola, KS to the Frisco yard in Kansas City, KS. Northbound MKT train #104 passes the grain elevator in Lenexa, KS while meeting southbound Frisco train 62 lead by #662. Train crews get to enjoy the midwestern Kansas scenery on the warm summer days like this one in 1980.

Santa Fe, and I can have Seaboard Coast Line. A lot of the Seaboard Coast Line stuff didn't really get repainted quickly, so if I backed up to say '77, or '78, I could have the green and yellow Seaboard units, in addition to the black Seaboard Coast Line units.

And, because that became the Family Lines around 1976, I can have some of those gray units too: the ones with the little Family Lines stripe through them. I think they called it the Confederate Soldier paint scheme.

Running the transcontinental trains lets me have different cabooses. Because they pooled the power, they also pooled the cabooses as these trains went across the country.

Having interchange tracks along the way, I could probably get the Kansas City Southern on the layout if I could squeeze it in somewhere, but I haven't figured out how to do that one just yet.

MRH: If you think about the prototype, you may realize you can get a lot of variety and it's not inaccurate.

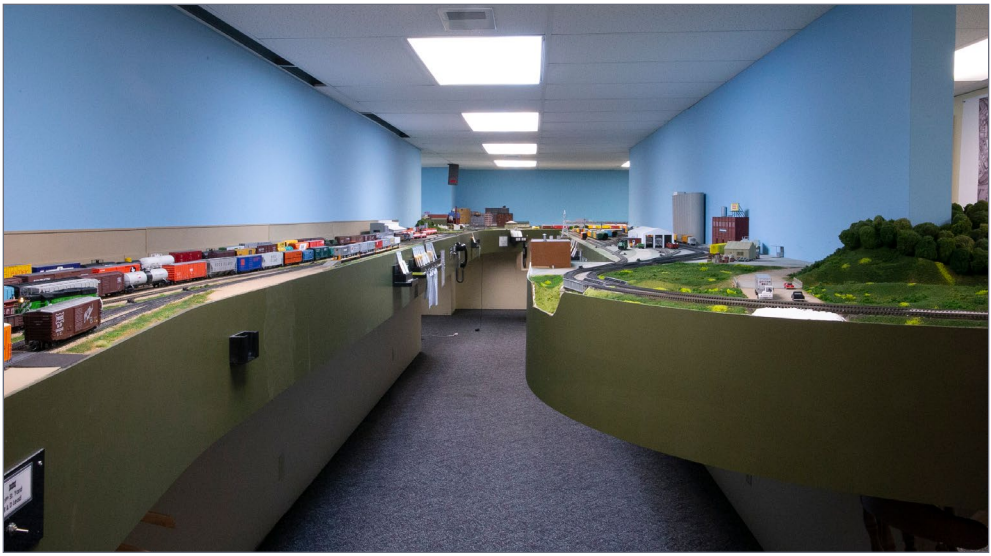
Rick: Well, I don't have Penn Central, but if I could justify it, I'd do it. I'd also like to have some Southern. I think that tuxedo scheme is cool.

MRH: This isn't your first layout is it?

Rick: No, this is not my first layout. On my first real layout I didn't address crew comfort whatsoever. There was no place to sit, no restroom, and there really wasn't even a place to put treats, snacks, or drinks. I had no refrigerator in the basement at that time.

My wife talked me into a bigger basement. And if we had a bigger house on top of the basement, she was fine with that! She actually came to me saying, "I'm concerned about your crews." I think her tongue was all the way through her cheek when she was saying it!

She said, "I think you need a bigger layout – so we should look at another house." We had our other house paid for – we were done and I was happy. But I didn't know how happy I could be.



10. When you first enter Rick's layout from the crew lounge/workshop area, you get this view of Frisco's 19th Street yard in Missouri on the left, and the Rosedale-Merriam, Kansas peninsula on the right. In the far distance on the right peninsula is Frisco's Rosedale yard. You can see how neat and tidy Rick keeps the layout room, making for a very inviting space in which to work and run trains.

She asked, "If I can find a house that would have a big enough basement for your railroad, would you consider moving?" And I said, "Yeah, sure." I didn't think she could find one. It was a house we didn't buy, but we had drawn for us – one that became this house!

As far as crew comfort, this layout has a lot more crew comfort than any layout I've previously had. When you first walk in, you'll see my crew lounge. It's meant to be used. I tell people, "Go in there. Rest. You don't have to stand for three solid hours."

I usually have the TV on with a nice railroad video of some type. I'll have maybe a relevant ball game on, if people want to check

"I like a nice fascia around the layout, but I don't want a lot of attention on the fascia. To that end, it's a bland olive drab green color."

scores. I don't mind that. It's called a crew lounge because I want the crew to lounge when they're in there!

I also have a workroom, which I didn't have before. People can lounge in that room, too, if they want. When you step into the layout space, you'll notice that I've got a drop ceiling with no dust falling from the upper floor boards down into the basement.

I like a nice fascia around the layout, but I don't want a lot of attention on the fascia. To that end, it's a bland olive drab green color. Hopefully you focus more on the layout than the fascia. I do have things mounted on the fascia like card boxes for the car cards, or a telephone to contact the dispatcher, or it's a toggle switch to throw a turnout. I don't put anything on the fascia that I don't need, mainly because I don't want people to catch it on their clothes. I try to minimize things like toggles.

Under the layout, I try to minimize what I store under there. A lot of our stuff is in the attic rather than the basement. Having an attic is great: we store a lot of things there.

When you look under my layout, it is mounted on the wall with cantilever bracing. No legs, so you're not going to accidentally kick a leg from time to time. There's no skirting, I just paint the wall from the layout to the floor.

The floor has modular carpet that goes wall to wall within the layout room. It's not great carpet, but it does have a little bit of a

cushion, and I think it deadens the sound. It's comfortable for me, and I hope it's comfortable for all the visitors. They seem to enjoy it and keep coming back, so maybe I'm doing something right.

MRH: Why model trains and not some other hobby?

Rick: When people ask me why model trains – I think because it takes me back to the '70s, when I was in high school and in college. So I think there's some nostalgia there. The town that I grew up in, Springfield, Missouri had the Frisco running all over town.

Even though I don't live there anymore, that connection to my hometown is pretty strong.

There's a Facebook page called Historic Springfield, and I'm following that page like crazy. They post a lot of railroad-related items on there too.

But having the Frisco in my basement and collecting Frisco memorabilia takes me back to my hometown where I grew up. I had a great childhood.

I remember as child when we drove around town, went on our way to church, or went out to get groceries, wherever we went, it seemed like there was always something Frisco there. It might be a Frisco building, a Frisco car, or a Frisco train going by.

So to me, I developed a strong connection to the Frisco. Even though I didn't work for the railroad – and no one in my immediate family worked for the railroad either, the Frisco and Springfield always went together.

I would always get a wave from the engineer or conductor, or anybody – railroad workers just seemed to be such nice people. That's one of the things about Springfield that I'll always remember.

MRH: Interesting.

Rick: I think it was a simpler time.

MRH: Anything else you would like to comment on?

Rick: Yes, people need to come to the 2018 convention here in Kansas City. I'd like to share a couple reasons with you.

First, we have a lot of layouts in Kansas City – we might have more layouts than any other city, that I'm aware of. And I'm talking big towns LA or New York, places like that. If they have more layouts than we do, I'd like to see the list.

When you come to Kansas City, there are two kinds of layouts you'll see. Some layouts are on tour, so you can buy a tour ticket. You'll see some nice layouts – all scales, including garden railroads. If you like garden railroads there are five or six good ones to see.

There are also layouts you can operate on set up by the Operations Special Interest Group. To participate in the operations part, you don't have to be in the OPSIG, but the OPSIG folks will have first choice. It's a pretty reasonable annual fee and you get a nice magazine four times a year as well.

Around 40 layouts will be operating that week. There will probably be a few more that operate before the convention, and some that operate after, but that can't operate during the convention. All told, probably just over 40 layouts. This convention is a good place to come and operate, and it's a good place to learn how to operate.

The second thing is the focus on operations in the clinics, probably more so than any other convention. We're planning clinics with how to operate insights whether you're a new person or a veteran. Many layout owners will be describing how they operate with interesting nuances between owners – there's more than one way to do a job! Also, the Operations SIG will have several official clinics on how to operate.

The third reason to attend is prototype tours. I personally got confirmation of the Harriman Dispatching Center tour in Omaha. I've actually been there, but it's been a few years back.

11. This is the extreme other end of Rick's layout at the present time. On the left is the north end of Springfield, MO. The shelf then wraps around to Memphis and St. Louis staging on the right wall. The St. Louis staging yard is about 3 inches higher and behind the Memphis staging yard.

We'll probably send a couple of buses up to Omaha, so that'll be an all-day trip.

We're working on tours of all the major yards in the area and the facilities, including the new Lyft facility for the BNSF that's just southwest of Kansas City. We're looking at the Kansas City Southern, the Norfolk Southern. We haven't heard back from the UP on the Kansas City facility yet, but we do have the Harriman Center locked up.

So there should be a lot of prototype goodies to look at. In addition there is Union Station, which is right across the street from the convention facility. The nice thing about Union Station is you can walk across a real railroad bridge over the main line that goes through Kansas City, shoot all the pictures you want in the world.

The fourth thing is it's just a great family place. If this is your big vacation and you want to bring the wife and kids, there's going to be plenty for them to do.

From Union Station you can walk over the railroad footbridge to the other side and take in a great Italian restaurant. Or you can go to a great barbecue restaurant. There's also an art district over there. All within walking distance of the convention hotel.

Also right across the street from the convention hotel is the National World War I Museum and Memorial. You can spend all day there. The way they sell tickets, it's actually a two-day ticket, so you can soak it all in.

The museum has a 217-foot tower where you can look down on Union Station and watch trains go by. And they don't limit your time up there unless there's a weather issue. The reason I know all this is I volunteer at the World War I Museum.

MRH: What about for people who visit your layout?

Rick: When people come to my layout, I'd like them to leave with "I can do it. I can do this thing. I can do that thing, I can do it." The individual things I've done on the layout aren't that big, but when you put them all together, it adds up to something big.

Parts of my layout are finished, and some parts aren't, but we still operate it. You don't need to have a finished layout, and it doesn't have to be big. I hope that's what people take away from my layout when they leave.

Now, the question I also want to address is those who come up to me and say, "I'll never be able to do this."

One guy I work with came up from Florida, and he visited me when I was at my other house with my smaller layout. He puts his hands on his face and exclaims, "My goodness. How is all of this possible?" That's literally what he did.

I looked at him (his name was Cecil) and I said, "Cecil, it didn't all happen at once. I did a little each day." ☑

Rick McClellan

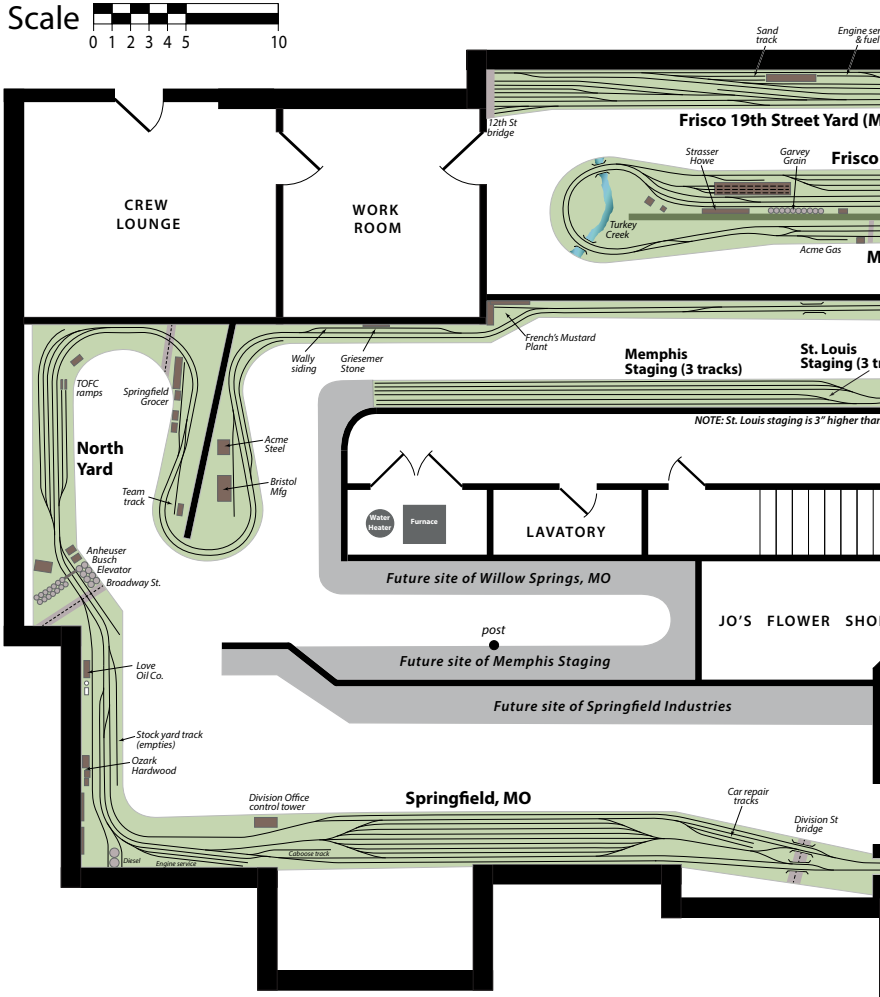
Rick started out with a Lionel layout. His dad got it after Rick's older cousin let him run the Tyco trains he got serving with the US Army in the Philippines during the 1960s. Rick's interest in trains waned in high school and college until he saw a custom-painted Frisco box car in the late '70s. He was hooked!

Rick credits his long-time friend Ron White for introducing him to the wonderful world of operating and he is now a big fan of realistic operation.

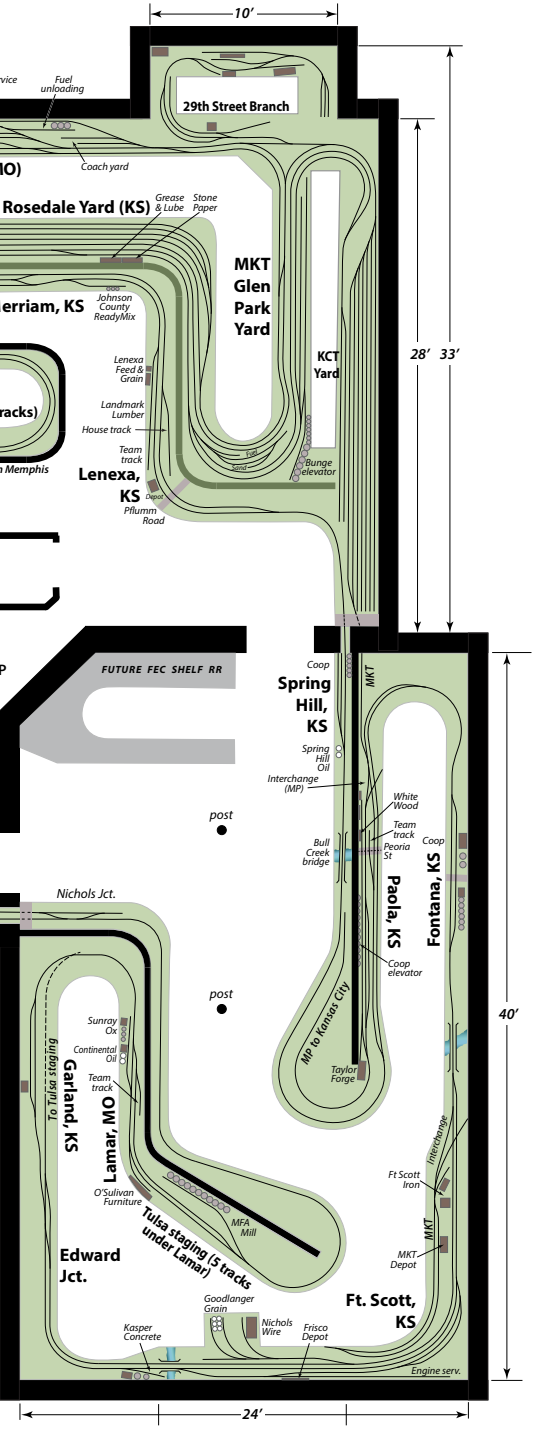
Along the way, Rick learned hobby insights from a lot of nice people who invested time in him. Rick does his best now to pass on the favor with anyone wanting to learn a hobby skill or how to operate on his layout.

Rick works at Unitedhealthcare as a senior project manager. He has been married to his wife, Jo, for over 30 years. They share their house with their miniature schnauzer, Dexter The Wonder Dog.

When not in the basement with the layout, Rick can be found playing guitar in his church band, driving his World War II Jeep, or participating in military history battle reenactments, displays and color guards. ▪



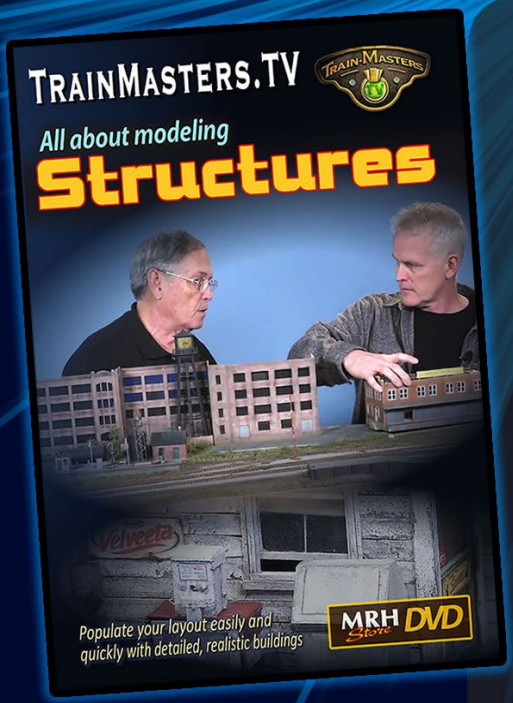
FRISCO RAILWAY
NORTHERN DIVISION
HO Scale



Structure how-to video!

NEW!

Pre-order Video!



Over six hours of insights

01. Kitbashing structures
02. Easy structure scratchbuilding
03. Making a quick tin roof
04. Making structures using a computer: 1
05. Making structures using a computer: 2
06. Making structures using a computer: 3
07. Better structure roofs
08. Easy structure interiors
09. Structure detailing tricks
10. Modeling brick/stone
11. Super-detailed structures

Bonus extras ...

- Cricut product review (7:41)
- Tips for using the Cricut (19:05)
- Modeling structures with plans (13:06)
- Using patterned sheets (22:45)
- Finescale Expo, part 1 (17:07)
- Finescale Expo, part 2 (19:38)

Video download: $19.99
DVD (4 disks): $31.99

SPECIAL VIDEO PRICING!

TRAIN·MASTERS

from the
Model Railroad Hobbyist *Store*

YES ... IT'S A MODEL

Model Railroad Hobbyist | May 2018 | #99

compiled by JOE FUGATE

RATE THIS ARTICLE

1. A CP Rail yellow van brings up the rear of today's St. Johnsbury Turn as it heads northbound past Crystal Lake in Barton, VT. The scene was captured on Neil Schofield's Lyndonville Subdivision layout representing CP's operations in Vermont. The backdrop photo was taken at the prototype location and scaled to the right size to give some depth to the overall scene. The residence was a scratchbuilt model of an actual home located along the lake.

MRH'S MONTHLY PHOTO ALBUM


LEHIGH
VALLEY
637
LEHIGH
VALLEY

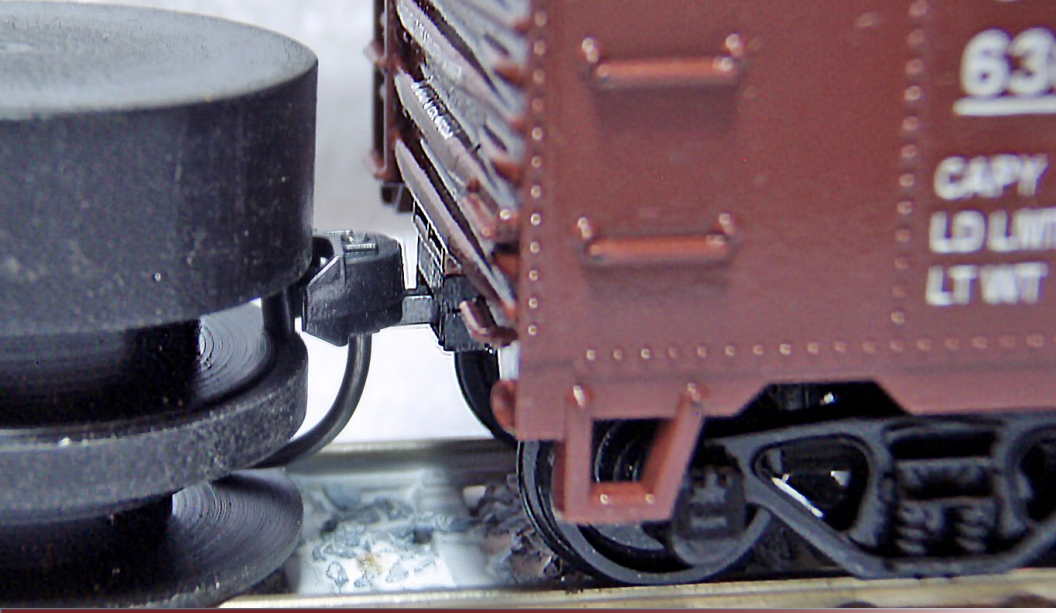
VIEW READER COMMENTS
click here

2. Lehigh Valley C-628 "snowbirds" climb up the hill at McIntosh with a load of iron ore. The models belong to Bob Fontana; the locomotives are Bowser models weathered by Mike Miller. Bob built the ore cars from Stewart Hobbies kits. Mark Mathu took the photo on the North American Prototype Modelers club HO scale layout in Milwaukee, Wisconsin. This image is a composite of six photos shot at different focus distances, then combined into a single fully focused image using Helicon Focus software.

GET PAID FOR YOUR PHOTO

We pay $40 per photo we publish. If you'd like to get your modeling in our photo feature, just start posting your photos on the MRH website, especially in the Weekly Photo Fun thread created each week.

See mrhmag.com/help for more on how to post an image. You need to be an MRH subscriber to post photos to our website, and becoming a subscriber is free, just fill out this form here. ■



MORE KADEE-STYLE MAGNETIC COUPLER TIPS

Model Railroad Hobbyist | May 2018 | #99

William Mosteller presents three more Kadee coupler installation tips ...

In my previous article ("**Four Common Mistakes in** Kadee-style Coupler Installation," July 2017 MRH mrhpub.com/2017-07-jul/online), I shared various Kadee installation tips. Here are three more suggestions you might find helpful.

RATE THIS ARTICLE

Don't spray-paint

Don't spray-paint couplers: When you spray-paint a Kadee-style coupler, two bad things happen.

First, paint sticks on the face of the knuckle, making it less slippery and more reluctant to couple. Sometimes you can push a car with a painted knuckle all around the railroad without coupling.

Second, paint gets into the hinge where the knuckle and trip pin pivot, making these parts reluctant to swivel. The coupler becomes unwilling to couple or uncouple over a magnet or with an uncoupling tool.

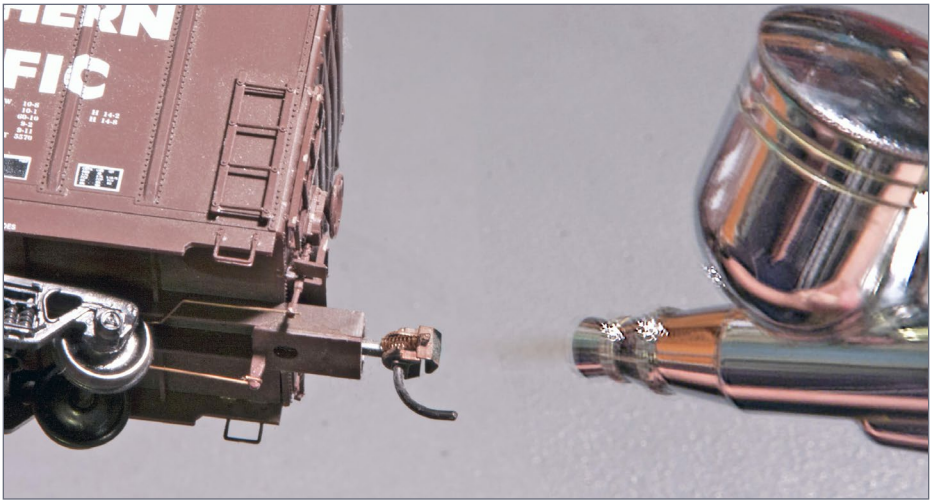
On a metal coupler, it's possible to treat these problems. Use a buffing wheel on your motor tool to clean the knuckle face. Use CA debonder (which hates all forms of paint) to free up the knuckle and trip pin pivot.

If you must have rusty looking couplers, Intermountain (85-40027) and Rapido (606-102025) couplers are available in rust-colored plastic. McHenry also made some rust-colored plastic couplers, but I don't find them in catalogs today.

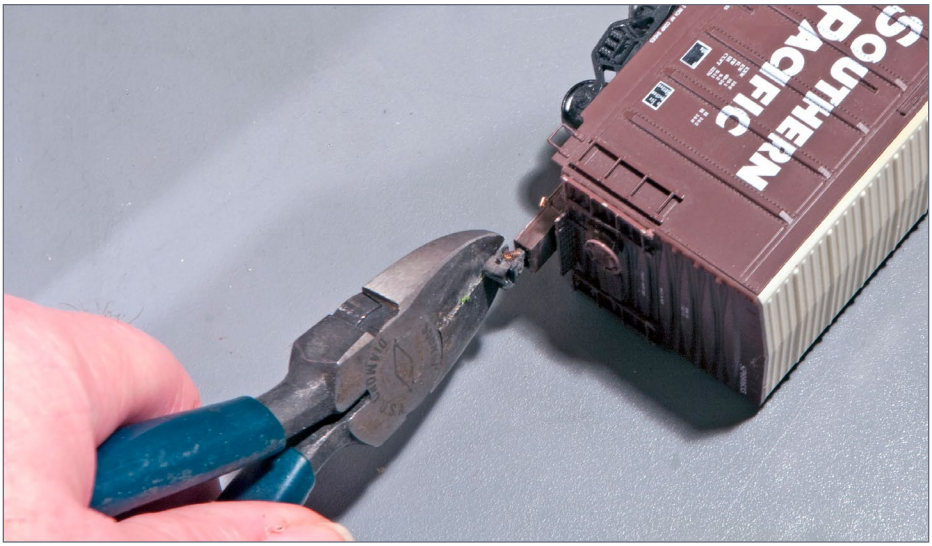
GETTING RUSTY COUPLERS

Bill is right, don't spray-paint couplers. For ways to brush-paint them so they work flawlessly, see the September 2017 MRH.

WEB: mrhmag.com/magazine/mrh2017-09/minimalist-weathering



1. Don't do this – avoid spray painting couplers. It's far too easy to get paint inside the working parts of the coupler when you do that.



2. Don't use wire cutters to cut off Kadee coupler trip pins. The hard metal Kadee uses will damage the tool's cutting faces. Use a motor tool and cutoff disc instead.

Trip pin tuning

Trip pins: Recently, a major modeling magazine compared Kadee's and other manufacturers' magnetic couplers. The article went into detail identifying the metal used in each coupler's trip pin.

A blacksmith friend tells me that some of the metals named haven't been readily available since World War II! No matter. The key point they didn't mention is that the metal on Kadee trip pins is a lot harder than the metal you find on any of the other brands.

This means if you apply Kadee-level force to a non-Kadee trip pin, your next reaction will probably be, "Oops!"

Often, modeling authors tell me they "snip off" the Kadee trip pin. If couplers are mounted at the proper height, this isn't necessary.

But if you're of this persuasion, use your hand motor tool and cutoff disk, with eye protection – do not use pliers to snip off the trip pin. Kadee trip pins are hard enough to ruin your pliers' cutting face.

Coupler head height

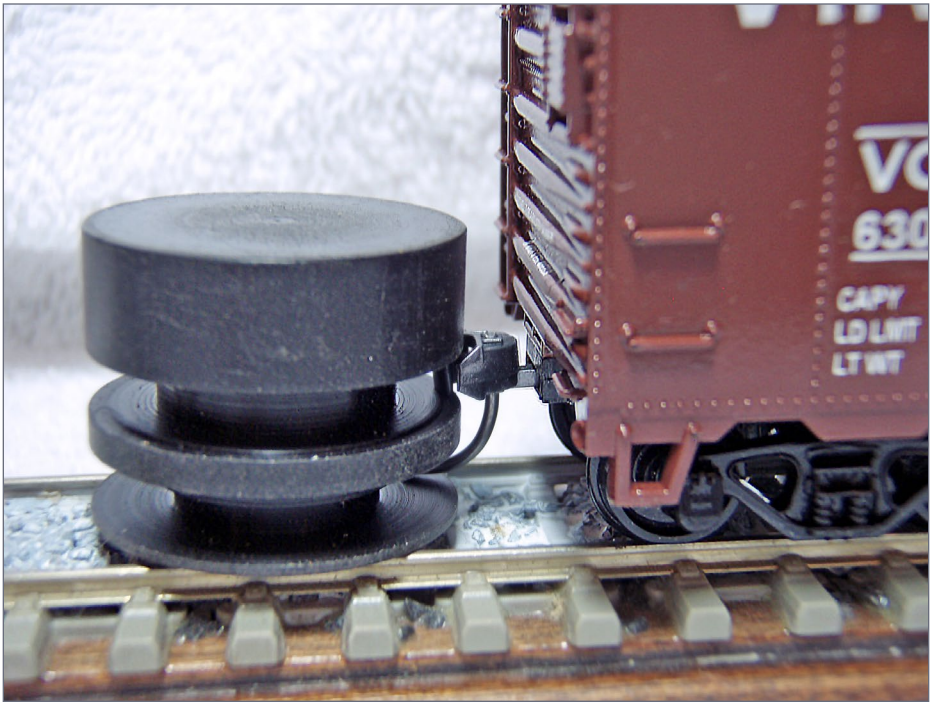
Mixing Kadee with non-Kadee couplers: My pass-no pass coupler gauge revealed that, except for Intermountain, all the non-Kadee coupler head heights I tested were shorter than standard Kadees (#5 and #140 series).

BENDING TRIP PINS

Unnecessary bending of Kadee trip pins can lead to an unsightly turned-up "Dilberted" trip pin. The metal can snap when it's curved and recurved. Keeping the trip pin intact makes it easy to test how freely the coupler can move from side to side.

Operationally, the shorter head up-and-down height means unless all your mixed brand couplers are at exactly the correct height, your railroad will be more prone to phantom uncoupling than if only Kadees are used.

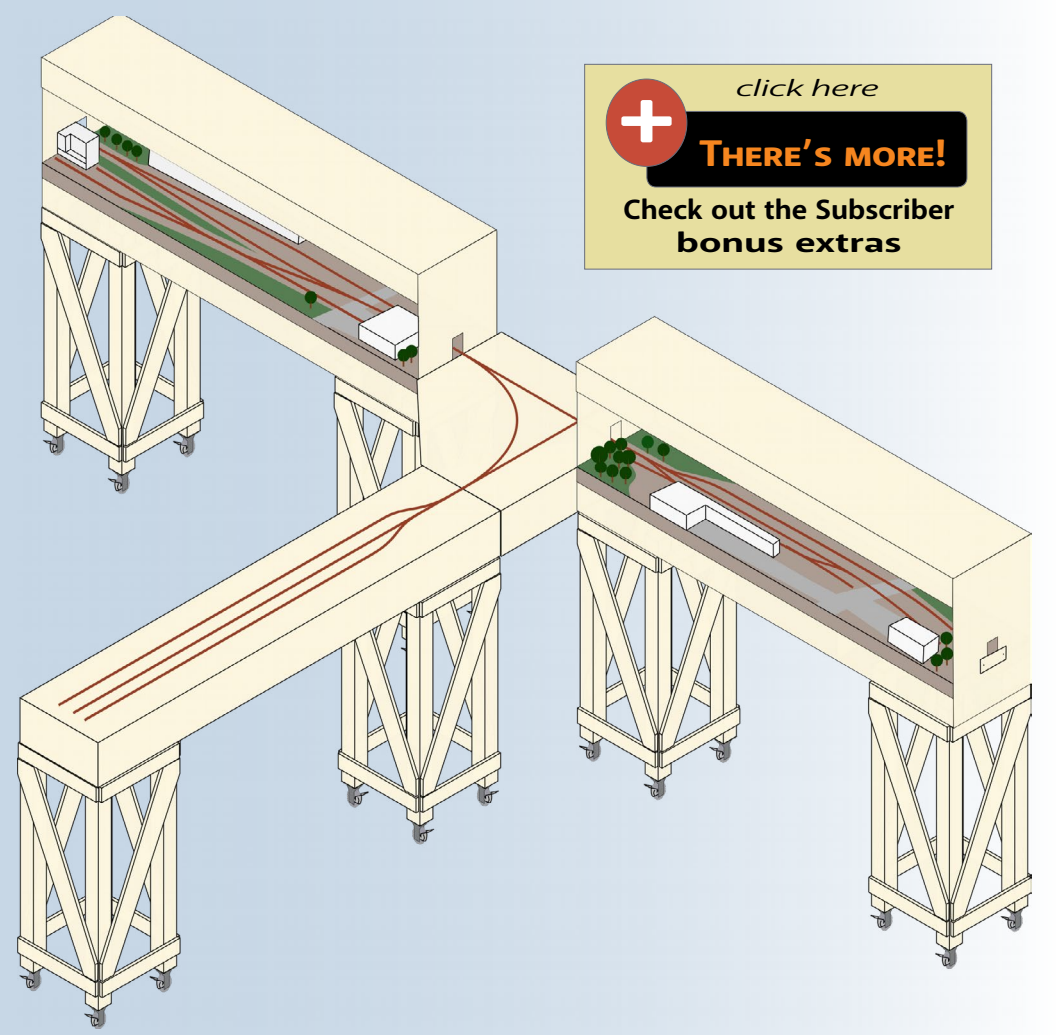
In my testing of other coupler brands, I found no clear winner. However, I was unable to get Accumates to delay uncouple reliably, despite spending a good deal of time trying to tune and tweak them for that. Your mileage may vary! ☑



3. Bill Mosteller's pass-no pass coupler gauge is available for O, S, and HO modelers at greatdecals.com/#Gauges.

WILLIAM "BILL" MOSTELLER

Bill conducts an hour-long clinic on Kadee couplers from which this material is extracted. He also offers what he considers the best coupler gauges in HO-, S-, and O-scale. See: greatdecals.com/#Gauges. ■



click here

THERE'S MORE!

Check out the Subscriber bonus extras

One Module Challenge

Grand prize winner

Model Railroad Hobbyist | May 2018 | #99

This TOMA layout design by **BENOÎT EVELLIN** employs mix-and-match industries along the rail ...

• INDEX • TABLE OF CONTENTS

YOU ALL HAVE SEEN TRACKS CROSSING ROADS OR PASSING by. They seem to be abandoned, but that's not the case; you can guess it by seeing how the top of the rails are polished, watching a couple of cars waiting or sometimes hearing the characteristic sounds of a train in service. You also see those buildings, warehouses, silos, factories. They are universal.

Today's project focuses on those various industries served by rail, by creating some small modules. The modules will be connected together to have trains running – and fun! This project follows the TOMA approach: create one module at the time to progressively have various scenes.

Working on a small surface allows you to achieve things quicker and have a way to do different things on different modules. But we will also go deeper – getting at the end perhaps, a layout that continues to surprise you.

A "mix-and-match" layout?

Modules are often considered as part of a future room-filling layout, with one long continuous decorated scene. In-between sections are simple add-ons or staging, but always temporary elements.

That way, you can have a layout of two modules, with a canning plant located in a city's suburbs on one module, and a farming cooperative on another module. Trains serve both to deliver raw material or finished goods. Between the two, you have some scenery.

What if we consider those two modules as parts of a story? Modules are independent scenes that compose that story – the

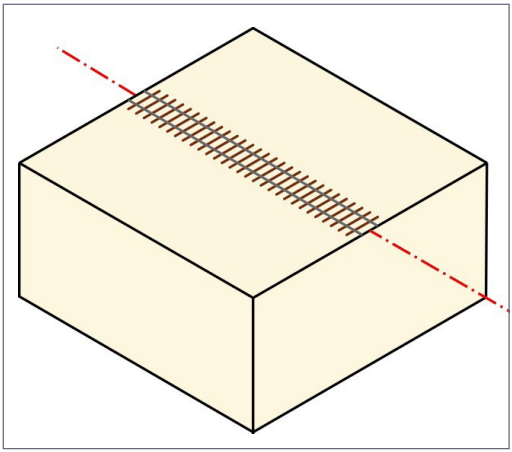
canning plant is one scene, the cooperative is another. Imagine that you combine scenes to create your layout – your story.

When you create a layout, you can keep the scenes' order to follow a prototypical example. But if you think outside of the box, you can also scramble the modules in any way that pleases you.

Instead of a linear approach (module A, then module B, then module C, all visually connected), you can add a transition between each module. Those transitions allow a visual separation of the scenes, and a random configuration of modules : A, C, B or B, A, C. Real industries sometimes seem to be randomly located along the railroad, so that approach is quite prototypical as well.

You then create a "mix-and-match" layout. "Mix-and-match" books display one image on one page, but each page is cut into slides. When you open the book, you will have an image that combines slides.

Children like those books, because you can then have thousands of combinations! By connecting various scenes in different combinations every time you play, like for the book, you will have many combinations as well!



1. Track position on a square-based module.

The "mix-and-match" layout principle requires at least two TOMA modules, a staging module (considered here as the 3rd module) and transitions. Transition modules will add fun to your future layout by allowing multiple track arrangements.

All those elements must have the same proportions. You have to define a grid,

with a square as a reference unit. That grid will be the norm for all your future elements that must proportionally fit together. All elements have the connecting track in the middle of a reference grid element to allow every possible combination [1].

Scenes can be even more fun by having "neutral" places. A warehouse can be a mechanical parts seller, or a can factory, or a simple storage, or used for any purpose [2] that in any case requires box cars (isn't this the most important part?).

It may be difficult to say that a grain silo or a cement factory is used for something else, but that's up to you – aren't those tank cars needed to refill that secret CIA plant? You can add signs at

2. The buildings on my under-construction HO French-1970s layout have no real labels to hint their activities. All what we know is that the Zelkin warehouse is used to transport "craddonium", a type of ore with strange properties.

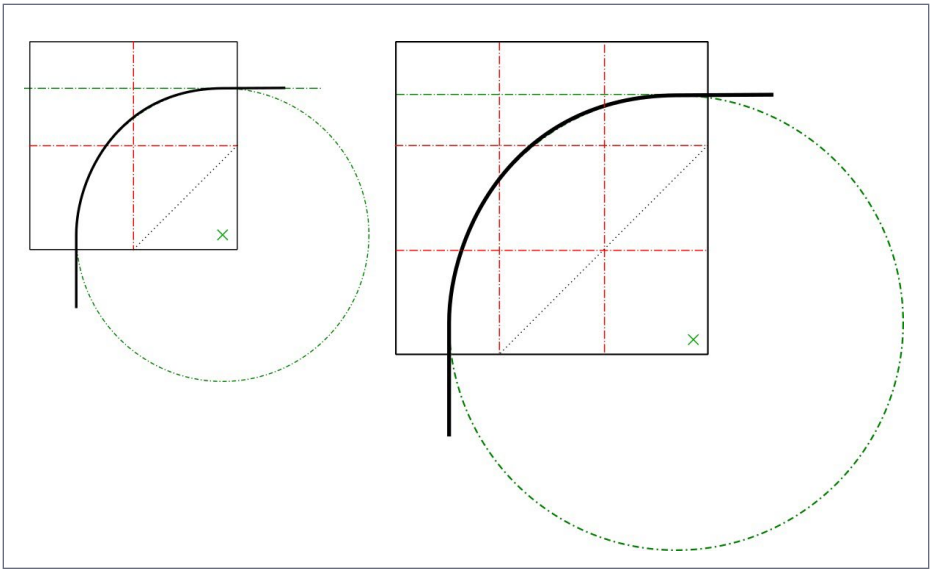
the front of the module to describe the purpose of the place, and change them to change the type of trains that serve them. Use a waybill system to add more constraints to your operations.

Simple how-to

To start, create two small TOMA modules based on the gird system. That's easy and it doesn't take much time. You can actually just start by creating the two modules, wiring the track, and that's all. Buildings can be represented by temporary printed stand-ins.

As on any module, you can work on them anytime, but most important: make sure to run the trains!

Then create a staging module, and one or more transition modules. Transitions are the most important part of the fun. You can have simple straight or curved ones.

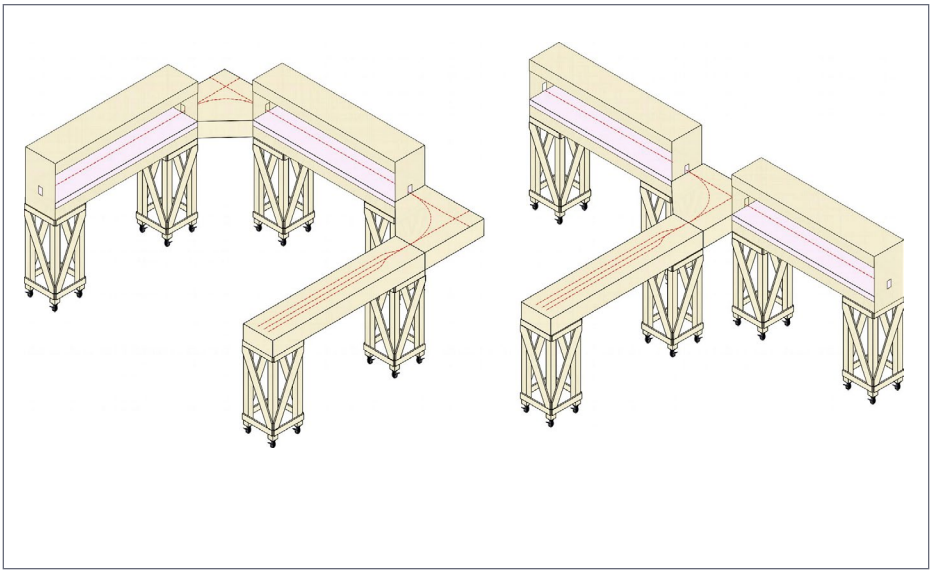


3. Curved modules based on 2x2 and 3x3 grids.

Curved transitions can be based on a 4- or 9-grid base element to allow curves [3]. The grid is defined on based on the minimum radius you will use on your layout. For instance, with a one-foot square size, use a four-square-grid (2x2) for an 18-inch radius or a nine-square-grid (3x3) for a 30-inch minimum radius.

The center of the curve is on the inside of the transition module, not on the edge or at the corner. That small gap allows smoother transitions for the trains through a straight portion of track and eases modules alignment during the setup.

You start a session by choosing a configuration of scenes. You move modules in an order you like, or just go with a random arrangement. Transition elements make the connection between the modules and allow different track arrangements [4]. Transitions connect scene modules.



4. Two configurations using the same modules.

Key elements: transitions and interfaces

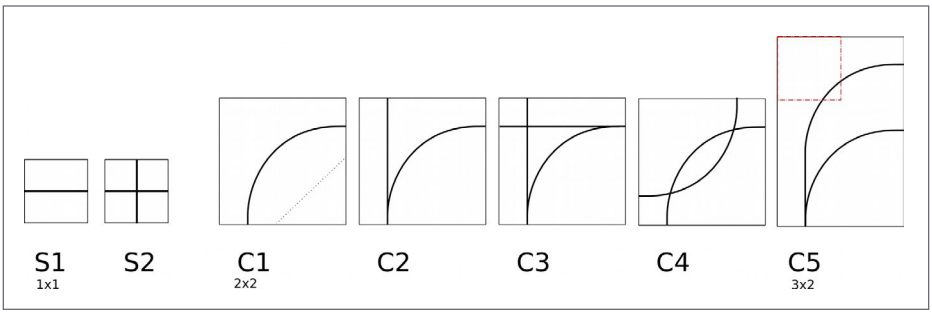
You can imagine many designs for transition modules [5] straight elements can be cross elements [S2 on 5]. Concerning curves, your only limitation is your skill at tracklaying: C3 is doable with track elements you buy; C4 will have to be handlaid.

Arrangement C5 allows back-to-back modules. The angle of the module inside the curve can be cut to save space (dotted line on C1). Use your imagination; add turnouts to transition elements for still more combinations (see the example at the end of the article).

Some transition elements can have tracks that may not be used during a session because that track is not connected to any module. You can consider each of those elements as industries (but with no decor), staging for a couple of cars, a loco escape track, or just ignore them. For this last case, put some tape on the unused track or lock the turnout.

Bolt a piece of wood on the fascia of the module to block the track and prevent your trains accidentally flying off the layout.

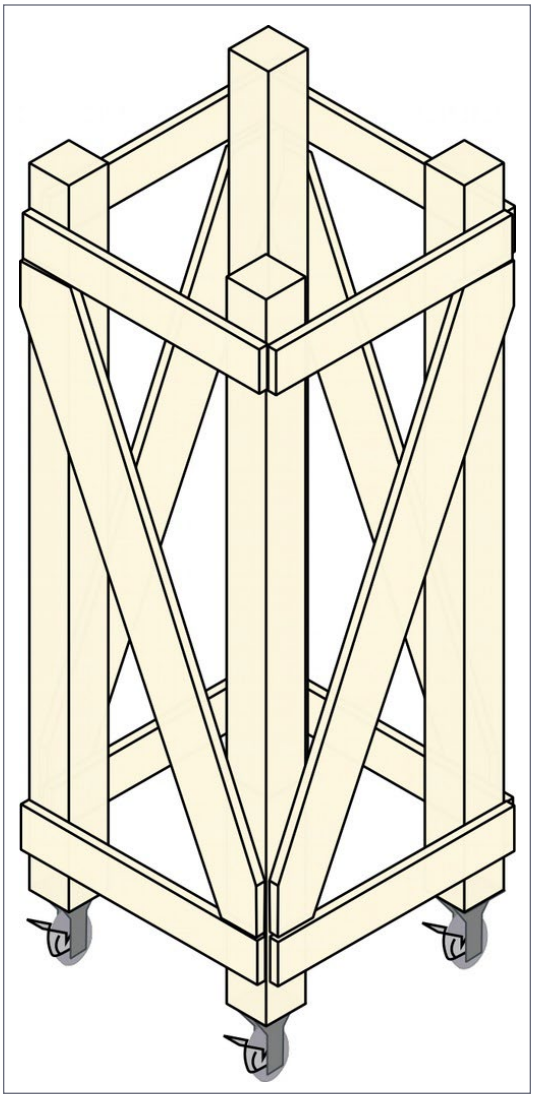
While operating, you can declare that operations on a given scene module can't go to another scene module. The transitions then become operational limits for operators.



5. Examples of transition modules.

Interfaces need a precise connection between all the sections. Using alignment bolts can allow a perfect match between the sections, but a pair of clamps and a trained eye can be good enough.

Track at module ends should be soldered to PC ties to avoid accidental damage. Wiring between sections can be connected by jacks and plugs.



6. Module support.

When creating different combinations, it helps to have an easy way to move modules. You can achieve this by building supports at your desired height, mounted on wheels that have brakes [6].

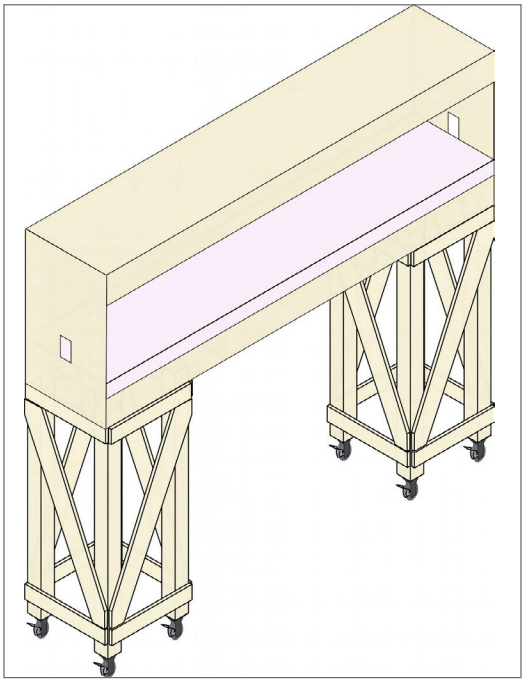
Creating a standard type of support allows combining supports with modules as you need them. I advise having an easy-to-assemble and disassemble support system so if you don't have much room, you can more easily store them.

Modules

To have efficient transitions between scenes, modules are not built simply as flat slabs with the track on top (and wires inside), but more as a complete box with the backdrop, trains and all the track, scenery, and structures inside it – the "shadowbox approach."

The shadowbox acts as a stage for your trains to pass through with an opening where the track exits the module. The shadowbox increases your modeling options, with a finished background and installed lighting ready to go for the scene.

The shadowbox also helps keep your module from domestic dust (and makes it a little harder for the house cat to sleep on the layout). Transporting module sections longer distances in a vehicle is easy by closing the open side to protect the scenic details.



7. Complete shadowbox module section, mounted on movable supports.

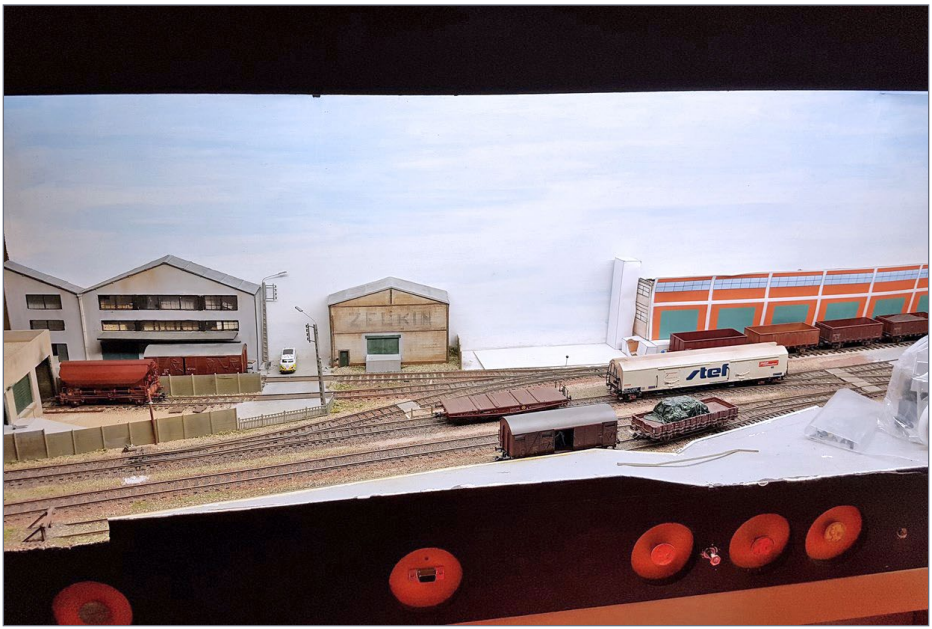
You can also store modules by stacking them, which becomes a helpful option when you live in a small place and don't have a dedicated layout room (that's my case).

This shadowbox approach not only works for clubs, but for anyone. This method has become

popular in Europe in the 2000s, where houses are much smaller than in North America.

Creating these boxes is not complicated if you have a way to properly cut plywood and assemble it. The box has a simple geometry. Be careful not to make a shadowbox module too long – you still want it to be easy to exit your room.

You can also separate a single scene into more than one module section if you want, but the more modules you spread a single scene across, the less interchangeable they become.

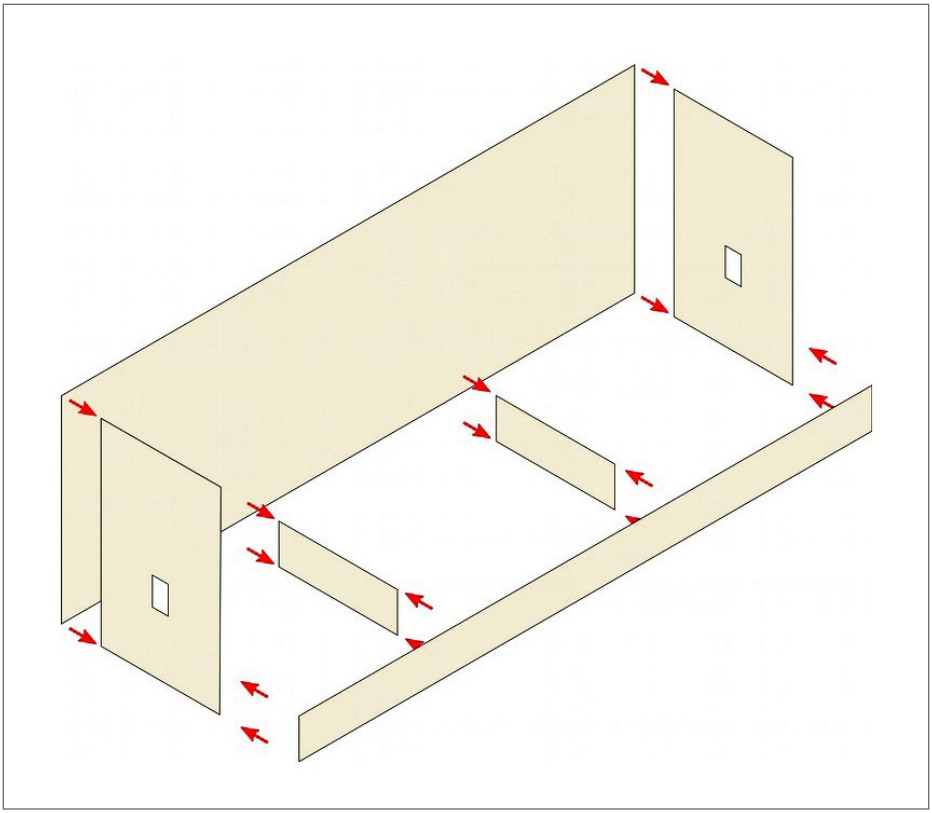


8. The principle of the shadowbox. The box includes a full background and pre-installed lighting. I can store things on top of the module or stack them, too. Note how this module's fascia is designed to enforce my 1970s mood, I've used a dark brown fascia color, while the turnout knobs actually have typical coins of that era on the ends, highlighted by an orange background.

Be careful to keep all interfaces the same, especially concerning trains exiting at the module ends. Module ends can be cut en masse on a controlled cutting machine. You can share that price with your friends if you decide to have inter-operable modules.

For best interchangeability, establish interface standards for the modules. The examples in this article don't rely on such standards, but you can find many possible examples of interface standards that can adapt to this grid concept.

You assemble the frame based on the grid design [9] while taking care to keep the corners of the perpendicular element square.



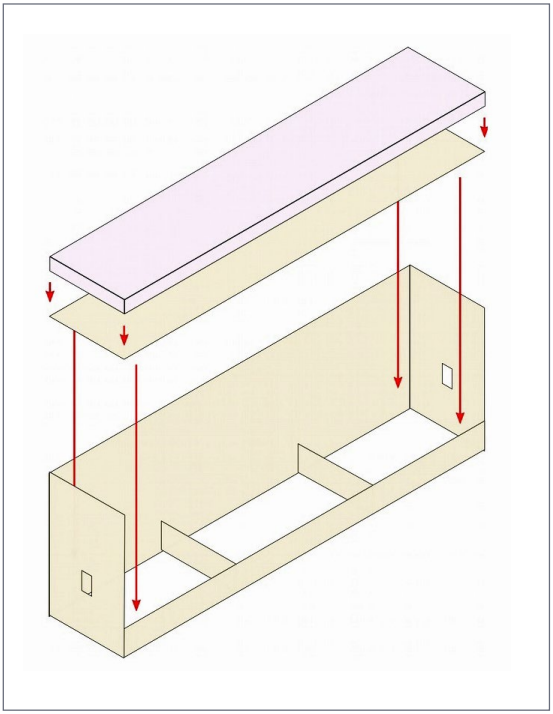
9. Module frame.

The end interfaces are 1/2" (15mm) thick, other elements are 3/8" (10mm) thick.

You then add a foam base [10], and add the roof using 1/4" (5mm) material, along with the upper lighting strip 3/8" (10mm) [11]. These thicknesses are enough to get a solid module.

Assemble the roof and your choice of strip lighting. Adding lighting makes it easier to work on the module. By experience, I prefer to have the roof and the lighting installed at the beginning, and to create the backdrop immediately, adding the best perspective.

Match the lighting between the modules and my workbench to get the best colors for the final scenery. Color temperature might vary if you're modeling the desert or a winter snow scene.



10. Base for scenery and track.

You can use your grid as a measurement for height. Making it an even increment of the grid eases storage when all elements are stackable. It can also make it easier to transport the modules in a vehicle.

My leg supports are also grid-based. I designed their inner frame to fit the modules. Remember to avoid placing things like turnout motors right where the support will go [12].

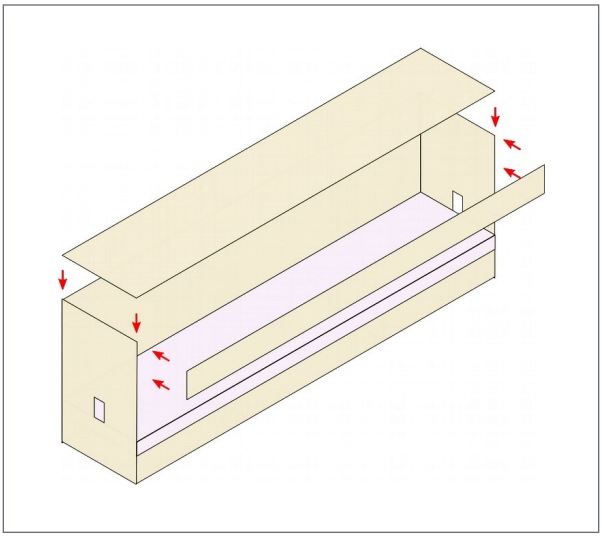
These leg support

modules can also be used to support transitions when they are longer than three grid units. Keep in mind the ability to add shims to ensure everything is flat just in case the floor is not flat.

Also transition modules and staging modules may be usable for other scales if the track gauge works. For example, with the radius and width between parallel tracks for an On30 train, you can also use those transitions and staging module sections for HO as well. As long as we're thinking outside the box, nothing prevents us from running both On30 and HO trains at the same time!

I recommend DCC for this project. It eases wiring, and most new models are DCC-ready. Older models can be equipped with DCC fairly easily these days.

But if you don't have a DCC locomotive at the beginning, that's not a show-stopper. The wiring is the same for DC or DCC. You can start with one DC locomotive if the budget is tight. The DCC purchase can be made later, when the project evolves and you need a second locomotive.



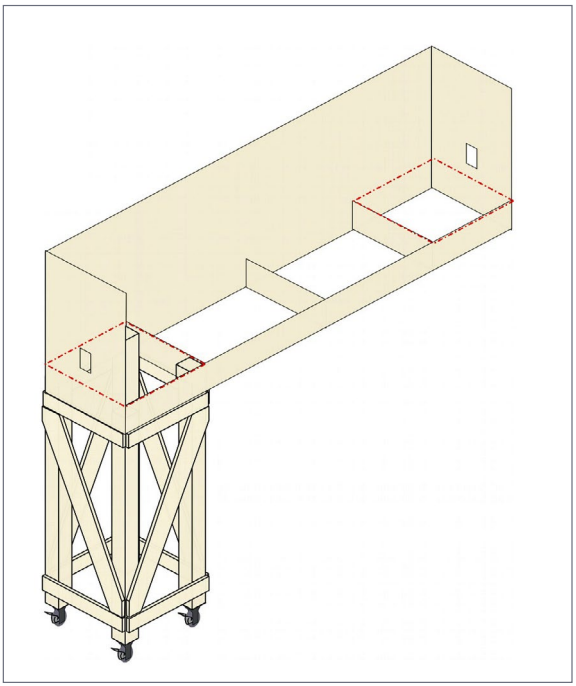
11. Roof and lighting strip support.

Example: modern-era N scale shortline

The layout photos in this article come from my HO French early-1970s layout, I'm budgeting a simple three-module N-scale layout using this system.

I'm basing the new layout on a one-foot grid and 2x2 curve grids (18-inch radius). It is a project I actually have in mind for a modern era short-line.

On the first example [13], a train starts from A, goes to B and then to C (fiddle yard). In the second example [14], a train starting from A can go to B or go to C. This combination adds operational interest; a short through-train goes from C to A, and then some cars are detached to send on to B.

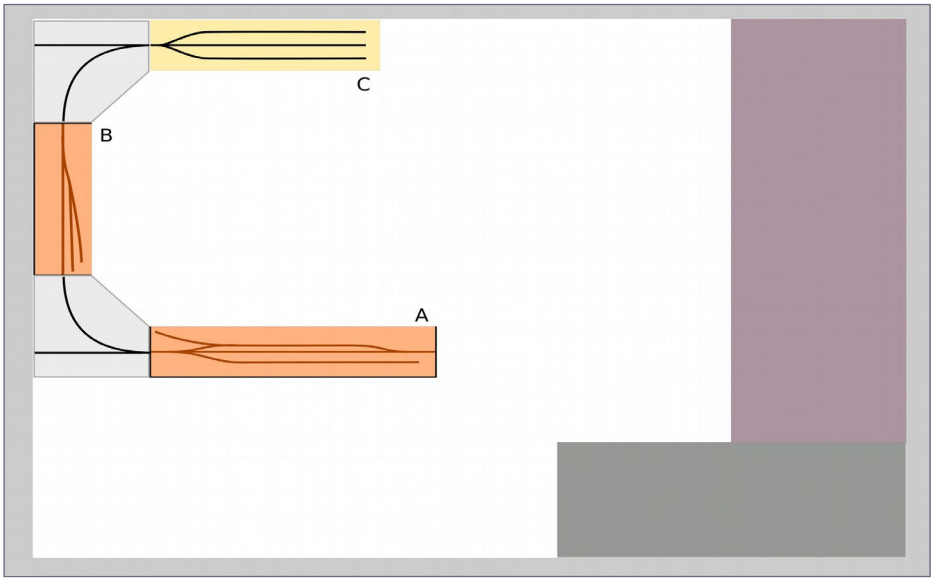


12. Be careful when mounting the supports to avoid damaging wires or turnout motors.

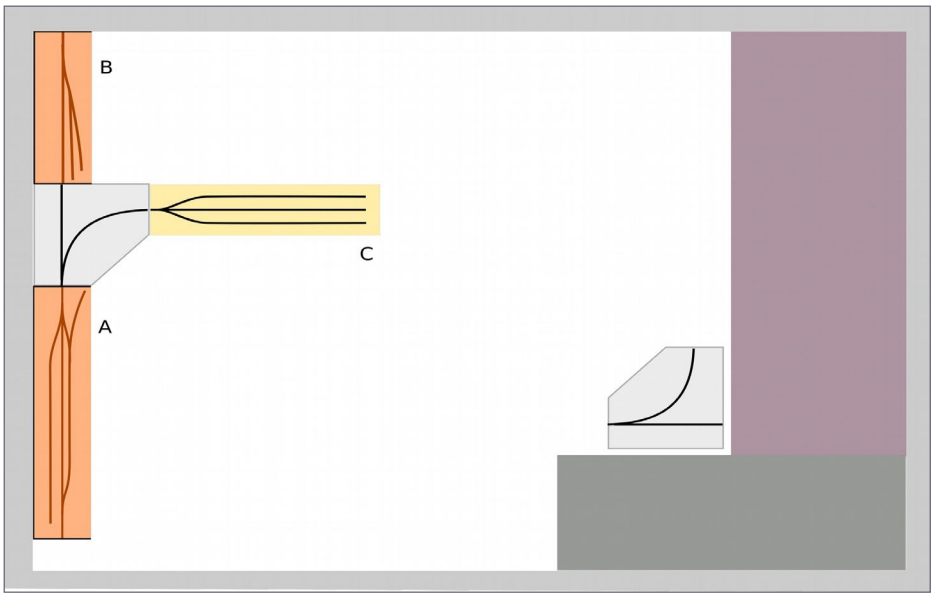
My project uses a GP38-2 locomotive, which is typical on shortlines. The set of cars to go with it can vary. It is actually difficult for a foreigner to know which cars are appropriate!

I have used tighter radius sectional curved track on transitions but flex track works too.

I don't recommend track with ballast



13. A linear example, with train going from A to B and B to C.



14. A new configuration with more involved operation to serve B from C through A.

included. They are more expensive and have extra height that can complicate matching track height and transitions.

Now imagine what could happen if you move around just two modules – in the bonus extras, I explore even more arrangements. You can also print out the pages, cut out the modules, and try some arrangements out for yourself.

You have no limit but your imagination between your train room's walls. ☑

Benoît Evellin

Photo credits: Édouard Hue, CC-BY-SA

Benoît, 34, lives in Le Mans, France. A fan of trains since childhood, he started modeling a narrow gauge micro-layout at 14.

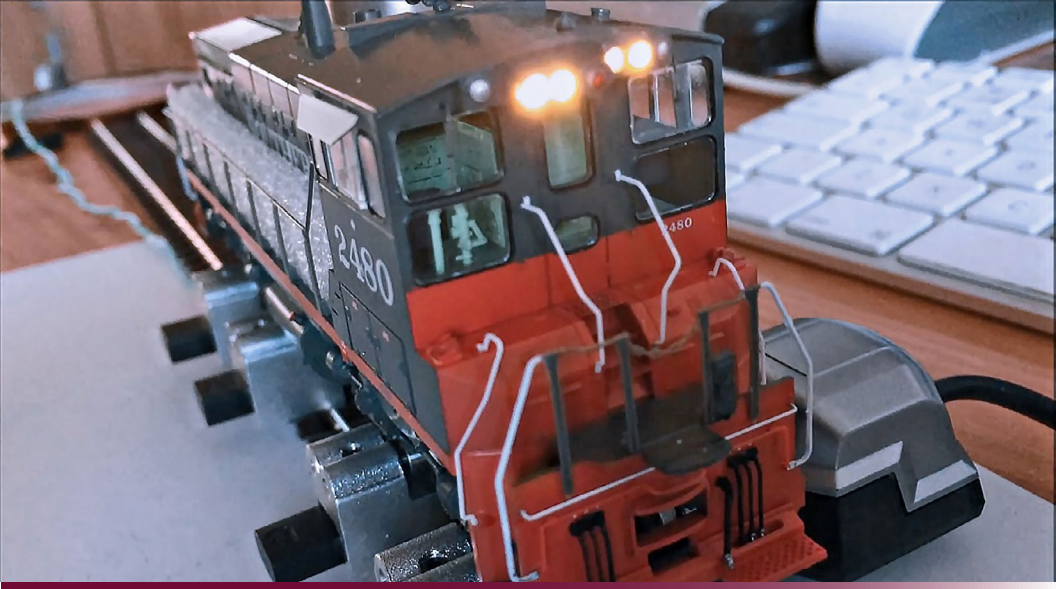
In the 2000s, he has tried to promote new ways to model, like using science fiction or fantasy themes. He also builds HOe modular layouts in shoe boxes, and On30 layouts in trolley cases. He has multiple projects in mind, and too little time to start them.

He alternates model railroading with other activities, like writing articles on French Wikipedia about trains, silversmiths of Brittany, and model railroading. The "modélisme ferroviaire" – model railroading – article is considered one of the best of the encyclopedia. He also volunteers at the local library to help people using and editing Wikipedia. He enjoys gardening, stage and screen combat fencing, adds interactivity to museums, and plays folk music and role-playing games.

He is a remote contractor for the Wikimedia Foundation (Wikipedia's host), where he helps with product definition, and interacts with multi-language volunteer communities to create, improve, and fix multiple tools developed by the Wikimedia Foundation. ■

Use our custom Google search on the MRH website to find topics of interest

CLICK TO FIND OUT MORE



Lights and a sound decoder for an Athearn SW1500

Model Railroad Hobbyist | May 2018 | #99

Koos Fockens performs a 'ship in a bottle' trick with micro LEDs and an ESU Loksound Select Direct ...

The Athearn EMD SW1500 model appeared a few years ago as part of their Ready-to-Roll range. The model was updated from its Blue Box origins and has universally been commended for its quality. A few minor tweaks and it could move straight into their Genesis range in my view.

Due to the size of the shell, the standard RTR motor will not fit, so the drive in this model makes use of a Mashima motor and

a Genesis-style drive train Both are improvements over the standard drive, which I think is not bad, albeit a little noisy sometimes compared to others.

Like all Athearn models currently on the market and in the recent past, lighting is via miniature "grain o wheat" size traditional incandescent bulbs. While these have a nice warm color temperature, there are a few disadvantages in my view:

- They tend to get warm
- They protrude from the light housings
- They generally don't last very long.

1. Athearn bulbs in the long hood.

That last issue is a problem, as this SW1500 is not a service friendly locomotive. It is busy inside this locomotive.

It is probably an economic decision that drives Athearn to use bulbs, but I would gladly pay a few dollars more for each locomotive if I didn't have to replace burned out bulbs all the time.

Other brands seem to have moved to LEDs for loco lights in the meantime.

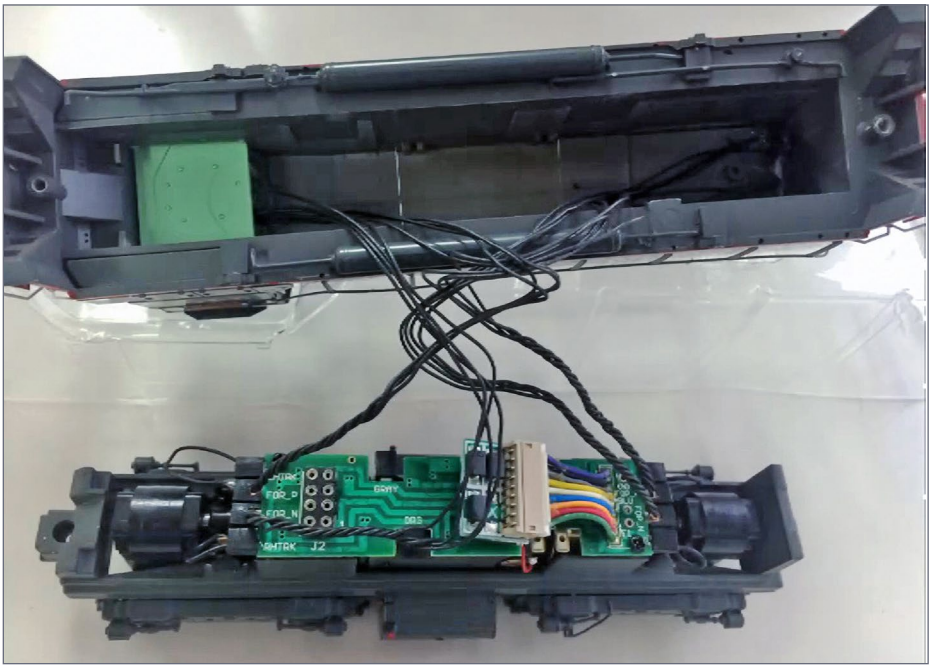
I wanted to do two things with my model of an SW1500. I have an SP version and wanted to replace the bulbs with micro LEDs and add a sound decoder.

I recently did another SP unit but forgot to document how I did it. This second time I made sure I had my smart phone handy.

Because this is an SP loco, it has additional Gyralights that I want to control separately The same steps can be used for other roads that might have fewer lights, ditch lights, or a roof beacon for example.

Making space

Removing the shell is easy. Take out the two screws from the coupler boxes and slide them out and set aside. The shell is now



2. Removing the SW1500 shell, you find lots of wires!

3. Remove the green cab insert to access the lights: note the tabs.

loose and you can lift it straight off.

This will reveal the factory-installed circuit boards with DCC decoder plugs, and the wiring for the lights [2].

You could take out all the bulbs, wire the replacement LEDs up in the same manner and plug in a decoder of choice, but this would not provide independent control of the lights. What's more, space is at a premium inside this model and I want to add sound, which means finding space for a speaker. So I need to get all the space I can possibly find.

I therefore removed the entire built-in board and all the bulbs.

The bulbs in the long hood are easy to remove. You can access the wires quite easily and removing a bit of tape enables you to pull them out.

Removing the lights in the cab is more difficult. You need to remove the cab to access them.

To remove the cab, carefully remove the handrails that lead up to the cab door. Loosen the handrails attached to the sides of the cab along the long hood.

Look at the cab from inside the shell [3] and you can see two tabs just below the green interior floor. Pry these backwards

with a wide blade screwdriver and carefully pull the cab up on the same side, so that it 'pivots' loose. This is a tricky task so take your time.

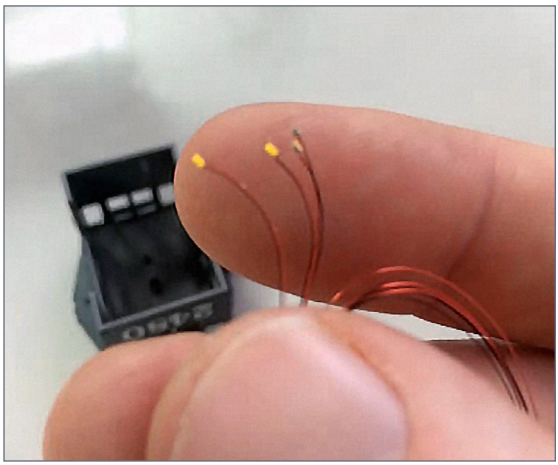
There is another longer tab at the front of the cab below the windows, which attaches to the long hood You may have to pull a little there and exert slight pressure on the front of the cab to get it loose. The plastics are relatively stiff, so it's not an exercise you would want to repeat too often. All the more reason to install LEDs!

Once the cab is off, you can remove the factory applied tape and pull the bulbs back out of their housings. The wiring of these bulbs is routed through the control desk in the cab, and he wires to the new LEDs will have to take the same route [4].

I used the Express Models brand of micro LEDs and resistors [5]. Yes, that is 4 LEDs on their leads in there!

4. Removing the cab gets you access to the lights.

5. Express Models supplied micro LEDs and resistors I used.



6. Note how tiny these micro LEDs are.

Taking a closer look at businsess end of the micro-LEDs, note those little yellow dots – those are the LEDs [6]. They come with small single strand wires already attached, and the positive and negative leads are color-coded.

Next, I feed the LEDs into the light housing holes.

Separate the LEDs carefully and twist the leads together. They may look like tinted bare wire but they actually have insulation on them.

Feed them in one by one into their respective light fixtures, making sure the copper wires don't catch on anything.

Thread them through, leaving them out of the housing by about 5 mm or approximately 1/4 of an inch.

This prevents them from falling out while threading the others in [7].

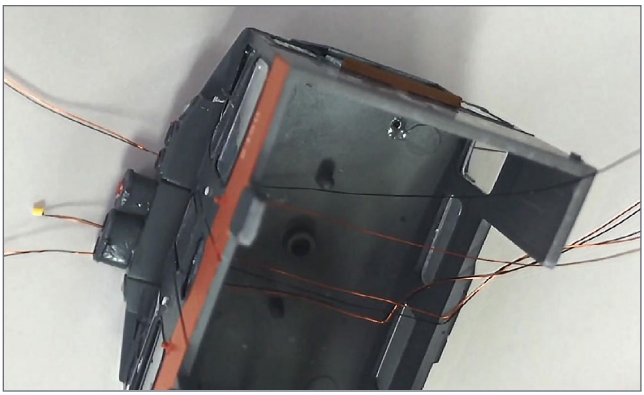
Once done with all the lights on one side, I apply a tiny drop of Micro Kristal Klear on each light opening and let it set for about two two minutes. After this, it becomes slightly sticky, so carefully pull the LEDs all the way into position, and apply a little extra Kristal Klear. Wipe away excess with your finger tip [8].

I use a little bit of Kapton tape to secure the LED leads to the shell /cab roof [9]. This will prevent the LEDs from being disturbed and falling out while the Kristal Klear cures completely.

You can take this opportunity to do some detail work or painting on the cab interior. For me it looked good enough from normal operating distances.

You can now put the cab back on, making sure the wires are routed through the operating console into the long hood. Let the Kristal Klear cure completely which takes approximately 8 hours. After that, examine the clear surface for dimples and add a little extra to fill those if needed.

I use a toothpick to apply the Kristal Klear.



7. Thread the LED leads through the light housing holes. Leave the LEDs sticking out by at least 5mm (1/4 inch).

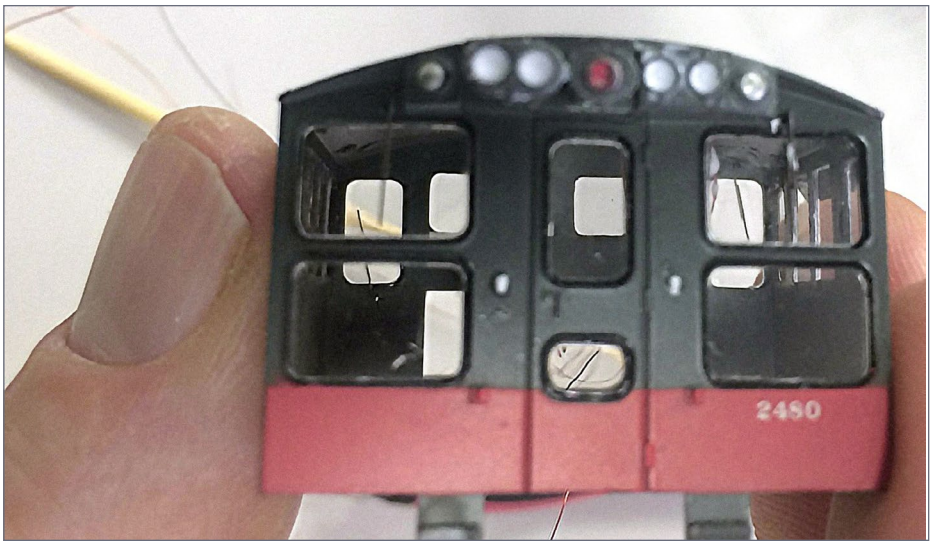
Installing a decoder

I chose to use an ESU Loksound decoder. You are free to choose which ever brand you like, but the instructions I give here apply to the ESU. Each decoder will have it's own configuration and connection locations, so read the manual for your decoder before you start cutting and soldering.

Part of the work we need to do in this section is to also install a speaker. Space is tight in this loco.

We could re-invent the wheel here, but I chose a lazy route and used a method described online, on the Soundtraxx website. They have various manuals describing decoder installation, and the Athearn SW1500 is one of them.

You can find it at: www.soundtraxx.com/documents/appnotes/SW1000&SW-1500App.pdf.

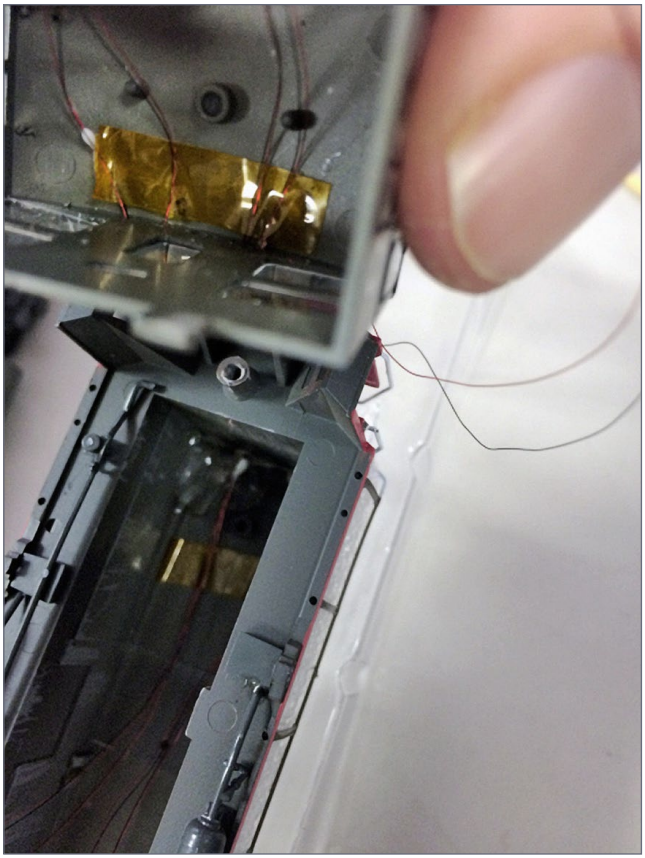


8. Lights with Micro Kristal Klear applied. Allow it to cure completely.

In their example, however, they cut the frame. This is something I decided to work around, but if you want to install a Tsunami decoder, the above link is a very good guide. If you are installing LEDs then use my instructions on those and add resistors to the outputs of the Tsunami where applicable.

Back to my ESU. I went with a Loksound Select Direct. This is a drop-in replacement board for most Athearn and Atlas circuit boards. The nice thing about this decoder is that it has lighting resistors already mounted on the board, so it saves space on installation.

This gives a clean installation. Its physical size is similar to the Tsunami boards and the above mentioned installation link is helpful.



However, I found that in the case of the SW1500 frame, the screw holes to install the decoder don't quite line up with the original boards. I decided that I would attach the decoder board using Kapton tape. To

9. The LEDs have been fastened with Kapton tape.

isolate the decoder from the frame and other metal parts, I made a simple styrene spacer which covers the motor and flywheels and keeps the board from shorting metal anywhere. I secured it in place with Kapton tape.

Taking advice from the Tsunami install manual, I also decided to reduce the height of the front gear tower to give additional clearance for the speaker. I filed it down carefully. The material is fairly soft so this is an easy process. Take your time.

Next I soldered on the truck pickups, motor, and speaker wiring.

Before proceeding to solder the LED wiring to the board, I tested the loco on a test track to make sure direction was correct. Checking this now is a lot easier than doing it with all the other wiring in place.

Next I wanted to make sure the hood still fit before I made a speaker housing, I test fitted the hood. It still went on with very little issue. Just be careful to keep the LED wiring out of the way so it doesn't get trapped.

All good so far. I made a styrene bracket for my speaker and checked it for fit, glued it in place above the front truck, and mounted my speaker.

I put the the shell back on and she's ready for service.

You can view my installation video on the next page. ☑

Kapton tape

Kapton tape resists pokey objects much better than stretchy black electrical tape, and the adhesive does not turn gummy after a couple of years.

Playback problems? Click here ...

Koos Fockens

Koos (pronounced as "coast" but without the "T") Fockens is a Dutch model railroader who lives in the southwest of the United Kingdom.

Koos got the bug at the age of 3. After starting out in Dutch HO scale, he switched to N scale, modelling German railways.

Koos discovered North American HO in his late teens when he was introduced to the NMRA by a friend. His main interests in modelling are the SP and the California Northern in 1993-94.

Koos is married to Vicki and has two children. His family, however, likes the trains, but they do not have quite the same passion for U.S. model railroads that Koos does. ■

VIEW READER COMMENTS
click here

Prototypes for Accurail's 1300-series kits

Model Railroad Hobbyist | May 2018 | #99

Ray Breyer

DOCUMENTS THE PROTOTYPES FOR THIS IMPORTANT NEW BOX CAR KIT ...

1. A string of Accurail 1300-series box cars rolls across the author's home layout. These new models are a good way to beef up any 1910-1950-themed freight car fleet.

Accurail (accurail.com) released a brand-new box car model in late 2016. The model is welcome news to anyone modeling North American railroads in the 1900-1950 period, as the model is of an extremely common prototype.

As a simple but finely detailed kit molded in styrene, it is the first time ever that a "modern" short box car has been offered in anything but resin; LaBelle wood kits and the old Roundhouse short box cars are all of older all-wood prototypes not really suitable for the post-1928 wood underframe ban period and generally reflect pre-1905 built prototypes.

Since this is a model of an older prototype freight car, some modelers are wondering if the car is suitable to run on their layouts. Other modelers question the era-appropriateness of Accurail's initially announced road names and paint schemes. This article is the first of a series to cover these models and to answer some of those questions.

Accurail is doing four variations of this model:

- 1300-series: steel roof, steel ends, fish belly center sill underframe (accurail.com/accurail/1300.htm)
- 1400-series: steel roof, steel ends, straight center sill underframe (accurail.com/accurail/1400.htm)
- 1700-series: steel roof, wood ends, fish belly center sill underframe (accurail.com/accurail/1700.htm)
- 1800-series: steel roof, wood ends, straight center sill underframe (accurail.com/accurail/1800.htm)

Since this is an affordable, mass-produced plastic model utilizing as many common parts as possible, there are naturally some compromises in the detailing. Straight out of the box, none of these four versions is 100% right; all modeling requires some form of compromise.

However, none of them is 100% wrong either, and each of the four variants will be appropriate for several prototype cars that were built and used in large numbers before and after World War I.

Let's look at the different versions of the four base models and how they stack up against Accurail's road names. This time, we're focusing on the 1300-series kits, with the others coming in future MRH articles.

The 1300-series kits

This is the baseline model for the series. Out of the box, the 1300s are the most useful version of the four kits for the largest group of modelers, since they represent a modern short box car that's usable for the longest period of time.

With a steel roof (Murphy or Hutchins, not Chicago-Cleveland), large fish belly center sill underframe, and 7/7 "inward" rib steel ends, the 1300-series models represent tens of thousands of box cars built or rebuilt between 1914 and 1929. Many of these cars ran in revenue service into the 1950s, and as MOW cars well into the 1970s. The basic car design is from the New York Central, but don't think of this as strictly an Eastern region car.

Accurail has announced 14 paint schemes for the initial run of the 1300-series kits. #1300 is undecorated, #1397 is painted mineral red with WWII-era dimensional data, #1398 is pre-painted mineral red with pre-1927 dimensional data, and #1399 is oxide red with pre-1927dimensional data. Ten other cars come full decorated.

The kits themselves are straightforward and easy to build, but not quite "shake the box." Accurail has been stepping-up the detail level of their recent kits, and the underframes on these models do require a bit of patience and planning to assemble. MRH had an step-by-step article in the February 2018 issue showing how

2. NKP 10580 in Conneaut, OH, circa 1949.
Howard Ameling collection

3. Small detail additions like cut levers and prototype-correct trucks have been added to all three of these new Accurail box cars to bring their "basic car" detailing more in line with higher-end kits.

to assemble these cars (mrhmag.com/magazine/mrh2018-02/accurail-box car).

As with any simple model, some work may be desired to add details, especially items like coupler cut levers, air brake relief valves, and prototype-specific trucks.

1301: New York Central

Since the 1300-series models are the baseline for this kit series and are based on a New York Central prototype, we might as well start here. The NYC built around 8,400 new box cars to this general design between 1914 and 1917. They also rebuilt close to another 25,000 cars to this basic configuration. The NYC&HR began developing steel components for their basic box cars early in the 20th century: by 1909, Hutchins roofs, corrugated steel ends, and steel underframes were standard elements for all NYC Lines box cars.

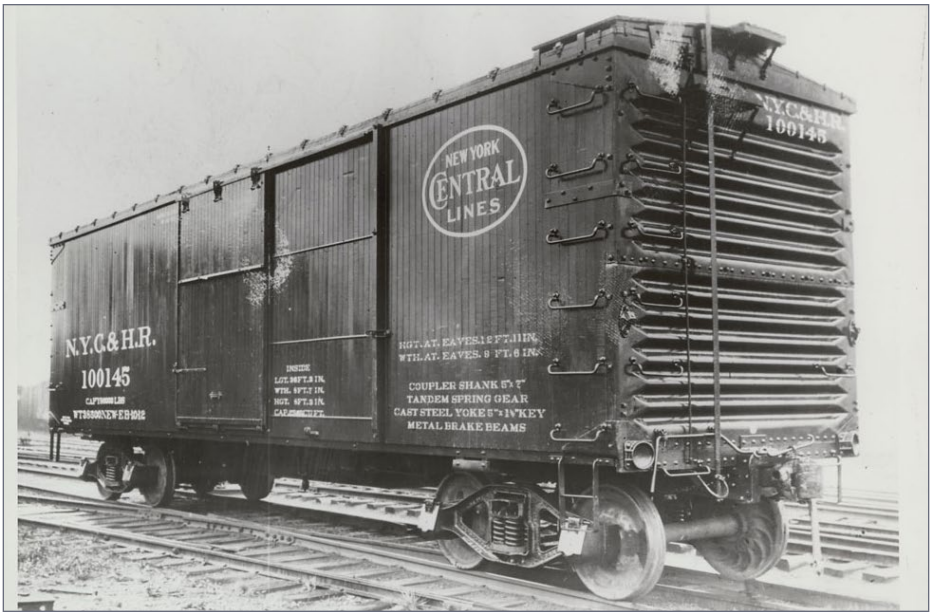
In late 1912, the NYC's East Buffalo car shops built a single experimental car, NYC&HR 100145. This car set the standard for all future

4. A NYC short box car rebuilt to their new standard by Ryan Car Co., 1922.

short box cars on the NYC, which began rebuilding as many of their older cars (represented by Accurail's 1700-series kits) as possible.

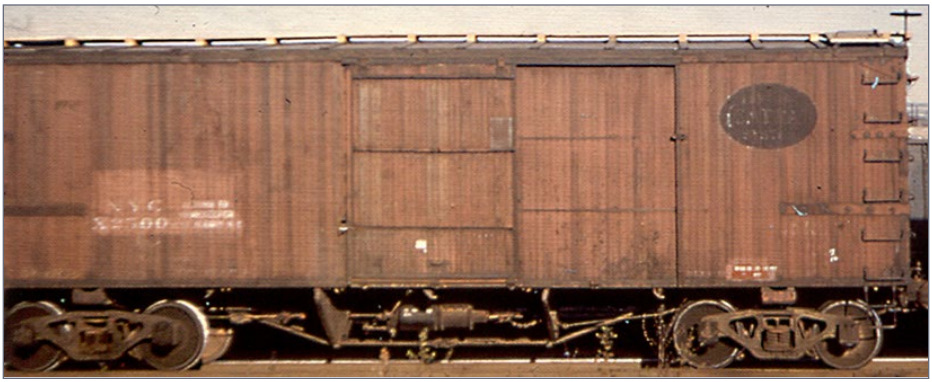
Many all-new box cars were also built to this design, starting with lot 309-B (CCC&StL 54000-55499). The New York Central stopped ordering new-built short box cars in 1917. Their car rebuilding program started in 1912, paused for the USRA years, and then started again between 1922 and 1929.

By the end of the rebuilding program the New York Central had rebuilt 15,000 to 20,000 of their freight cars to match NYC&HR 100145, including both plain and automobile box cars. They had also rebuilt several thousand older cars with straight steel underframes which looked similar (which I'll get to when I review Accurail's 1800-series kits). And finally, they built nearly 8,500 all-new short box cars to the new standard.



5. NYC&HR 100145, a one-off prototype box car built by the NYC's East Buffalo Shops in November, 1912.

The last of the NYC's short box cars dropped off of their roster by 1952 due to a combination of age and obsolescence. A few of these box cars soldiered on in maintenance-of-way service for several more decades, with the last of them finally being scrapped in the late 1970s (under Conrail).



6. Color photos of the massive NYC fleet fleet of short box cars are extremely hard to find. Here, MOW service car NYC X2500 sits fading in the sun, somewhere in New York City in the late 1950s. *John Nehrich collection*

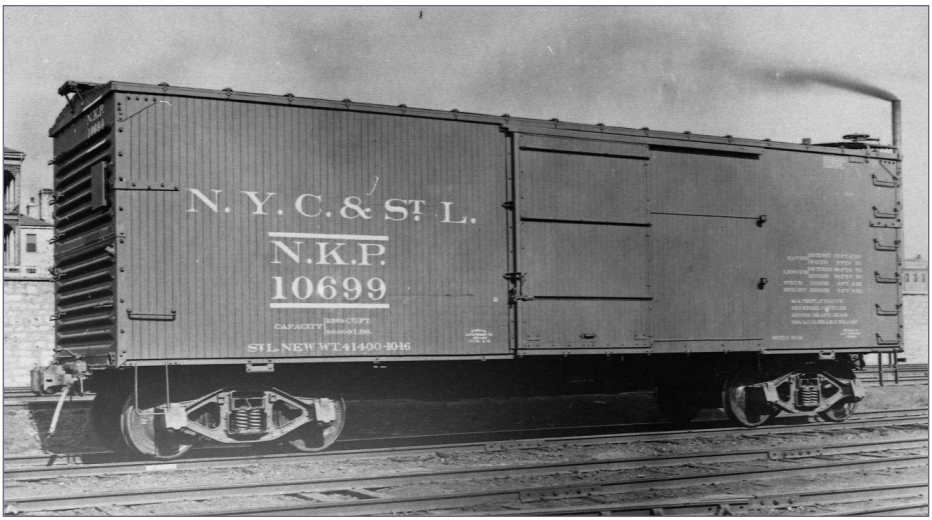
7. Model of New York Central box car 257783. *Photo courtesy of Accurail*

Accurail's model comes decorated as these cars would have looked in through the mid-1920s, with pre-1927 Master Car Builder's Association (MCBA) standard dimensional data. The specific car number is for a car originally built with all-wood ends and rebuilt in the early 1920s with corrugated steel ends.

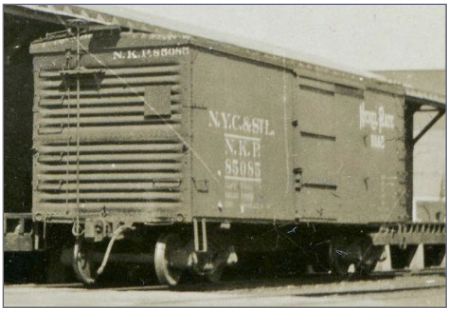
These cars ran with a variety of truck styles, with the most common being T-section Bettendorf trucks. Models of that truck type are available from Kadee and Walthers.

1302: Nickel Plate Road

From 1881 to early 1916, the Nickel Plate Road was part of the Vanderbilt railroad empire, which was dominated by the New York Central. Most of the NKP's equipment of that period (and generally up to the formation of the Van Sweringen-era AMC in 1929) was



8. NKP 10699, new, built at the ACF's St. Louis shops in October, 1916. Note the lack of the "Nickel Plate Road" slogan/nickname, which would only be added to their freight cars after 1918. *ACF builder's photo, JW Barriger III National Railroad Library collection*



9. Original car in service (left) and years later modified into a caboose (right). *Both photos, Tony Koester collection*

built to standard NYC designs. That included 1,000 box cars ordered just before the NYC sold off the NKP in 1916.

These cars, along with another 750 identical box cars acquired when the NKP bought the Lake Erie & Western in 1922, became the standard NKP general-service box car well through the 1930s.

The last of the revenue cars were retired in late 1949, but the cars were too useful to scrap, so the NKP converted 35 of them into LCL rider cars in the 1930s, another 57 into cabooses during WWII, and kept over 200 around for MOW service.

The cabooses were retired by the N&W in the mid-1970s, and the last of the MOW cars were retired by the early 1980s.

Accurail's model accurately reflects a Nickel Plate short box car as it would have appeared during and after WWII. Many of these cars were painted with black roofs and ends, so some touchup paintwork by modelers may be in order. As with the NYC models, these cars usually rode on T-section trucks..

1303: Missouri Pacific

In the list of initial Accurail releases, there are two paint schemes that can be classified as stand-ins: MP and S&A. To be fair, both

railroads did have box cars that were generally similar to the base model and which share the same gross detailing similarities (the ends, roof and underframe are all related designs). Of these two, the Missouri Pacific cars are actually pretty close to the NYC

10. One basic car, many faces: at left is one of the NKP's standard short boxcars in service as a fire fighting car, and at right as a MOW crew bunk car.
Left Ray Breyer collection, right Chuck Yungkurth photo

11. Model of Nickel Plate box car 10562.
Photo courtesy of Accurail

cars dimensionally, and only differ in some details, mainly the fascia along the roof.

The Missouri Pacific had a large and varied box car fleet through the 1960s, and short box cars made up an important part of that mix. The road had several styles of short box cars including modern ones built in the mid-1920s. Cars 120000-120849 were built in 1926, cars 120850-121149 in 1927, and 121150-121749 in 1928.

The first two groups of cars were 38'-3" long outside and only differed in their steel ends: the 120000s having 7/7 inward ends and the 120850s having early Dreadnaught. The 121150s were a foot longer but otherwise similar. So in general, the new Accurail box car can represent around 8% of the MP's 1930s and 1940s box car fleet. They best represent the 120000-120849s, which is good news for modelers in general: of the three car types, they stuck around the longest, with 700 cars in 1945, 406 in 1950, and 234 cars in 1959 (still 1% of the MP's total box cars).

12. Photo of Missouri Pacific 120537 in service.
Bob's Photos collection

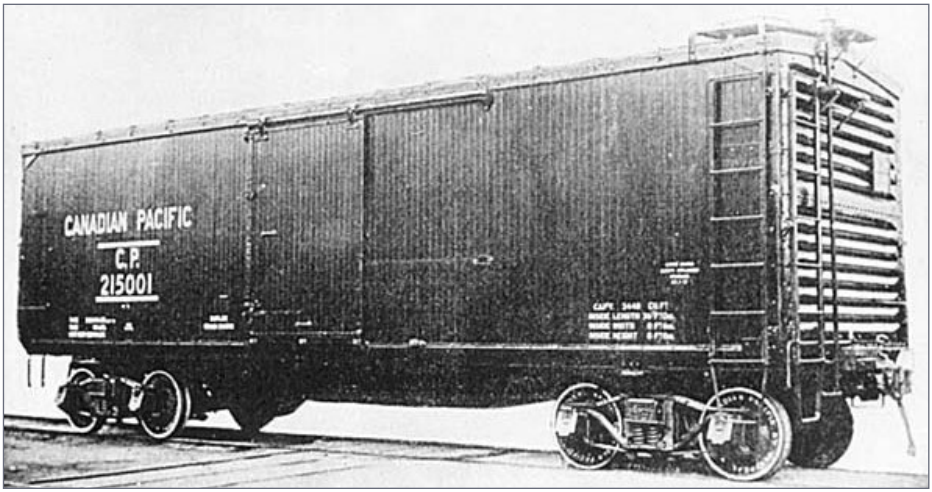
13. Model of Missouri Pacific box car 120583.
Photo courtesy of Accurail

Accurail's model represents the MP's 120000-series cars as they appeared during and after WWII. The cars should have more modern Bettendorf-style trucks, available from a variety of manufacturers. By changing the reweigh date to the left of the car door, the model can be used on layouts themed through the 1960s.

1304: Canadian Pacific

Canadian railroads were generally known for their huge numbers of short Dominion (or Fowler) single-sheathed box cars, but they were still building double-sheathed box cars well into the 1920s. Someone in the Canadian Pacific's engineering department was obviously paying attention to railroad trade journals, because at some time between 1924 and 1926, they bought 1,300 almost identical copies of the NYC short box car design.

Cars 215000-216299 were never a large portion of the CP's box car fleet (only 2% in 1930), but it's nice to know these models will match a Canadian prototype car and are available. These CP box cars lasted a long time: 1,041 were still on the roster in 1945. Their



14. Builder's photo of Canadian Pacific 215001.
John Nehrich collection

numbers shrank rapidly after that, but seven of these cars were still listed in the 1959 ORER.

Accurail's model of these CP cars are painted in post-1927-appropriate lettering, which for most Canadian railroads didn't change a whole lot through the 1960s. The builder's photo shows these cars with arch bar trucks, which would have been changed to a cast steel side frame type truck by 1940. As with any Canadian box car, remember to add stirrups to the end ladders.

1305: Louisville & Nashville

For some odd reason, the Louisville & Nashville, one of the largest railroads in North America, tends to be overlooked by modelers. That's a real shame, considering it had a varied freight roster, ran all through the South and into the Midwest, hauled every commodity imaginable, and had a very attractive steam fleet.

Thankfully, this new Accurail model will go a long way toward introducing modelers to L&N freight equipment, since model

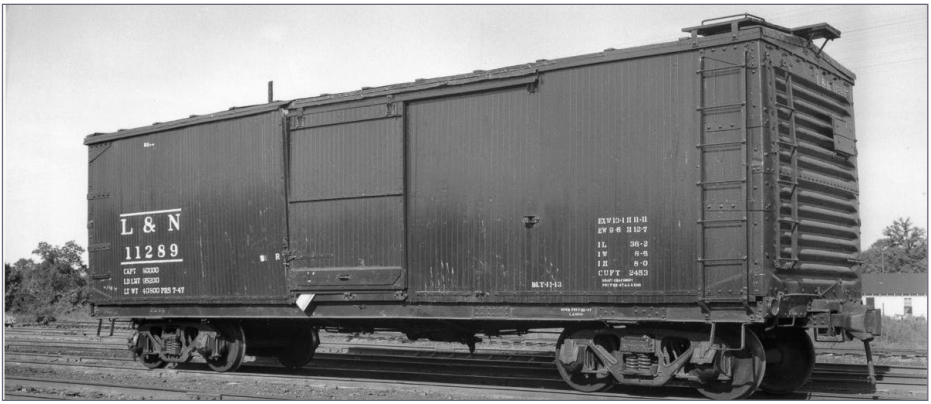
#1305 does a good job representing a very important car on their roster.

The L&N bought 3,000 box cars in 1921 that were essentially clones of the NYC design. Cars 8000-8999 were built by ACF, while cars 10000-11999 were built by Mt. Vernon. Due to a combination of general age and wear, these 3,000 cars initially represented around 12% of the L&N's box car fleet when built, but by 1949 climbed to almost 19% of the roster.

Unfortunately, the general economic recessions of the late 1940s, coupled with the looming K brake ban of 1954 spelled the end for these cars. The January 1955 ORER only shows one of these cars, number 8769, still on the roster.

Accurail's version of these L&N box cars is based on the ACF built cars of 1921, and is lettered in a WWII-era scheme, appropriate from the early 1930s to 1955. As seen in the photos, both Bettendorf and Andrews trucks are appropriate under these cars.

16. Louisville & Nashville car 8312. *ACF builder's photo, JW Barriger III National Railroad Library collection*



17. L&N 11289 poses for a photo in late 1947, soon after being repainted. This photo was probably taken as an insurance photo; the light splotch to the upper left corner of the door shows that the car body has broken in two!
Bob's Photos collection

18. Model of Louisville & Nashville box car 8359.
Photo courtesy of Accurail

1306: Boston & Albany

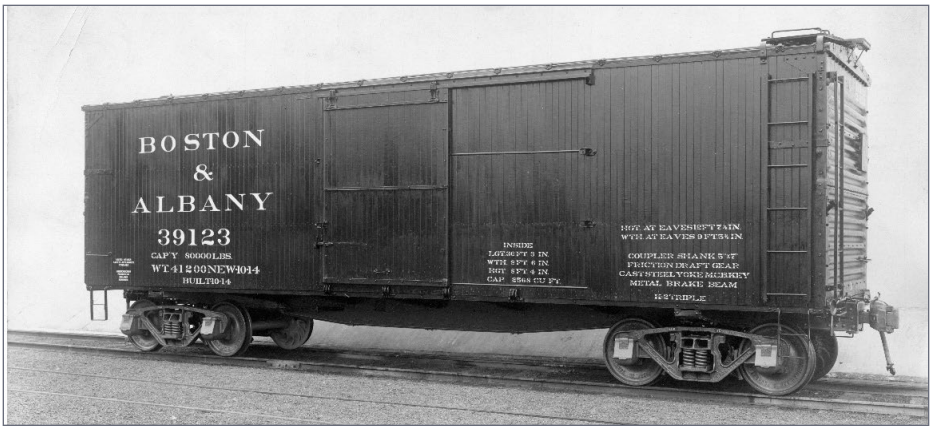
As it was one of the NYC Lines roads, it's natural that the Boston & Albany would have a few of these standard NYC short box cars on their roster. And they had a lot of them: by the end of 1915 the road

had taken delivery of 4,000 cars with wood ends and 905 with 7/7 inward-facing rib corrugated steel ends, accounting for 65% of all of their freight cars.

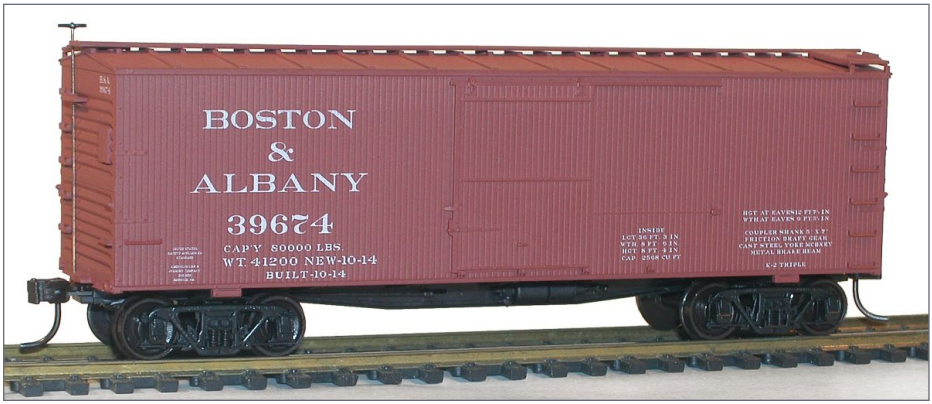
By 1925 the B&A was rebuilding their 4,000 wood-end cars with steel ends (mostly early Dreadnaught). The B&A's freight car fleet shrank to almost nothing after the Depression, with parent NYC either scrapping or transferring their cars to their own roster. By the end of WWII the B&A's roster of short box cars was down to 919 cars with Dreadnaught ends and 264 with 7/7 Murphy, and by 1950 down to 33 and eight cars respectively. By 1955, all of these cars were off the revenue roster.

Still, for nearly 30 years, if you happened to see a B&A box car, you'd likely be looking at one of these cars.

Accurail decided to support pre-WWI modelers with this car release, which is painted in the car's as-built lettering scheme. In general, wood-sided freight cars were repainted every seven to 12 years, so this specific model is most suited to pre-Depression-era layouts.



19. ACF builder's photo of B&A car 39123. *JW Barriger III National Railroad Library collection*



20. Model of Boston & Albany box car 39674.
Photo courtesy of Accurail

One note: except for the Nickel Plate's 1916-built versions of this car, almost all non-New York Central painted cars within the Lines family had side ladders rather than grabs. Several of the non-NYC copies also have this feature, including the MKT car below.

So if you want a more accurate model of a B&A or Big Four car, you'll have to do some scraping and gluing to get one.

1307: Missouri-Kansas-Texas

Being a small railroad, it's understandable that the Katy would lean heavily on other roads' equipment designs, and sometimes even catalog cars to fulfill their rolling stock needs. That seems to have been the case in the early 'Teens, when they took delivery of just over 1,800 box cars built by ACF in 1913.

The cars of the 74100-75679 and 170000-170228 series look to be nothing more than direct copies of the NYC's 1913 car designs. And just like the NYC, the MKT began rebuilding their cars with steel ends in the late 1920s. These box cars, especially visible during the Depression years in their distinctive bright yellow paint, ran

21. MKT 74919 in Constantine MI, circa 1952. *LG Isaac photo*

in diminishing numbers through the K brake ban period, which seems to be what finally killed them off.

In 1930 the road had 1,487 of these cars, by the end of WWII in 1945 they were down to 322, and by 1950 the fleet had dwindled to only 75 cars. They were all gone by January 1955.

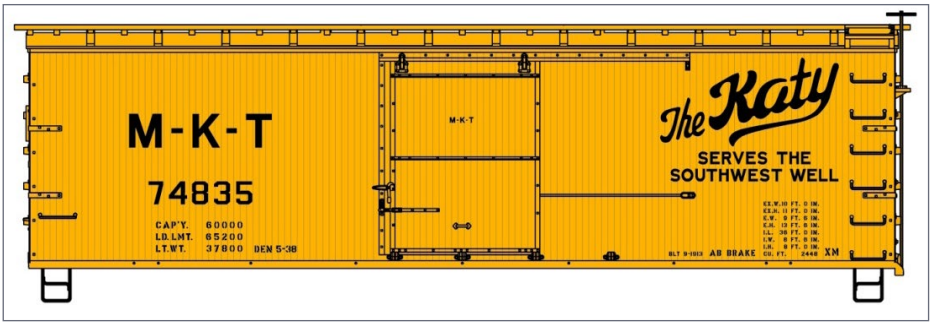
Accurail has decided to paint their MKT car in the post-1934 "Sloan yellow" scheme. While many modelers might assume that this is either an "old timey" paint scheme or even a post-1960 high-visibility scheme, it's an accurate depiction of a rare transition-era, brilliantly painted box car.

1308: Michigan Central

Another NYC Lines road, the Michigan Central, was the second largest chunk of the greater New York Central, and moved a huge amount of traffic to and from the Detroit and Toledo areas. You would think the road would have been allocated a large number of these cars, and you'd almost be right.

The MC was allocated 5,000 cars built to this general design, but only sort of: they received 4,450 auto box cars built between 1910 and 1912, and another 450 plain box cars in 1912 and 1913. These cars did make up a significant chunk of their box car fleet, but

22. MKT 75090 is seen in Mexico in the early 1930s, wearing the second of the car's three paint schemes. *Steve Hedlund collection*



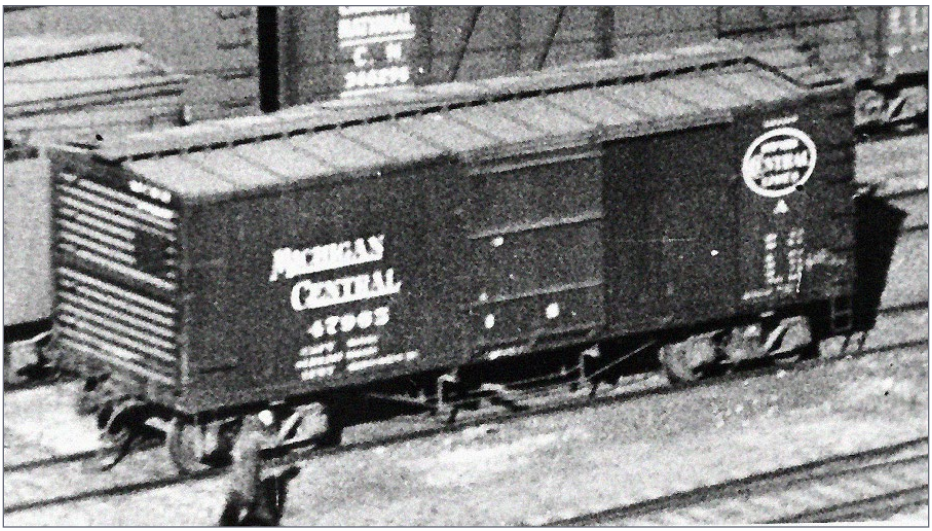
23. Full-color drawing of MKT box car 74835 in the "Sloan yellow" scheme. *Model art courtesy of Accurail*

they were obsolete within five years, since the MC began taking delivery of the NYC-standard 1916 and 1922 40-foot all-steel box car designs.

The two small groups of short plain box cars (28500-28899 and 51050-51099) were rebuilt with steel ends around 1925, but began losing their identities soon afterward; in 1936 the NYC underwent a major reorganization and consolidation, eliminating many of their subsidiary railroads including the MC. From that point on the cars were slowly repainted as NYC cars or scrapped, until only seven cars remained at the end of WWII. By 1950, all short MC box cars were gone.

See [24] below for modeling the far more-common MC short auto box cars based on this design.

Accurail hasn't released their Michigan Central model art, but they're doing a good job in supporting all three major phases of



24. Representational photo of a rebuilt MC short box car; their cars with fish-belly steel underframes would look generally identical. *Richard Burg collection*

these car's lives. Personally, I'm hoping for a mid-1920s lettering style for these cars, since that will cover the most bases.

1309: Savannah & Atlanta

Of all of the paint schemes announced by Accurail, this is possibly the largest "foobie." The S&A was a fairly recent railroad, only being chartered in 1915. The road bought the Savannah & Northwestern in 1917, and only then actually owned any freight equipment at all. The S&A inherited 175 or so all-wood box cars from the S&NW, all of which were listed in the ORER as being 37'-8" long, and numbered somewhere in the 1600-4049 group of cars.

All of these cars were gone by 1930, meaning that they were most likely scrapped due the wood underframe ban of 1928/1929. The S&A 8000-8197 group of cars [25] were secondhand box cars bought during WWII and were 40-foot long ventilated box cars rebuilt into plain box cars. These cars ran into the early 1960s.

25. Another representational photo, this time of an S&A 40-foot long box car in St. Louis in 1948. Their 36-footers would have worn the same general paint scheme. *Joe Collias collection*

Depending on what number Accurail uses, these cars should be acceptable stand-ins, although personally I'd rather they used their 1800-series kits for this road name (wood ends and straight underframes).

1310: Big Four (CCC&StL)

And finally for the 1300-series releases, is the Big Four. The major Midwestern component of the NYC Lines roads, the NYC allocated over 6,000 of these cars to the CCC&StL, and another 550 to sub-subsidiary, Peoria & Eastern.

These cars were mostly all 1914-built cars with corrugated steel ends; 1,500 of the Big Four and all of the P&E cars were built new with wood ends, but were later upgraded to steel. As of 1930, these box cars accounted for 32% of the Big Four's box car fleet and 75% of the P&E's.

26. DL&W Company Photo. *Steamtown NPS collection*

As with the MC cars above, the CCC&StL ceased to exist (except on paper) as of 1936. By 1945, only 32 of these Big Four-lettered cars were still on the roster, and they were all gone by 1950. When the cars came in for repairs after 1936 and were deemed suitable for repair & use, they were re-lettered and re-numbered as NYC equipment, so they weren't all scrapped right away.

The P&E lost their cars even earlier, with the last short box car dropping off of their roster by 1944.

Accurail based the artwork for this release on the prototype photo of #53572 [27]. The base model does differ slightly from the prototype: 4"x4" wood door stops were common on many NYC Lines box cars, and ladders instead of grabs were common on subsidiary line roads. And finally, these cars were delivered with Bettendorf trucks instead of the Andrews supplied with the kits.

Other road name possibilities

Accurail's announced road names won't cover each and every paint scheme possibility. And that's a good thing, since that means that we'll have more cars to model! With a little digging I've come up with a small list of low-hanging fruit that can be created using the undecorated cars as a starting point.

27. Full-color drawing of NYC box car 53576.
Model artwork courtesy of Accurail

In my summary of the 1700-series kits I'll have even more, since while we often have builders' photos of the cars, in-service photos from the 1920s through 1940s are scarce.

The simplest road names to include in this list are various other NYC Lines roads. With 8,405 cars built new with steel ends and fish belly underframes, and over 15,000 built with wood ends and fish belly underframes, and later converted to steel ends, there are quite a few more NYC family schemes left to do.

The other road names include NYC&HR (for the few cars modified or built before 1913), Canada Southern, P&LE, PMcK&Y, P&E and LE&W (these last cars heading to the NKP in 1922 as their 85000-series box cars).

Due to MCBA recommendations and ARA guidelines from 1914, most railroads began building or rebuilding wood-bodied box cars with steel ends immediately after WWI. Generally following the

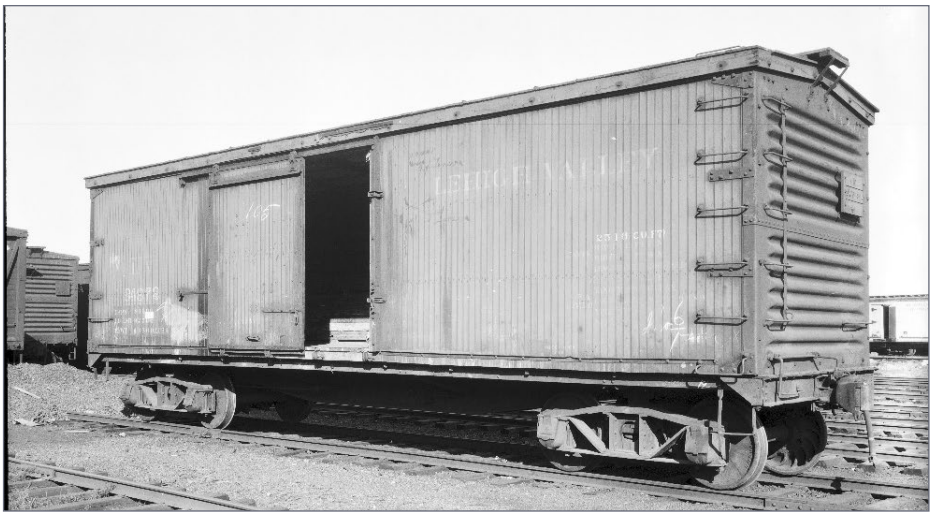
28. Various other NYC Lines road cars, demonstrating that this ubiquitous car type was spread pretty evenly among all of the NYC family properties.

standard set by the NYC, most of the short box cars rebuilt ended up looking a lot like these Accurail models.

Lehigh Valley 84972, shown in Jersey City in 1928 [29], is one such car. By 1930 the LV had 5,177 essentially identical rebuilds on their roster, accounting for over 43% of all their box cars. Starting in the mid-1930s, the LV rebuilt most of these cars into 40-footers, and by 1945 only 19 of these short cars remained on the roster. Six stuck around to 1950, but all were scrapped by 1952.

Other railroads built box cars that were very similar to the new Accurail kits, but which included their own peculiar in-house design biases. One such road was the Philadelphia & Reading (Reading Co. after 1924).

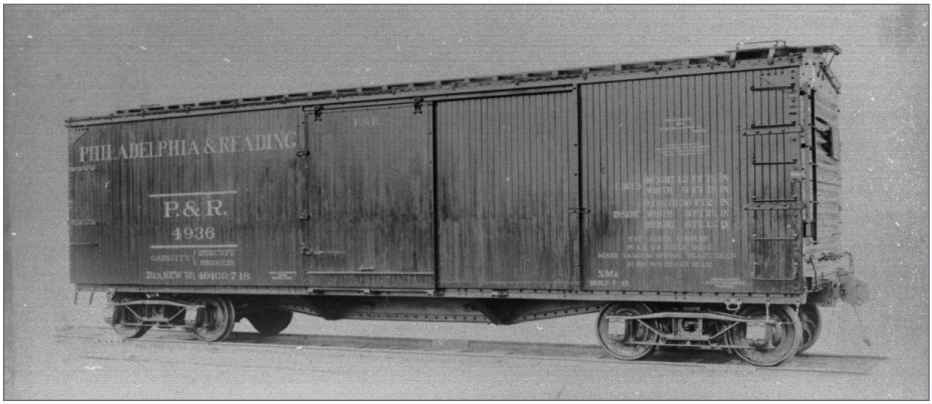
In the decade before World War I the P&R built 8,000 box cars in their XMk through XMr classes.

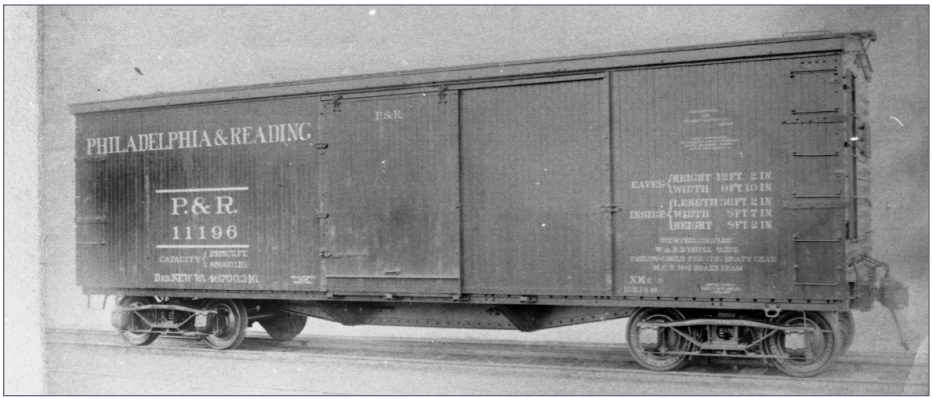


29. Note that the car, although rebuilt with many new all-steel body elements, retains its original arch bar trucks. *DL&W company photo, Steamtown NPS collection*

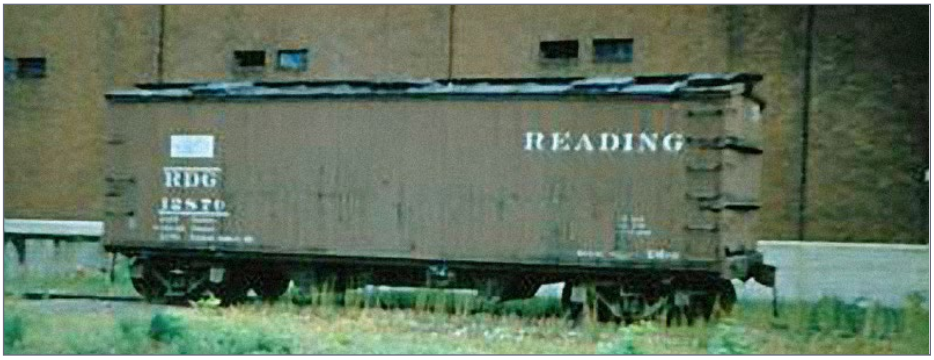
All of these cars were virtually identical, with the first 4,000 being built with wood ends, and the others built with 7/7 "inward rib" steel ends. Like the NYC-designed cars they were built with durability in mind and so featured as much steel as possible in their bodies, including a very large fish belly underframe (slightly different than the NYC's design).

By the late 1920s most of the wood-ended cars had been rebuilt with corrugated steel ends.





30. ACF Builder's photos. *Al Westerfield collection*



31. This poor photo shows one of the Reading's cars very late in life, having been rebuilt into a sand service covered hopper in the 1960s. This car is still on the revenue roster, since it had to be interchanged for loading. This photo was taken right after the formation of Conrail in 1976.
Ray Breyer collection

The Reading's new cars made up 25% of their fleet when built, but as their earlier cars fell off the roster due to age and wrecks, these shorties took on more and more duties, until the 2,880 survivors in 1945 accounted for 40% of their box cars. That would change quickly, as orders for new 40-foot, all-steel box cars began being filled after 1947. By 1950 their short box car fleet was down to 116 cars, and by 1955 down to only seven. These last few cars were tenacious though, and almost outlived the railroad, finally being retired less than a decade before the formation of Conrail.

Rio Grande 63786 is a good example of a car that looks to be a good candidate for these models on paper, but which gets most of the actual details wrong.

Part of the 63500-64199 series built by Standard Steel in 1913, these cars were built with all of the same general body details as the NYC's box cars, but each is different enough that one of these models would look "wrong" decorated for the D&RGW.

32. Denver & Rio Grande Western box car 63786. *Bob's Photos collection*

33. ACF builder's photos. *Al Westerfield collection*

Thankfully, the Rio Grande had cars that were identical to Accurail's 1400 and 1700-series kits, so there's little reason to use the 1800s as a stand-in.

Finally, here's an odd car that can be modeled using the Accurail model plus a lot of work.

SSW 21902 had some VERY odd ends that may be unique to these cars. As such they're not very modelable unless you know someone that's decent with 3D CAD and can have them printed. The Wagner-like door hardware doesn't help much either.

Still, in general these cars are close enough to the basic 1300-series kits that with a little imagination they can be used as a stand-in model. The Cotton Belt did have a large group of 36-foot box cars with steel underframes, cars 24000-26998 (even numbers only), with 1,140 of these cars lasting into the Depression years.

Many of these cars were built with all-wood bodies and fish belly underframes, and it's likely that some were rebuilt with more conventional steel ends in the mid-1920s.

Kitbashing possibilities

Having a series of brand new short box car kits around will be a huge boon for pre-diesel-era modelers, since they'll be very useful for representing cars that may never be produced, even in resin.

With more than a million short box cars running between 1910 and 1950 there's no way that resin manufacturers will ever be able to make models of more than a fraction of them.

34. NYC 265547 (ex-Michigan Central) rolls though Chicago on a snowy February day in 1942.
Jack Delano photo, Library of Congress collection

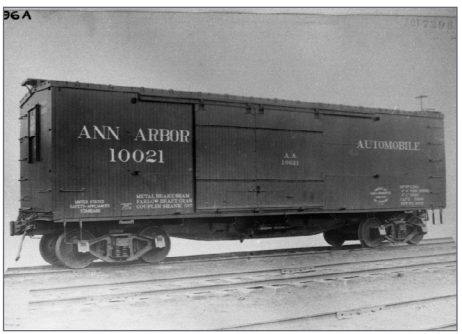
It will still be up to individual modelers to fill in gaps in their fleets with kitbashes and scratchbuilds. Here are a couple of general ideas to get your creative juices flowing!

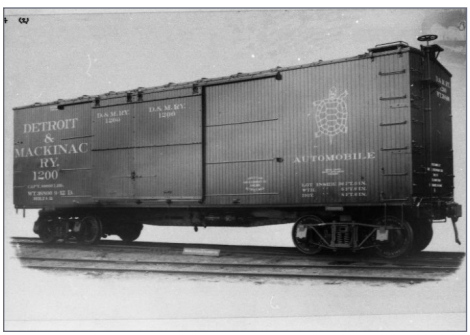
When you think of automobile-carrying box cars you don't immediately think of short cars. But before 1916 they were more common than 40-foot auto cars, and some lasted well into the transition era.

The New York Central and its Michigan Central subsidiary had the largest number of these less-than-40-foot-long dedicated automobile carriers, but there were many roads with small numbers of similar cars.

The New York Central built nearly 11,000 short auto box cars between 1909 and 1914. Initially assigned to several of the Vanderbilt roads, they were soon consolidated into just the NYC and MC, and stayed there into the early 1950s.

By 1930, the NYC was down to 2,850 of these cars and the MC down to 3,812 (some of the cars had been rebuilt as plain box cars rather than being scrapped). After the 1936 reorganization the Michigan Central's cars disappeared en masse, and the remaining





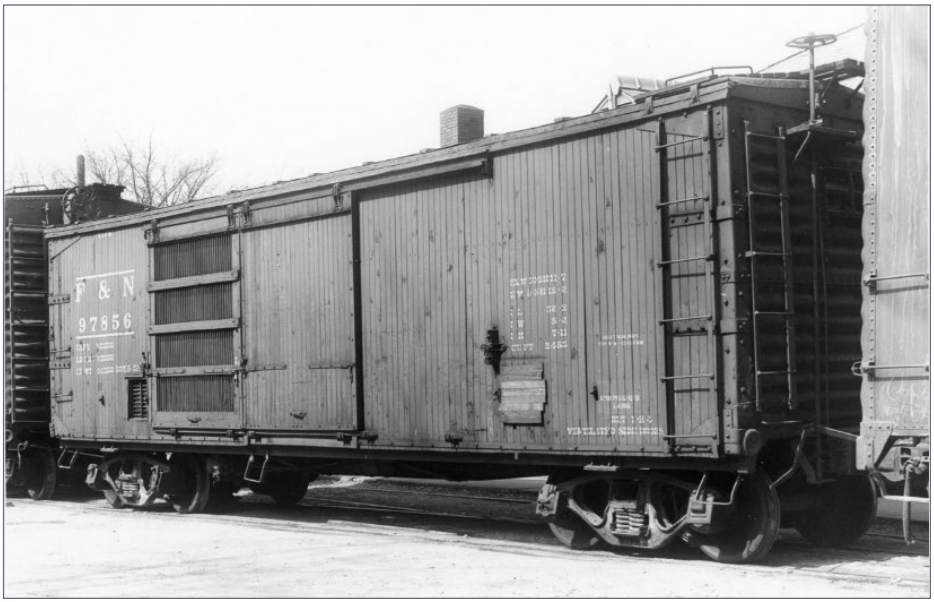
36. Other examples of prototype cars similar to the Accurail model. Both photos, Al Westerfield collection

cars were downgraded to plain box cars with 12 foot wide doors, renumbered and relettered as NYC cars.

By the end of WWII, the NYC had 1,433 of these cars left on the roster, with 112 of them still lettered for the MC. The end of short wood-sided cars on the NYC came in 1951 and 1952, with the last 28 NYC-lettered cars dropping off the roster.

While never a very large group of cars on the NYC as compared to the rest of their box car fleet, these 10,000-odd cars were still more cars than most railroads even owned!

As with much of their other equipment, the NYC saw small railroads copying their designs. I'll get into these cars in detail when I discuss the 1700-series kits, but here are two Detroit-area railroads that copied the NYC's 1910 designs for their own use.



37. Yet another prototype car that could be kitbashed from this Accurail model. *Bob's Photos collection*

Like the NYC's equipment, these cars were upgraded in the 1920s with various styles of steel ends, and some were downgraded to plain box cars with a single side door.

If you stare at enough pre-WWII photos of yards and freight terminals in major cities, you'll start noticing ventilated box cars. They're absolutely everywhere, and are by far the most commonly seen specialty freight car in early railroading. Every railroad had at least a few on their rosters at one time or another.

For example, the Wheeling & Lake Erie had a few, and the Reading had a lot of them. But sadly, ventilated box cars are an ignored side note for manufacturers; besides the (usually unavailable) Con-Cor model and a few 40-foot resin models, there are very few options for modeling these necessary cars.

If you need a Southern ventilated car, or IC, or C&O, or even one from the Nickel Plate, you're forced to compromise or not have them at all. Modifying the new Accurail models will allow us to compromise a little more easily, and come up with better-representational models for our fleets.

A good example of an easily modelable ventilated car is Flemingsburg & Northern 97856, one of 20 ventilated box cars on their roster in 1945 [37]. These cars were bought secondhand from the Southern, which at one time owned several thousand of them. The railroad shut down in 1955, and these cars were scrapped at that point.

So there you have it: dozens of uses for the Accurail 1300-series short box car kits, representing well over 60,000 box cars built for American and Canadian railroads. Some of the cars I've touched on above will be compromises or stand-ins, but until companies step up and start offering more correct short box car models, these Accurail cars will do nicely!

In a future issue of *MRH,* I'll take a look at Accurail's 1400-series models, which are similar to the 1300-series kits but feature a straight steel center sill underframe. ☑

VIEW READER COMMENTS
click here

Ray Breyer

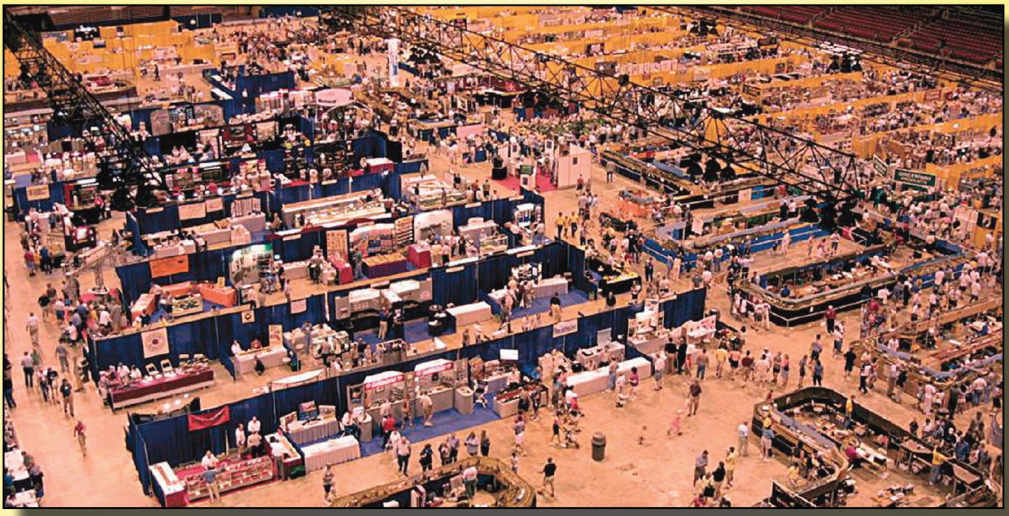
Ray, a second generation model railroader, has been active in the hobby for as long as he can remember. At age six he gave his first modeling clinic, when he demonstrated scratchbuilding trees at the 1976 NMRA National Convention in Chicago.

Ray has been a prototype modeler since 1998, he's currently modeling the Nickel Plate Road's Peoria Division in the spring of 1929. An avid researcher and scratchbuilder, Ray has written several prototype-focused articles for the NKPHTS magazine, as well as for several online blogs.

He's also contributed research material, research time, and photos for pieces from many other authors.

Ray lives and works in Elgin, IL, with his wife Candice, daughter Vivian, and son Alex. He's also the editor of the NKPHTS' online modeling magazine, the Nickel Plate Road Modeler's Notebook. ■

You're the kid.



Welcome to the candy store.

- 180,000 square feet of "candy"
- The world's best known manufacturers
- 44,000 square feet of modular layouts
- "Ask the Collectibles" appraiser
- Trains, accessories, collectibles & more
- Hands-on demonstrations

CLICK HERE FOR ALL THE DETAILS!

www.nationaltrainshow.org

August 10-12, 2018

Kansas City Convention Center
301 West 13th St.
Kansas City, MO

Sponsored by

nmra.org
We make it more fun!

THE NATIONAL TRAIN SHOW®

MAY NEWS column

Model Railroad Hobbyist | May 2018 | #99

RATE THIS ARTICLE

Richard Bale and
Jeff Shultz report the latest hobby industry news

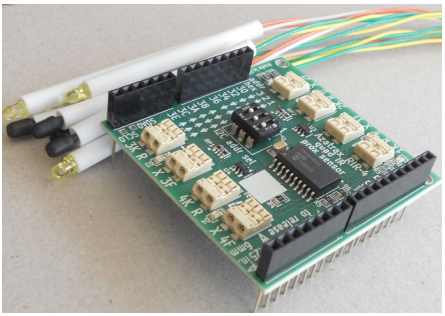
Accurail buys Rib Side Cars

Accurail Inc., a major producer of injection molded HO scale freight car kits, has acquired the tooling of Rib Side Cars, of Bensenville, IL. Established by George Schmidt, Rib Side Cars specialized in producing injection molded kits for several variations of Milwaukee Road boxcars with distinctive horizontally ribbed sides. Although Accurail has not announced any specific plans or timing, it is expected that the newly acquired cars will be added to their extensive line of HO scale freight car kits ...

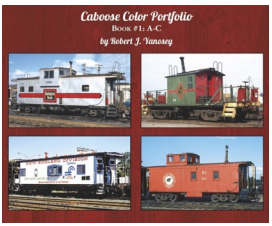
NEW PRODUCTS FOR ALL SCALES

Atlas Model Railroad Company has released an upgraded version of its free track planning software. The upgrade allows layer visibility to be applied in the 3D viewing mode, saving and restoring of the backup project files, and improvements in

the status bar with more details about the selected tracks and objects. Atlas's upgraded track planning software can be accessed by going to shop.atlasrr.com/t-software.aspx.

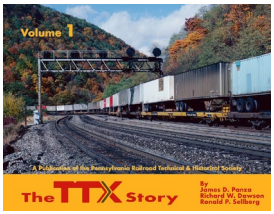


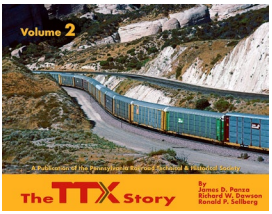
Many modelers use Arduino or compatible microcontrollers to create their own layout automation and animation effects. **Azatrax LLC,** a Colorado firm specializing in model railroad applications, has built four infrared (IR) proximity detectors into its new model RIR4 Arduino compatible shield. By plugging one or more RIR4 shields onto an Arduino, IR detection can be easily added to the system. The RIR4 detectors use the same technology as other Azatrax train detection and layout automation products. IR detectors work equally well in brightly lit rooms or in the dark, and can be configured for reflective or across-the-track sensing. For additional information visit azatrax.com/arduino.



Morning Sun Books has released three soft cover publications titled *Caboose Color Portfolio.* Book No. 1 covers railroads A through C, book No. 2 railroads D through M, and book No. 3 completes the series with railroads N through Y. Authorship for the three-book series is credited to Robert J. Yanosey. For additional information visit morningsunbooks.com.

The **Pennsylvania Railroad Technical & Historical Society** has published a two volume set of books titled *The TTX Story.*



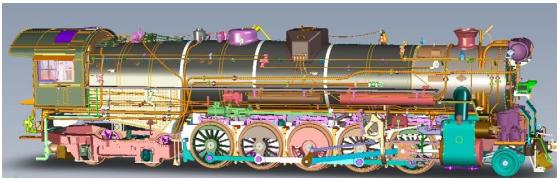


The Pennsylvania Railroad and Rail-Trailer Company formed Trailer Train Company in 1955 to expand piggyback service between the nation's railroads. The 62-year journey started with 500 flatcars in 1956 and grew to over 161,000 cars, including TOFC, auto rack, Railbox, Railgon, and other specialized equipment. The authors, James D. Panza, Richard W. Dawson, and Ronald P. Sellberg, have over 90 years combined of first-hand service with Trailer Train/TTX. This is a monumental study with the two hardbound books totaling 624 pages. These books are a must for serious TTX modelers. For ordering information visit prrths.com.

The Cab Saver has introduced Cab Savers, plastic disks with square holes in them sized to eliminate free play and rocking in the knob of potentiometer equipped NCE Cab06P and Cab04P throttles. Available in 16 different colors, the Cab Savers fit against the throttle underneath the knob, filling the space between the knob and the throttle, which relieves the potentiometers of lateral stress that can cause them to fail. For more information, email TheCabSaver@gmail.com or visit their Facebook page at www.facebook.com/cabsaver1.

RATE THIS ARTICLE

O SCALE PRODUCT NEWS



3rd Rail Division of Sunset Models is preparing handcrafted O scale brass models of 2-10-4 steam locomotives. The computer drawing shows the engineers side of a Texas & Pacific class I-1a. Four versions of the T&P locomotive are in production along with a single version of a similar Chicago Great Western 2-10-4. Both 2-rail and 3-rail versions of the O scale model will be available. For additional information visit 3rdrail.com.

Atlas O has scheduled a new production run of its Baldwin VO-1000 diesel locomotive for release during the fourth quarter of this year. Road names for the venerable switch engine will be Nashville, Chattanooga & St. Louis; Rock Island, Southern Pacific, Santa Fe, Western Pacific, and Lehigh Valley. The O scale ready-to-run model will be available for TMCC operation or with LokSound Select Dual-Model decoder for DC or DCC operation.

Two styles of steel caboose are scheduled for release from Atlas O during the third quarter of 2018. A caboose with an extended vision cupola and diagonal panel roof

without running boards will be available decorated for Alaska Railroad, Frisco (two schemes), Chessie System, Reading, and Burlington Northern in a Bicentennial scheme.

Road names for a steel caboose with a standard cupola, riveted roof, ladders, and running boards will be Montreal, Maine & Atlantic; Great Northern, Norfolk & Western, Norfolk Southern (N&W Heritage scheme), Norfolk Southern (Southern Heritage scheme), and Wheeling & Lake Erie. Undecorated models of both cabooses will also be available. All Atlas O locomotives and rolling stock are available for either 2-rail or 3-rail operation.

Atlas O's fourth quarter 2018 release will include a group of 40-foot corrugated containers. Features of the standard height containers include beveled corrugations, detailed roof corner pads, and separately applied door rods and handles. Decorating schemes will be Evergreen, K-Line, Maersk, and ZIM. For additional information on all Atlas O products contact a dealer or visit atlaso.com.

Tichy Train Group has introduced several new O scale road side signs. They include bridge warning, firehouse warning, and low vehicle warning signs. For more information visit www.tichytraingroup.com/WhatsNew.aspx.

S SCALE PRODUCT NEWS

Des Plaines Hobbies/S Scale America now have available Thrall 2743 gondolas in five paint schemes. Equipped with new 100-ton trucks, wire grab irons, and separately applied steps and ladders, the factory assembled models are 1/64th scale and come equipped with American Flyer compatible trucks and couplers. Converting to Kadee couplers involves removing only three screws. Road names available are Canadian Pacific, CRLE Gondola Connection, CSX, DJLX David J Joseph, and Duluth, Minnesota and Eastern. For more information visit Des Plaines Hobbies online at www.desplaineshobbies.com.

HO SCALE PRODUCT NEWS

Athearn's April new announcements include a group of Genesis series EMD F-unit diesels. New features added to this run include LED lighting and rubber MU hoses.

F7A and F7B units will be available decorated as EMD demonstrators and in Santa Fe's Bluebonnet freight scheme. F3A and F3B models with chicken wire side grilles

will be available for Central Railroad of New Jersey and Union Pacific. The models will have a factory installed DCC decoder with SoundTraxx Tsunami2 decoder. Sound units operate in both DC and DCC environments.

Athearn's March 2019 delivery schedule includes an EMD SD40-2 diesel locomotive. Features of the model include new LED lighting, rubber MU hoses, and photo-etched stainless steel windshield wipers. Models with an 88-inch nose will be available decorated for Union Pacific (No. 3300 in a special red, white and blue United Way scheme), Santa Fe SP-SF Kodachrome, and Norfolk Southern.

Models decorated for BNSF and RJ Corman Railroad will be available in both 88- and 123-inch noses. The Ready-to-Roll series locomotive will be available for standard DC operation and for DCC with an Econami Sound decoder.

Athearn has added several new details to its HO scale GATC 2600 cu. ft. 70-ton Airslide covered hopper. The revised car will be released next March as a Genesis series model. The

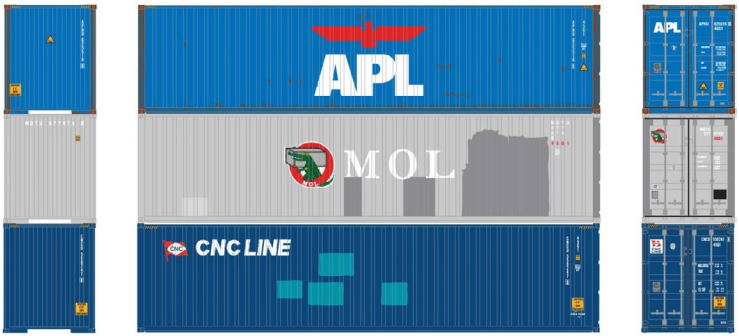
upgrades include uncoupling levers, train line hoses, and some railroad- and road number-specific details such as Bettendorf or roller bearing trucks with rotating bearing caps.

Road names for this release will be Baltimore & Ohio, Con Agra, Conrail, Erie, Milwaukee Road, and two Great Northern schemes.

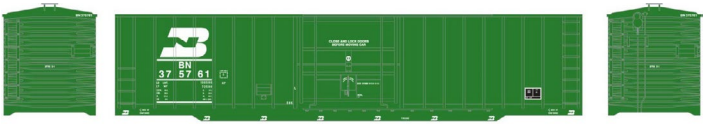
HO scale Thrall high-side gondolas will be included in Athearn's March 2019 product release. In the 1960s, hauling coal shifted from open hopper cars to high-sided gondolas capable of carrying more coal than a conventional hopper car. Since gondolas lack discharge hoppers for unloading, rotary car dumpers were required to efficiently unload the gondolas. Features of Athearn's coal gondolas include factory-applied ladders, stirrup steps, wire grab irons, and 100-ton trucks with 36-inch machined metal wheelsets. Road names for the Ready-to-Roll models will be Commonwealth Edison, CWEX, ATSF, Herzog, RJ Corman, Wisconsin Electric, and Midwest Car.

Athearn has included an assortment of 40-foot containers in its April announcements. Individual names available in 3-packs with different numbers will be available for Hyundai Merchant Marine, Seaboard, SM Line, and ONE-Ocean Network Express

(two schemes, pink and grey).



Three-packs with assorted carrier names in Athearn's Primed-for-Grime paint will be available for APL/MOL/CNC (above) and MMCU/BH/CNCU.

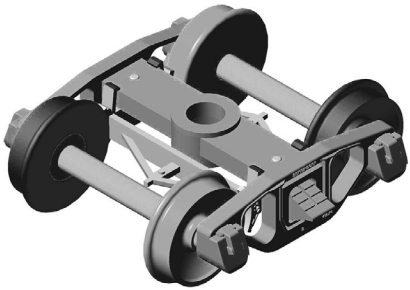


Roundhouse Brand models coming from Athearn next March include this 50-foot steel boxcar with ribbed sides, plug doors, and Dreadnaught ends. In addition to the Burlington Northern car shown here, road names will be Conrail, Great Northern, and two Soo Line schemes.

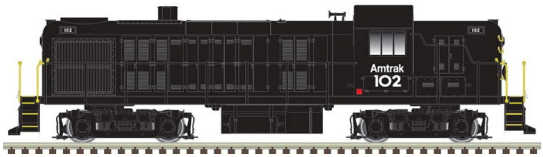
Boxcars in Primed-for-Grime paint will be available for Canadian Pacific and Wisconsin Central.

A steel caboose with offset cupola is scheduled for release under

the Roundhouse brand next March. Road names will be Illinois Terminal, Chicago Short Line, Indiana Harbor Belt, Denver & Rio Grande, Rock Island, and two Santa Fe schemes.



The Roundhouse model will come with new Athearn Barber Bettendorf swing motion caboose trucks with elliptical springs. For additional information on all Athearn and Roundhouse products contact a dealer or visit athearn.com.



Atlas will release another run of its HO scale Alco RS-3 road switcher during the fourth quarter of 2018. The model is based on the 1,600 hp diesel launched by the American Locomotive Co. in 1950. It was a great success with more than 1200 being produced. Atlas will offer the

ready-to-run model decorated for Amtrak, Lackawanna, Burlington Northern, Green Bay & Western, New Haven, Pennsylvania, Reading,

Atlas's fourth quarter production run will include Alco's RSD-4/5 road switchers. With the exception of six-wheel trucks with staggered axle spacing, the RS-3 and RSD-4/5 are visually identical. Road names will be Chicago & Northwestern, Santa Fe (blue and yellow scheme), and Southern Pacific. Atlas will include undecorated models of both the RS-3 and RSD-4/5. The locomotives will be available for DCC operation with a LokSound decoder. DC-only models will have an 8-pin socket for installation of an aftermarket decoder.

Atlas has set the release of an International steel caboose with an extended-vision cupola for the fourth quarter of 2018. The HO scale model has a diagonal panel roof without running boards. Road names for the ready-to-run caboose will be Delaware & Hudson (ex-Reading), Frisco (two schemes), Rutland, TTX, British Columbia Railway, and Burlington Northern Bicentennial scheme.

Additional HO scale models scheduled for release from Atlas during the fourth quarter include a bulkhead flat car. Details on the ready-to-run Trainman series model include individual

side stake pockets and simulated tie-loops. Road names will be Santa Fe, Canadian Pacific, CSX, Illinois Central, Northwest Oklahoma. TTX, and Union Pacific.

Also coming from Atlas in the fourth quarter is a group of 40-foot containers with beveled corrugations. Features of the standard height containers include detailed roof corner pads and separately applied door rods and handles. Decorating schemes will be Evergreen, K-Line, Maersk, and ZIM. For additional information on all Atlas products contact a dealer or visit atlasrr.com.

New HO scale kits recently issued by **Acccurail** include this Santa Fe 36-foot double-sheathed wood boxcar. It is available singly and in a specially priced 3-car set with different road numbers. The model represents a prototype built in the era of WWI that was subsequently upgraded.

Also new from Accurail is a kit for a 36-foot Fowler box car decorated for New York, Susquehanna & Western. The rugged prototype was built in 1913 and rebuilt in 1939. It saw extensive duty in both WWI and WWII.

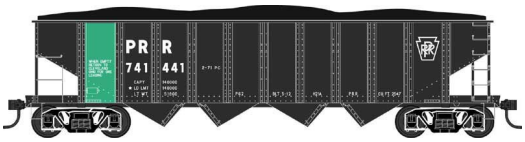
The prototype of this 41-foot AAR steel gondola was built in 1929 and rebuilt in 1952. Accurail's

HO scale kit is available in a 3-car set with different road numbers.

This Milwaukee Road 70-ton triple-bay hopper car with offset sides is available as an HO kit from Accurail.

Also available now from Accurail is an HO scale kit for a 50-foot Baltimore & Ohio insulated boxcar. The model is based on a prototype with welded sides, plug doors, and a Stanray diagonal panel roof. All Accurail kits include appropriate trucks with plastic wheels and Accumate knuckle couplers. For additional information on all Accurail products contact a dealer or visit accurail.com.

Bowser plans to release an HO scale version of PRR 70-ton quad hoppers next January. The run will include cars with both clamshell and conventional discharge hoppers.



In addition to 15 different Pennsylvania Railroad schemes, the ready-to-run model will be available for Baltimore & Ohio, Penn Central, PC MOW, Union Railroad, and Virginian. Reservations for guaranteed delivery are being accepted through May 18, 2018. For additional information contact a dealer or visit bowser-trains.com.

Broadway Limited Imports is working on an HO scale USRA 4-6-2 Pacific steam locomotive for release in July. Both heavy and light versions of the United States Railway Administration designs will be available. The locomotive and tenders are composed of ABS bodies/superstructure and diecast chassis. The locomotives are equipped with traction tires. Due to insufficient boiler diameter in the USRA boiler these models will not have smoke units. The models will feature Paragon3 Sound & Operation System with Rolling Thunder which is operational in both DC and DCC equipped layouts. In addition to the B&O President Madison shown above, BLI's heavy USRA Pacific will be available decorated for B&O President Monroe, Santa Fe, Chicago & North Western, Erie, Fort Worth & Denver, and Great Northern.

Road names for the USRA Light Pacific will be Northern Pacific, Atlantic Coast Line, Baltimore & Ohio, Louisville & Nashville, Gulf, Mobile & Ohio; New York Central, and Southern Pacific. Undecorated models will be available for both light and heavy versions of the steam locomotive. For additional information on all Broadway Limited products contact a dealer or visit broadway-limited.com.

Custom Model Railroads is selling a laser-cut kit for an HO scale Power Substation. The model is based on a facility that provided regulated electric power to catenary lines on the Milwaukee Road. The kit features tab and slot construction. Components include laser-cut acrylic parts, cast details, photos and assembly instructions. The finished structure is

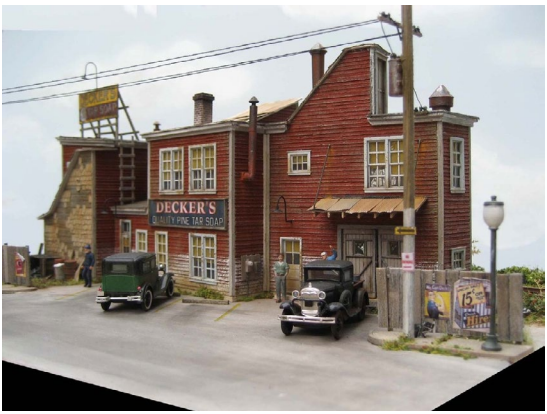
7.5-inches tall. It has a footprint of 7.5 x 6.76-inches. For additional information visit custommodelrailroads.com.

Digital Fox is selling an HO scale kit for a New York Central USRA twin-bay hopper. The model is based on a prototype built in 1917. The kit is available in four different road numbers. A removable coal load is included.

Also available from Digital Fox is a kit for a Nickel Plate 36-foot wood sheathed boxcar. The HO scale model replicates a prototype with steel ends, steel roof with wood running boards, National sliding doors, and a steel fish-belly underframe. Both Digital Fox kits come with appropriate trucks, Delrin wheelsets, and Accumate knuckle couplers. For additional information visit digitalfox.com.

The latest HO scale creation from Downtown Deco is The Downtown Overlook Hotel, a rundown four-story brick structure that features an interesting selection of decals. The new

kit is composed of Hydrocal castings, roof top details, assembly instructions, and weathering suggestions. The completed structure has a footprint of 3 x 7-inches. For additional information visit www.facebook.com/Downtown-Deco-213351728739385.



Fos Scale Models has reissued Decker's Tar Soap, a popular craftsman style structure kit first released in 2008. This shallow, highly detailed kit offers lots of character and a multi-angled roof. The kit includes laser-cut clapboard walls and roof cards, board-by-board construction, laser-cut shingles, cast metal details, and plastic windows and doors. The assembled HO scale model has a footprint of 3 x 9-inches. Figures, scenery, vehicles, and telephone poles in the photograph are not included. For additional information visit fosscalemodels.com.

InterMountain Railway is selling HO scale class R-40-23 steel refrigerator cars with three different Pacific Fruit Express

decorating schemes. Cars with full-color double heralds display a 1947 build date.

PFE reefers with black and white double heralds, including cars with silver roofs and gothic lettering, show 1952 build dates.

Although these steel ice reefers were built for PFE, InterMountain offers the R-40-23 decorated for several other roads including Armour, Northern Pacific, and MDT.

Also available from InterMountain is this HO scale 42-foot flat car with fish belly sides. Road names for the ready-to-run model include Chesapeake & Ohio, Great Northern, Baltimore & Ohio, Pennsylvania Railroad, Canadian Pacific, Union Pacific, Southern Pacific, and Pere Marquette. For additional information on all InterMountain products contact a dealer or visit intermountain-railway.com.

Kadee Quality Products has introduced a new series of HOn3 freight car trucks. The truck frames are cast in HGC (high gravity compound), a high-tech plastic that is almost as heavy as metal.

The new trucks include (from prior page starting from the left) arch bar with 3-foot 7-inch wheelbase, Andrews 1898-era, (above left and right) early Bettendorf T-section, and Vulcan. Additional new narrow gauge trucks include ASF A-3 Ride-Control, and arch bar trucks with a 4-foot 6-inch wheelbase. All of the trucks come with 26-inch ribbed-back metal wheels with plastic axles.

New HO scale ready-to-run models coming from Kadee in July include this ACF 11,000 gallon ICC-105A insulated tank car decorated for SHPX Mathieson Chemicals. The model is based on prototypes built from 1947 to 1949 with a full platform. Two car numbers will be available. For additional information contact a dealer or visit kadee.com.

KC Workshop has introduced The Blue Slipper, a craftsman kit featuring laser-engraved brick siding, shingles, windows, and doors. Based on a bar in in Onekama, MI, the kit includes a striking laser cut BAR sign on the roof. With an approximate footprint of 4.5 x 2.5-inches the kit includes front security gates, signs, wall vents, decorative trim, and roofing paper. For more information visit kcworkshop.com.

Monster Model Works has released a Starter Structure kit for a two-story brick storefront. The HO scale kit incorporates updated assembly techniques that simplify altering the building to fit individual space requirements. Even the text on the front sign can be customized.

The Old Brick sides, corners, and chimney, and the Terra Cotta coping are 3D laser-engraved. The peel & stick windows and glazing, cornice, and storefront are all laser-cut. Detailed assembly instructions and weathering suggestions are included. The finished model has a footprint of 3.3 x 5.3-inches. For additional information visit monstermodelworks.com.

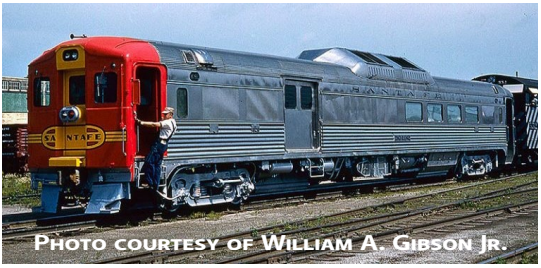
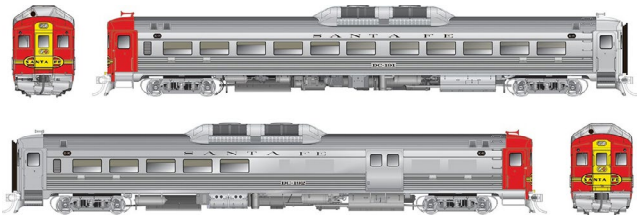


Photo courtesy of William A. Gibson Jr.

Rapido Trains has added two unique Atchison, Topeka & Santa Fe cars to its lineup of standard HO scale Budd-built RDC units. Santa Fe's DC-191 and DC-192 were extensively rebuilt following a major accident in 1956. DC-192, the lead car in the accident, was rebuilt with a large baggage section while DC-191 retained its full-coach interior. Both cars received a variation of Santa Fe's distinctive Warbonnet paint scheme. Special tooling was prepared to accurately differentiate the Santa Fe rebuilds from Rapido's standard RDCs.

Santa Fe later sold DC-191 to the Maryland Department of Transportation (MARC). That unit now resides at the Orange



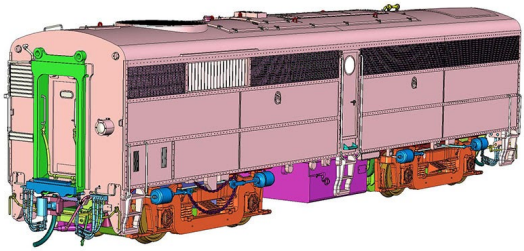
Empire Railway Museum in Southern California where it will soon undergo restoration. Rapido is donating a portion of the sale price of its HO scale models toward the restoration of the prototype.

In addition to the Santa Fe Warbonnet versions, Rapido will offer the DC-191 decorated in a blue and yellow MARC scheme. The rebuilds will be part of Rapido's second production run of standard RDCs. The release is expected in late 2018 and will include the RDC-1 and RDC-2, as well as an RDC-3 which is a combination baggage-mail-coach with no cab and only one motor.

Thomas Wilson photo courtesy CNWHS

Rapido has added more than a dozen new paint schemes to the next release of its HO scale Alco/MLW FA-2 and FPA-2 diesel locomotives. The new road names are Ann Arbor, Chicago & North Western, CP Rail (5-inch stripes), Erie Lackawanna, Long Island Railroad, Louisville & Nashville (gray), Missouri Pacific, New York Central (cigar band scheme), Penn Central (ex-NYC), Penn Central (black), SP&S, BN (ex-SP&S), Wabash, and Western Maryland (speed lettering). An undecorated version will also be available. The additional roads are based on requests received from modelers, however,

they are conditional pending receiving sufficient reservations to meet minimum production quantities. The order deadline is September 17. Delivery is planned for spring 2019.



Joining the FA-2 and FPA-2 locomotives are FB-2/FPB-2 units, which will be available separately. The FPB-2 has a steam generator and water tank in order to provide steam heat for passenger cars. Several fuel and combined water/fuel tank variations will be made. Road names and schemes available for pre-order are Baltimore & Ohio, Canadian Pacific (block), Canadian Pacific (script), CP Rail (5" stripes), Chicago & North Western, Erie (delivery), Erie-Lackawanna, Great Northern (Empire Builder), Lehigh Valley (delivery), Louisville & Nashville (gray), Missouri Pacific (delivery), New Haven (delivery), New Haven (McGinnis), New York Central (lightning stripe), New York Central (cigar band), Penn Central (black), Pennsylvania Railroad, and undecorated.

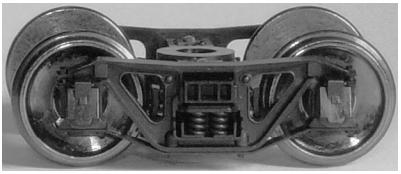
Rapido has also opened a short-term pre-order with a deadline of July 1st for VIA F40PH-2D locomotives that were wrapped in vinyl decals for Kool-Aid, Telus, Home Hardware, CBC 50th Anniversary, Operation Lifesaver, and a two-locomotive Coors Light set. Which versions are made depend on how many orders are placed.

Additionally, unwrapped VIA F40PH-2D locomotives are included in this pre-order in the narrow blue stripe original scheme (1986-2000), the wide blue stripe Canada scheme (1998-2012), and the Renaissance rebuild (2009-present). For additional information on all Rapido products contact a dealer or visit rapidotrains.com.

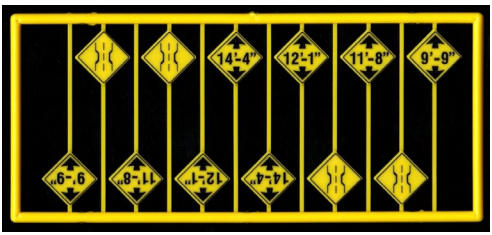
River Point Station has announced an HO scale Ford F-550 XLT truck with a crew cab. The ABS molded plastic models are equipped with firefighting equipment including a hose reel and roof-mounted emergency light assembly. They have tinted clear windows, appropriate interiors, rubber tires, and authentic paint schemes with either painted or reduced-luster simulated chrome grilles, bumpers, and wheels. The illustrated model has a red body and wheels, a black grille and a white lightning stripe.

Additional schemes include trucks with a white body with black grille; white body with black grille and orange stripe, white US Coast Guard scheme, red body with black grille and red wheels; red body with chrome grille and wheels, yellow body, and a green U.S. Dept. of

Agriculture scheme. For additional information contact a dealer or visit riverpointstation.com.



Tahoe Model Works has created a unique HO scale 40-ton T-section Andrews truck for the Northern Pacific Railway Historical Society. The prototype trucks date from 1912. They are appropriate on several prototypically accurate Northern Pacific models produced by Sunshine Models, Yarmouth Model Works, and Aaron Gjermundson/Northern Specific Models. They were also used under some Northern Pacific wood-sheathed refrigerator cars, and MOW equipment operated by NP and Spokane, Portland and Seattle. The one-piece trucks are cast in black acetal plastic with separate brake shoe detail, and include non-magnetic RP-25 wheels. Optional semi-scale wheels are also available. For additional information go to store.nprha.org.



Tichy Train Group has introduced several new HO scale roadside signs. They include bridge warning (above), firehouse warning, and low vehicle warning signs, and PRR pipe rail stanchions. For more information visit www.tichytraingroup.com/WhatsNew.aspx.

Walthers is working on a new EMD SD9 for introduction next March. The HO scale model will be in Walthers Proto line. The ready-to-run model will be based on Phase 1 prototypes that were in service from 1958 to the early 1970s. Features will

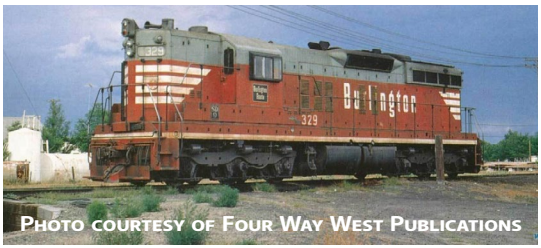


Photo courtesy of Four Way West Publications

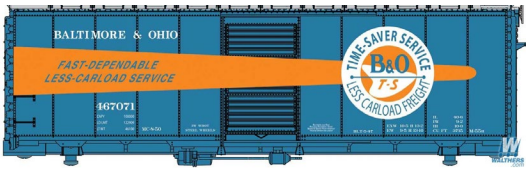
include operating Mars lights, dual Pyle sealed-beam headlights, and pilots with footboards. All lights will be LEDs. Road names currently on the production schedule are Chicago, Burlington & Quincy; Elgin, Joliet & Eastern; Milwaukee Road, Nickel Plate Road, and Southern Pacific. The new Walthers SD9 will be available for standard DC operation and with ESU LokSound Select and DCC.

The next release of Walthers Mainline series F7A and F7B units is scheduled for November. Details on the classic car body diesel such as steam generators, Mars lights, and the application of single or dual headlights will be prototype road-specific. Road names are Northern Pacific, Alaska Railroad, Milwaukee Road, VIA Rail Canada, and Wabash. DCC models will come with ESU LokSound Select decoders. DC models will have a 9-pin plug to simplify installation of aftermarket DCC decoder.

New Walthers freight cars due in June include this 50-foot AAR exterior-post mechanical reefer. The HO scale model is based on a prototype built in Burlington's Havelock Shops in the early 1960s. Road names on the ready-to-run model will be Northern Pacific, Santa Fe-SFRC, Burlington Northern, Conrail, Pacific Fruit Express, and Chicago & North Western.

Special features on the Walthers Mainline model include the diagonal panel roof, Improved Dreadnaught ends, twin ventilation panels, see-through running boards, and 70-ton roller bearing trucks with 33-inch machined metal wheelsets.

This 54-foot PS2-CD triple-bay covered hopper is scheduled for release in late June. The Walthers Mainline model is based on a prototype with low sides introduced by Pullman-Standard in 1964. The ready-to-run HO scale model rides on 100-ton roller bearing trucks with 36-inch machined metal wheelsets. Road names will be Burlington Northern, Santa Fe, Chicago & North Western, Louis Dreyfus Corp., Northern Pacific, and Soo Line.



Walthers has set an August release date for this 40-foot AAR 1944 boxcar. The Mainline series ready-to-run HO scale model will be available decorated for Elgin, Joliet & Eastern; Santa Fe (Chief slogan), Delaware & Hudson, New York Central (Pacemaker scheme), Union Pacific, and Baltimore & Ohio (Time-Saver Service).

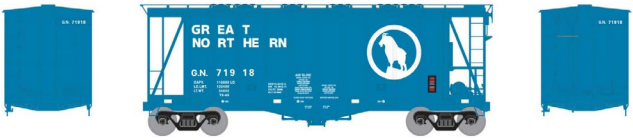
Walthers anticipates that its new Cornerstone American Bungalow kit will arrive in late April or early May. Measuring 6.35 x 3.63-inches in size, this plastic kit builds into a structure built in towns all across the US in the early 1900s. It includes

a detailed roof and front porch, printed paper curtains, gas and electric meters, and plastic parts molded in white and gray. For additional information on all Walthers products contact a dealer or visit walthers.com.

Yarmouth Model Works has a resin kit for a 40-foot West Indian Fruit & Steamship boxcar. The prototypically accurate model is based on a 50-ton postwar car built by ACF. WIF had a series of 150 cars built in late 1953. They featured a 12 panel welded side, and proprietary ACF steel ends and roof. As built they were painted boxcar red, but were later repainted green. The kit includes decals for both colors. Yarmouth has captured the unique "oil canning" effect resulting from welding the car's side panels. Additional features include etched metal details and running boards, and Kato ASF A-3 trucks with machined metal wheels. For additional information visit yarmouthmodelworks.com.

N SCALE PRODUCT NEWS

Athearn is quoting a March date for the next release of its N scale GATC 2600 cu. ft. 70-ton Airslide covered hopper. The model represents an early GATC Airslide body. Features include a see-through metal roof walk, separately applied roof hatches, and wire grab irons. The ready-to-run car will have either Bettendorf or roller bearing trucks as appropriate to the road name being modeled. The trucks



will be fitted with machined metal wheelsets. Road names for this release will be Baltimore & Ohio, Con Agra, Conrail, Erie, Milwaukee Road and two Great Northern schemes.

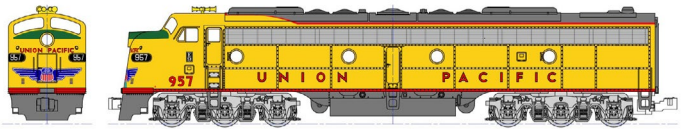
An N scale Thrall high-side gondola is included in Athearn's April 2018 announcements. In the 1960s, hauling coal shifted from open hopper cars to high-sided gondolas capable of carrying more coal than a conventional hopper car. Since gondolas lack discharge hoppers for unloading, rotary car dumpers were required to efficiently unload the gondolas. Features of Athearn's coal gondolas include screw mounted 100-ton roller bearing trucks with machined metal wheels. Road names for the ready-to-run models will CWEX, ATSF, Herzog, RJ Corman, Wisconsin Electric, Midwest Car, and three versions of Commonwealth Edison. For additional information on all Athearn products contact a dealer or visit athearn.com.

Atlas is planning another production run of its N scale EMD GP38 diesel locomotive. Special features on the Atlas Master Line model include directional lighting, walkway safety tread, blackened metal wheels, and golden-white LEDs. A fourth quarter release is planned.

Road names will be Kansas City Southern, Bangor & Aroostook, CP Rail, Burlington Northern (green and black scheme), Chessie System-C&O, Conrail, Union Pacific, and two schemes for Norfolk Southern: First Responder and Operation Lifesaver. DC models and DCC with ESU LokSound will be available.

Atlas plans to include an International steel caboose with an extended-vision cupola in its 2018 fourth quarter release. The N scale model has a diagonal panel roof without running boards. Road names for the ready-to-run caboose will be Northern Pacific, Reading, Delaware & Hudson (ex-Reading), Frisco, Rutland, British Columbia Railway, Norfolk Southern, and Burlington Northern in a red, white and blue Freedom scheme.

Atlas's fourth quarter release includes a group of 40-foot standard-height containers with beveled corrugations. Decorating schemes will be Evergreen, K-Line, Maersk, and ZIM. For additional information on all Atlas products contact a dealer or visit atlasrr.com.



KatoUSA plans to deliver a Union Pacific City of Los Angeles (COLA) train set with new car names and numbers in August.

The 11-car train set will include a mail car, baggage-dormitory, two coaches, dome chair car, newly tooled lounge car (above), three named sleepers, dome diner, and UP's unique dome lounge-observation (below). Optional interior lighting kits may be purchased separately.

To lead the COLA, Kato will offer EMD E9A and E9B units in two numbers. The A unit will feature a unique COLA nose herald. The engines will be available for standard DC and DCC operation. Units with DCC and sound will be available on special order.

Kato expects to release new three-car sets of Gunderson MAXI-IV TTX well cars in September. Six intermodal 53-foot containers will be included with each car set. The containers have a magnet and a metal plate to secure them to the bottom of the well car or to the top of the lower container. For additional information on all Kato products contact a dealer or visit katousa.com.

Micro-Trains Line has released several new ready-to-run freight cars including this 36-foot Santa Fe refrigerator car. The N scale model represents a wood truss-rod car built in the 1890s.

This modern 89-foot tri-level closed autorack displays the CSX "boxcar" logo introduced in 2011. Like the prototype, Micro-Trains N scale version rides on Barber roller bearing trucks.

The prototype of this 56-foot general service tank car was built in 1983 to carry diesel fuel for BCR.

Micro-Trains is selling this TTX depressed-center flat car equipped with heavy duty Buckeye six-wheel trucks. For additional information on all Micro-Trains Line models contact a dealer or visit micro-trains.com.

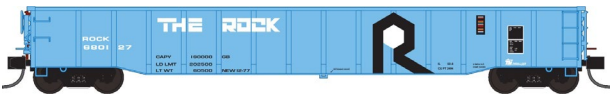
ScaleTrains.com has released an N scale General Electric Tier 4 GEVO ET44 locomotive. This is the company's first N scale diesel locomotive.

Road names are BNSF-Heritage 3, CSX, Canadian National, GECX-General Electric Demo, Norfolk Southern, Union Pacific, and ScaleTrains.com. Road specific features of the Rivet Counter series model include three engine cabinet roof lines, two types of trucks, and a variety of antennas and PTC antenna arrays. Grab iron locations also vary depending on the practice of the road being modeled. DC locomotives are ready for DCC and sound with a Next 18 connector. Models factory-equipped with ESU LokSound Next 18 Micro DCC are programmed with authentic

GEVO-12 prime mover sound. For additional information visit scaletrains.com.

Summit USA is selling an N scale kit for a Subway restaurant. This kit includes all building parts and signs milled in white and black styrene plastic, and clear window glazing. Self-adhesive signage includes Subway's new corporate logo. The assembled model has a footprint of 1.5 x 3-inches. For additional information visit summit-customcuts.com.

Tichy Train Group has introduced several new N scale road side signs. They include bridge warning, firehouse warning, and low vehicle warning signs. For more information visit www.tichytrain-group.com/WhatsNew.aspx.

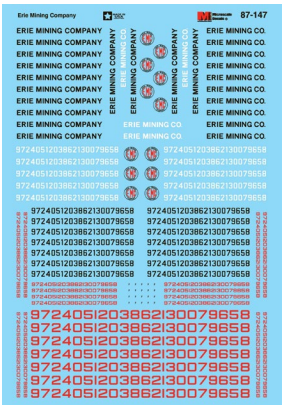


Trainworx is booking reservations for a new production run of 52-foot 6-inch steel gondolas. The N scale ready-to-run models will be available in six numbers.

Road names will be Missouri Pacific, MP with UP shield, D&RGW (two schemes: black and orange), Rock Island (two schemes), and Union Pacific. Availability is planned for the fourth quarter of 2018. For additional information visit train-worx.com.

NEW DECALS, SIGNS AND FINISHING PRODUCTS

Chesapeake & Ohio Trust Plates are among the huge collection of model railroad lettering systems listed by **Great Decals.** During the 1930s, 40s and 50s, information about the ownership of C&O cars was placed in the upper lefthand corner. The lettering set includes enough material to letter up to 12 cars. Sets are available for HO, S and O scale. For additional information visit greatdecals.com.

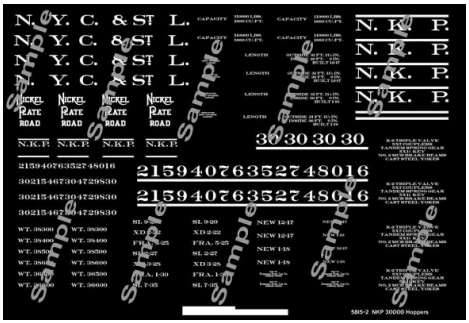


Microscale has water slide decals for Erie Mining diesels and Boston & Maine passenger cars. The B&M decals are Dulux gold lettering. Both of these sets are available in HO and N scale. For information on all Microscale products contact a dealer or visit microscale.com.

RATE THIS ARTICLE

Protocraft has new 1:48 scale decals for Chesapeake & Ohio gondolas and Northern Pacific cabooses. The C&O lettering set is for 52-foot 6-inch Greenville drop-end gondolas numbered 218850-218949 that were repainted following new C&O ownership.

The Northern Pacific decals will correctly decorate various series of NP wood cabooses including those numbered 1200-1399, 1000-1800, 1600-1699, and 1700-1789. This 1:48 decal set was developed by Rick Leach. For additional information visit protocraft.com.



Resin Car Works sells a selection of prototypically accurate decals including this set for lettering Nickel Plate 99000-99449 series of USRA twin-bay composite hopper cars.

The cars in this class were built in August 1919 for the TSsL&W and were acquired by the NKP in 1924. The set has sufficient

material to letter two cars in their 1924-1932 standard lettering scheme – which was worn as late as 1940. For more information on all RCW products visit resincar-works.com.

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 this new media train! ▪

VIEW READER COMMENTS
click here

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.

Briefly noted at press time ...

Stafford Swain 1945-2018

Stafford Forsyth Swain MMR passed away April 11, 2018. He was an outstanding modeler and one of the pioneers of the prototype freight car modeling movement. He was a softspoken gentleman who willingly shared his modeling skills and legendary knowledge of the Canadian National Railway in more than 80 articles in various model magazines. Stafford's HO layout of the CNR Whiteshell Division was a museum quality recreation of the real thing. He started building his layout in 1975, when prototype modelling was a rarity.

Stafford was an active supporter of the National Model Railroad Association and earned Master Model Railroader #98. From 1996 to 2010 he served as chairman of the CN Lines Special Interest Group which evolved into the Canadian National Railway Historical Association. He was president of the Winnipeg Model Railroad Club and the NMRA Thousand Lakes Region, and was the director of the NMRA National Convention held in Winnipeg in 1983. Poor health forced Stafford to give up his modeling activities several years ago. Fortunately his illness did not prevent him from enjoying his other passion – 1950s rock 'n' roll and playing his guitar. Stafford Swain is survived by his wife, Karen, and daughters Vanessa and Kristin.

Walthers next HO scale name-train project will be the Union Pacific City of Los Angeles. Ten passenger cars representing a typical winter consist of the flagship of the UP Domeliner

fleet of the 1960s will be produced along with authentically decorated EMD E9A and E9B diesel locomotives.

Intermountain is planning another run of its HO scale class R-70-15 50-foot plug door refrigerator cars. Road names will be PFE, GN, Milwaukee Road, UP, CR, BAR, and BN. Also scheduled for rerun is an N scale 50-foot AAR boxcar for CB&Q, GTW, D&H, and SP. New road names will be DT&I, ATSF, T&NO, and PC.

ScaleTrains.com has released a video in which Mike Hopkin demonstrates the installation of detail kits to the company's Operator line of basic HO scale models. It can be viewed at www.youtube.com/watch?v=fRrzP3IB1rw.

Trainworx plans to release a group of N scale dump trucks early next year. Peterbilt 379, Kenworth T800, and Kenworth W900 trucks will be available in in a variety of color schemes ...

VIEW READER COMMENTS
click here

SELECTED EVENTS

Model Railroad Hobbyist | May 2018 | #99

RATE THIS ARTICLE

May 2018

(Many events charge a fee. Check individual info website for details.)

AUSTRALIA, NSW, ALBURY, LAVINGTON, May 23-24, Annual Train Show, hosted by Murray Railway Modellers Inc., at Mirambeena Community Centre, 19 Martha Mews. Info at murrayrailwaymodellers.com.

CANADA, BRITISH COLUMBIA, BURNABY, May 4-6, 2018, 3rd Annual 7th Division PNR Modellers Meet, at Simon Fraser University (Burnaby Campus), West Mall Centre. Info www.facebook.com/RailwayModellersBritishColumbia.

NEW ZEALAND, MOSGIEL, May 12-13, Dunedin Model Train Show, at Taieri Bowling Club, 12 Wickliffe Street. Info at dunedinmodeltrainshow.nz.

CALIFORNIA, SANTA CLARA, May 24-26, O Scale West, S West & Narrow Gauge Meets, at Hyatt Regency Hotel, 5101 Great America Parkway. Info at www.oscalewest.com.

NORTH CAROLINA, SPENCER, May 12, Train Show and Tour of Historic Spencer Shops, at North Carolina Transportation Museum, 1 Samuel Spencer Drive. Info at www.nctrans.org.

NORTH CAROLINA, SPENCER, May 17-19, Norfolk & Western Historical Society Convention at North Carolina Transportation Museum. Info at www.nwhs.org/convention/2018spencer/index.php.

NORTH CAROLINA, LAKE JUNALUSKA, May 24-27, NMRA Southeastern Region Convention, at Lake Junaluska Conference Center, 91 North Lakeshore Drive. Info at www.ser-nmra.org.

OHIO, COLUMBUS, May 19-20, 10th Ohio N Scale Weekend, 'For N Scalers by N Scalers" sponsored by Central Ohio N-Trak. Info at www.centralohiontrak.org.

OHIO, MONTPELIER, May 20, Train Show & Swap Meet, sponsored by Montpelier Trackside Modelers Railroad Club, at Quality Inn Convention Center, 13508 State Route 15, Exit 13 Ohio Turnpike. Request additional info from Jim McPike at jimcpike@gmail.com.

OHIO, WEST CHESTER, MAY 17-20, Cincinnati Express Convention hosted by NMRA Mid Central Region at Cincinnati Marriott North. Info at www.cincy-div7.org/convention.html.

OREGON, PORTLAND, May 30-June 2, Stumptown Express Convention hosted by NMRA Pacific Northwest Region at Red Lion Hotel, 909 North Hayden Island Drive. Info at stumptown2018.org/pnr2018.html#home.

PENNSYLVANIA, ALTOONA, May 9-13, Pennsylvania Railroad Technical & Historical Society Annual Meeting, at Blair County Convention Center, 1 Convention Center Drive. Info at prrths.com.

SOUTH DAKOTA, SIOUX FALLS, May 18-20, Regional Convention hosted by NMRA Thousand Lakes Region at Best Western-Ramkota Hotel Conference Center. Info at www.thousandlakesregion.org/tlr-siouxfalls-18.

WYOMING, CHEYENNE, May 18-20, Rocky Mountain Region NMRA Convention, at Frontier Park Exhibition Hall, 1312 West 8th Avenue. Info at www.rmr-nmra.org.

June 2018, by location

AUSTRALIA, QUEENSLAND, TOOWOOMBA, June 2-3, Model Train, Craft & Hobby Expo, at Toowoomba Showgrounds, Glenvale Road. Info at admin@toowoombamodelrailwayclub.com.au.

CONNECTICUT, ENFIELD, June 1-2, 16th New England Railroad Prototype Modelers Meet, at Holiday Inn, 1 Bright Meadow Boulevard. Info at nerpm.org.

ILLINOIS, GREENVILLE, June 9, American Heritage Railroad Train Show, at American Farm Heritage Museum, Interstate 70 at Illinois Route 127. Request additional info from Jim at 217-825-6230.

KANSAS, OVERLAND PARK, June 23, 15th Annual Kansas City Narrow Gauge Meet, sponsored by KC Area Narrow Gaugers, at Johnson County Library, Blue Valley Branch, 9000 West 151st Street. Advance registrations are required by June 18, 2018. Request additional info from Larry Alfred at captlalfred@gmail.com.

MARYLAND, TIMONIUM, June 9-10, The Great Scale Model Train Show, at Maryland State Fairgrounds, 2200 York Road. Info at gsmts.com.

TENNESSEE, JOHNSON CITY, June 2-3, George L. Carter Railroad Museum 10th Anniversary Celebration, at East Tennessee State University. Includes presentation by the East Tennessee & Western North Carolina Railroad Historical Society. Info at www.etsu.edu/railroad.

VIRGINIA, FISHERSVILLE, May 6, 32nd Annual Shenandoah Valley Model Train & Railroading Show sponsored by Augusta County Railroad Club at Augusta Expo, 277 Expo Road. Info at www.acmrrc.org.

WISCONSIN, WAUPACA, June 16-17, 29th Strawberry Fest Model Railroad Show & Model Contest, sponsored by Waupaca Area Model Railroaders at Waupaca Recreation Center, at the intersection of School, State, and Badger Streets. Info at wamrltd.com.

WYOMING, CHEYENNE, May 18-20, Cheyenne Express Convention hosted by NMRA Rocky Mountain Region at Frontier Park Exhibition Hall, 1312 West 8th Avenue. Info at www.rmr-nmra.org/2018%20Convention%20Flyer%20-%20Revision%202.pdf.

Future 2018, by location

CALIFORNIA, SAN DIEGO, September 12-16, NMRA/PSR Convention, sponsored by San Diego Division, Pacific Southwest Region at Marriott Courtyard Hotel Mission Valley, 8757 Rio San Diego Drive. Info at psrconvention.org/home/index.php.

ILLINOIS, COLLINSVILLE (Metro St. Louis), July 20-21, Railroad Prototype Modeler's Meet co-hosted by NMRA Gateway Division, John Golden, and Lonnie Bathurst, at Gateway Convention Center, One Gateway Drive. HQ at Double Tree Hotel adjacent to the convention center. Info at icg.home.mindspring.com/rpm/stlrpm.htm.

MARYLAND, ROCKVILLE, August 22-26, 2018, 50th O scale National Convention, Co-sponsored by NMRA MER, Standard Gauge, Narrow Gauge, P48 and Traction modelers, at Rockville Hilton Hotel, 1750 Rockville Pike. Info at 2018oscalenational.com/newsletters/september-2017-newsletter.

MINNESOTA, BLOOMINGTON, September 5-8, 38th Annual National Narrow Gauge Convention at Double Tree by Hilton, 7800 Normandale Blvd. Info at www.nngc-2018.com.

MISSOURI, KANSAS CITY, August 5-12, 2018, NMRA National Convention and National Train Show. Host hotel is Westin Kansas City at Crown Center. Info at kc2018.org.

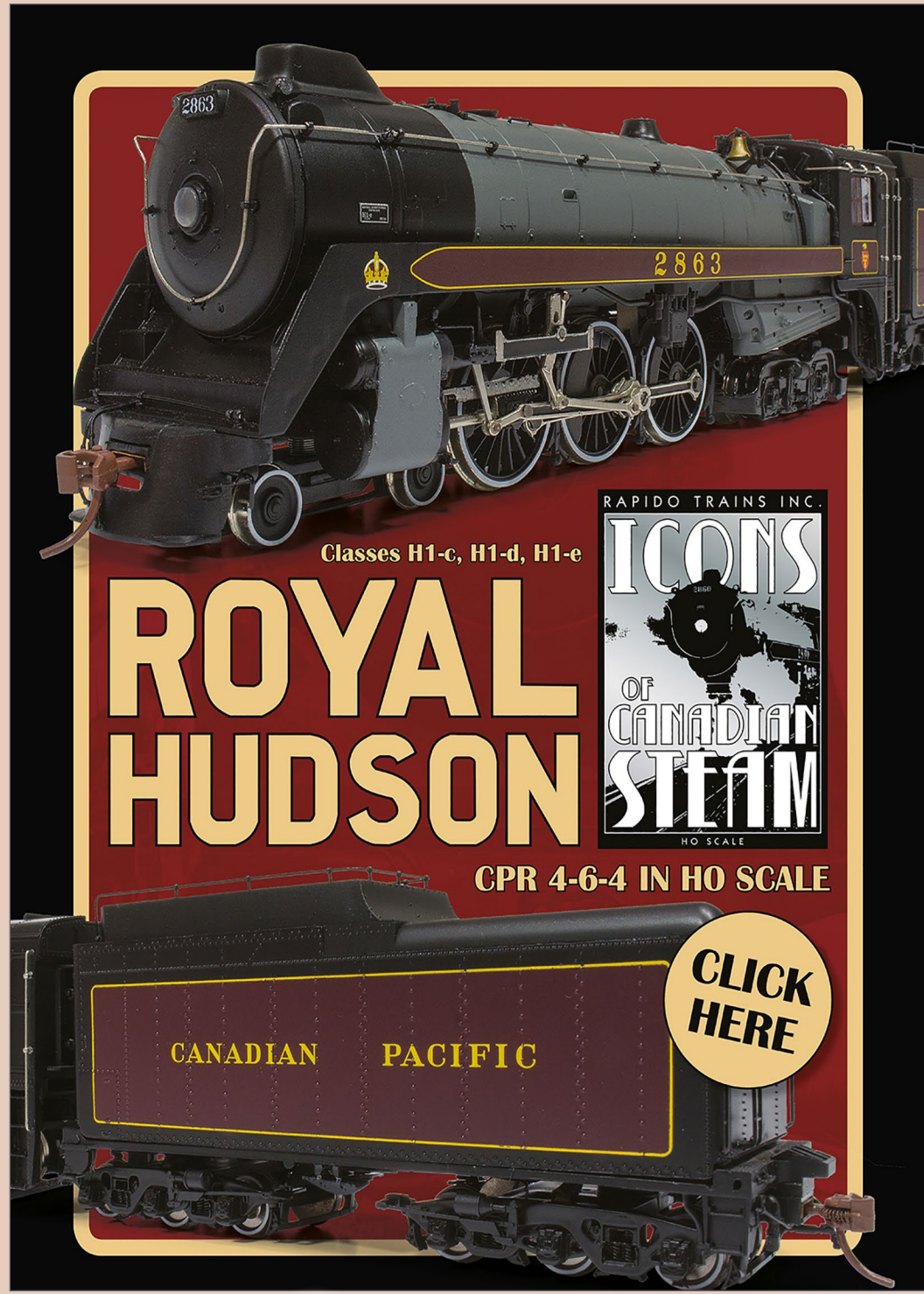
Beyond 2018

UTAH, SALT LAKE CITY, July 7-13, 2019, NMRA National Convention and National Train Show. HQ hotel is Little America Hotel. Info at nmra2019slc.org.

MISSOURI, ST. LOUIS, July 12-18, 2020, NMRA National Convention and National Train Show. HQ hotel is Hilton St. Louis at the Ballpark. Info at gateway2020.org.

CALIFORNIA, SANTA CLARA, 2021, NMRA National Convention. ■

Please take this survey, it really helps us know much better what kind of articles and videos to make for you!



Clickable advertiser index | 1

Clickable "other" index

Download issue

Download Portrait

Download Landscape

REVERSE RUNNING commentary

Model Railroad Hobbyist | May 2018 | #99

RATE THIS ARTICLE

JOE FUGATE LOOKS AT THE PROBLEMS WITH KEEP-ALIVE ...

ONE OF THE MOST INTERESTING DCC DEVELOPMENTS in recent years has been the keep-alive circuit.

Thanks to new super-capacitors, a relatively small extra circuit inside a DCC locomotive can keep it going and not stalling for several seconds – even if the power gets interrupted.

Keep-alive works great. Dead frogs no longer present any problem, and dirty track spots or iffy wheel contact issues just vanish.

STEPPING OUTSIDE THE BOX WITH A CONTRARY VIEW

But if you stop and think about it for a moment, this is actually a mixed blessing. What happens when the loco runs out of track?

The loco just keeps going, that's what!

I know several layouts that have a liftout, and they all have a dead track section on each side of the liftout to prevent any loco from encountering the steepest grade on the layout – and going straight to the floor!

What about staging tracks with a dead section at the end to keep any locos from running off the end?

If a loco with keep-alive loses contact, any stop command you send with your DCC throttle will not be received. Your loco in effect goes out of control and it just keeps running for several seconds *no matter what you do!*

If you're planning to use keep-alive, you now need some kind of mechanical means to stop a runaway train, because just removing the track power will not stop it.

There is a deeper problem with keep-alive – and that's your DCC command station programming track. Decoders with keep-alive will often not program correctly on your system's programming track. Doing program track decoder programming with JMRI's DecoderPro does not work because it uses your DCC system's programming track.

The programming track is designed to program decoders using a low power setting as a protection in case you installed a decoder improperly. Thanks to this low power, you're less likely to burn out a decoder if it's installed wrong when you try to first program it.

But with a super capacitor in the power feed circuit to the decoder, all bets are off when it comes to using the programming track.

While keep-alive is a neat solution to pesky power pickup problems, adding keep-alive to our locos also introduces a number of new problems that we dare not ignore. ☑

DERAILMENTS

Model Railroad Hobbyist | May 2018 | #99

RATE THIS ARTICLE

VIEW READER COMMENTS
click here

Diesels can smoke like a steamer

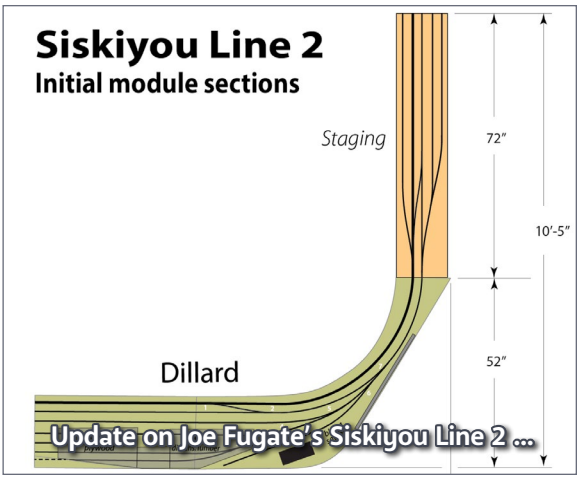
In this video, we get to watch a diesel prime mover starting up and how a diesel can sometimes throw enough smoke that it looks like a steam loco plume. Note the bit of humor at the end ... ■

BIZARRE FACTS AND HUMOR (SUPPOSEDLY)

Coming next month ... 100th issue!

Mike Confalone adds a new White Mountain Branch to his Allagash ...

Victor Roseman on modeling Los Angeles Union Station ...



Update on Joe Fugate's Siskiyou Line 2 ...

... and lots more coming in the June MRH!